



**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF HEALTH**

The Integrated Logistics System (ILS) Procedures Manual

Pilot-Test Version

January 2005

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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 Drugs 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 Mkuu wa Ugavi na Usambazaji wa Dawa na Vifaa
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
NGO	Non-Governmental Organization	AZISE – 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 Wizara ya Afya cha kuratibu Dawa na vifaa
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 Drugs and Related Medical Supplies	Fomu ya Taarifa na Maombi ya Dawa na Vifaa Husika
STI	Sexually Transmitted Infection	Magonjwa yaambukizwayo kwa njia ya ngongo
VA	Voluntary Agency	Shirika la Kujitolea/Hiari

FOREWARD

In the past, drugs and related medical supplies used in dispensaries, health centers, and hospitals came from a variety of sources and were ordered from numerous vertical programs. In fact, at one time in Tanzania, there were more than 30 vertical programs that you may have worked with that supplied medicines, other supplies, or related equipment.

Vertical programs that managed drugs and related medical supplies in the past included:

- the essential drugs program (EDP),
- the family planning program (FP),
- the national AIDS control program,
- the laboratory and diagnostics program,
- the dental program,
- the radiological program,
- the national malaria control program,
- the Expanded Program on Immunization (EPI),
- the national tuberculosis and leprosy program (NTLP),
- and many others.

Each vertical program had its own procedures and requirements. The MOH has decided to strengthen the health care delivery system by replacing the vertical systems with the Integrated Logistics System (ILS).

The ILS, described in this manual, takes an integrated approach. The ILS will manage, in an integrated manner, virtually all of the supplies needed to support all dispensary, health center, or hospital activities.

[NOTE: So that the English version of the manual would be more user-friendly when paired with the Swahili version, page breaks have been inserted to match the Swahili version.]

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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 drugs 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 drugs and related medical supplies.

B. Questions about the Integrated Logistics System

Question 1: What is the ILS?

Answer: The Integrated Logistics System is a system for managing various categories of supplies, which used to be managed vertically, using a single set of procedures. The ILS is a type of indent system where health dispensaries, health centers, and hospitals *order* quantities of each supply according to their needs and within their budget.

At its most basic, the ILS addresses the concept, “No Product, No Program”. In other words, where programs exist but do not have the supplies they need to support the program, the program itself will fail. For example, a health center with an MCH program in long-term contraceptive methods and nurses trained in IUD insertion cannot be successful if there are no IUDs available to be inserted.

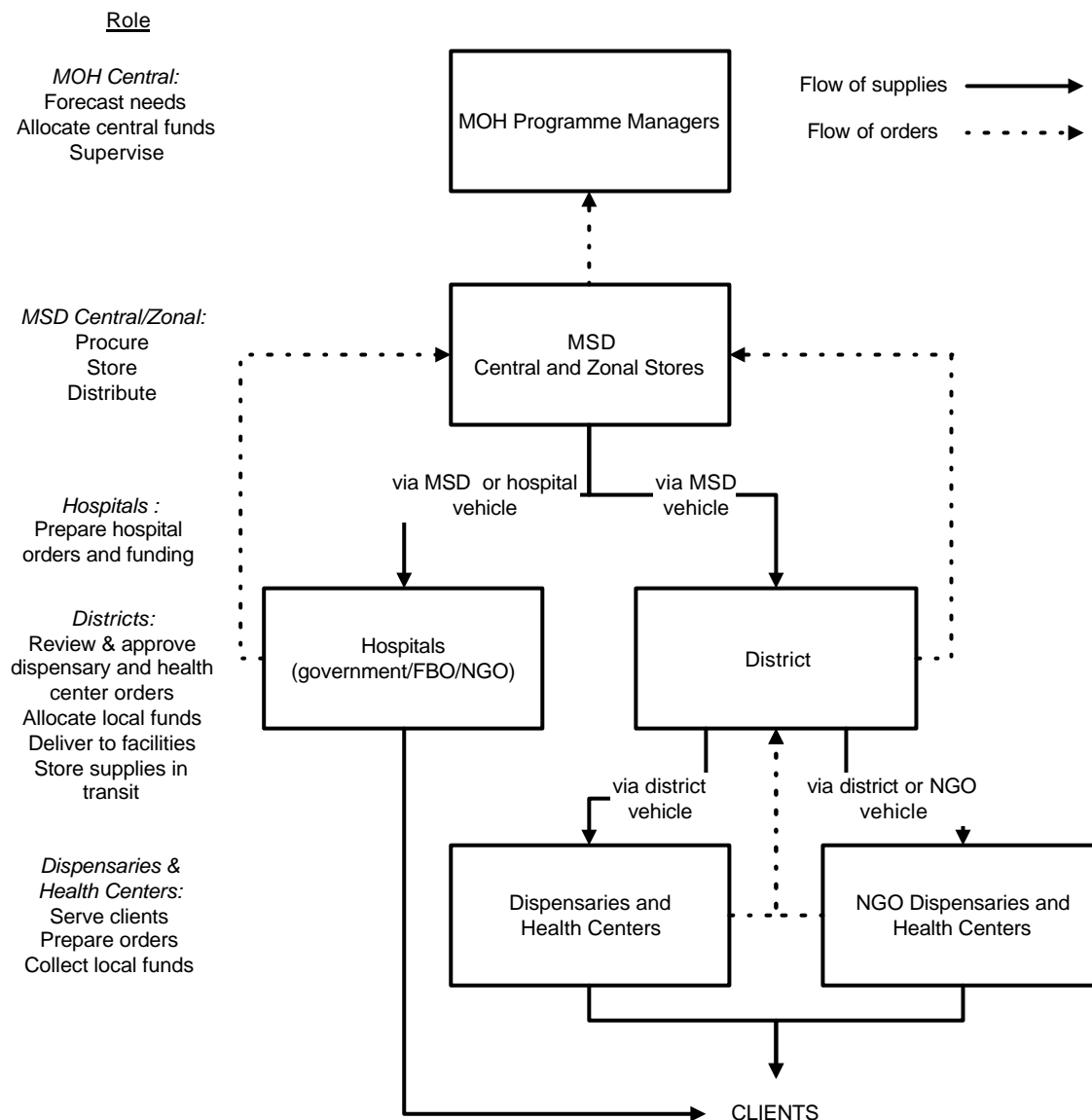
To be successful, the ILS must fulfill the Six Rights of supply management. The system, and its staff, must ensure that:

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

Question 2: How does the ILS work?

Answer: In simple terms, facility staff determine 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



Question 3: What categories of supplies are included in the ILS?

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

- essential drugs
- contraceptives and condoms
- STI drugs
- lab supplies
- dental
- radiology

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

- vaccines
- TB/leprosy drugs
- HIV tests
- Anti-retroviral (ARV) drugs

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

Question 4: What are the key benefits of the ILS?

Answer: Key benefits of the ILS include:

- allows each facility to determine its own needs
- assists in managing drug finances
- reduces the number of forms previously used in vertical systems
- encourages record keeping
- facilitates supervision through the design of its forms
- promotes a more rational use of medicines and transportation
- enables data collection for planning and budgeting
- minimizes wastage and pilferage
- eliminates the need for districts to maintain a separate store of supplies in bulk
- relies on the lessons already learned from other systems, particularly the "Indent System," a system for ordering essential drugs that has been tested and demonstrated to be effective in districts that have implemented it

Question 5: What supplies are included in the ILS?

Answer: 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>	These supplies 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. The MOH and MSD will work to ensure that these supplies will always be in stock and that the full order for these supplies will be honored.

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 MOH and 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 drugs (ARVs), TB/leprosy drugs, and vaccines.

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

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

C. Questions about Financing in the ILS

Question 1: How are drugs financed at the dispensary, health center, or hospital level in the ILS?

Answer: 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 drugs and related medical supplies they use. However, most financial support will continue to be allocated from the central Ministry of Health.

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

One of the chief 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 some part of the funding needed for drugs 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 drugs and supplies. Some community members might choose not to join the CHF and these people pay a user fee each time they obtain 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. Finally, some members of the community might not be able to afford to join the CHF. At the village level, these poorer people would be exempt from payment, but would become members of the CHF. The CHF funds would be used to cover their treatment. (Exemptions are intended to be limited to only a very small number of community members identified by the community itself.)
- *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, such as teachers and nurses, are covered by the government. They are issued an insurance card which they present at a facility. The cost of the goods 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 drugs 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. User fee funds are generally turned over to the DMO for management. In areas where CHF is implemented, people who do not join CHF will be asked to pay a user fee that becomes part of the CHF.
- *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 drugs and supplies.
- *Office of the DMO:* DMOs may have access to discretionary funds that may be used for the procurement of needed drugs and related medical supplies.

District Basket funds also exist, but this source of funding is not to be used for the procurement of drugs or related medical supplies.

In response to these many sources of funding, and to improve the quality of health services within the council, many councils are now establishing Council (or district) Health Boards (CHB or DHB). Councils without a CHB may rely on the DMO or DED for drug-financing decisions.

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. All 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. If at any time there is a question about financial management in the ILS, refer to the person or persons in the council designated to handle financial matters.

Question 2: How are drugs financed at the hospital level?

Answer: Hospitals receive funding from the central level based on an allocation according to the population served by the hospital. It is known that these funds are insufficient to cover all of the costs of drugs and related medical supplies. Therefore, under the capitalization program, hospitals charge half of the cost of drugs to the patient. This charge is a type of user fee.

Question 3: What happens to donated drugs and related medical supplies for specific programs?

Answer: Donated drugs 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 drugs, related medical supplies, or equipment. In some cases, donors provide the entire national need for this supply. In other cases, donors may provide a limited amount of a selected supply item. Facilities should order the overall quantity of each supply that they need. If all or part of this need can be covered by donated supplies, it will decrease the cost of the facility's order.

Question 4: How are drugs used during an epidemic financed?

Answer: In the event of an epidemic (e.g., cholera), the central level will provide a sufficient quantity of drugs for the epidemic without cost to the facility. Epidemics are reported through the notifiable diseases reporting system.

II. FACILITIES, PEOPLE, AND FORMS 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 include 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 to purchase drugs and related medical supplies from MSD. The ILS includes all types of facilities, from dispensaries to referral hospitals. All organizations and facilities should complete all of the forms in the system in the same way.

One important difference will be that NGOs, FBOs, and VAs will not generally receive an allocation of funds from the central level. For these organizations, therefore, all funding will be “supplemental funding.”

B. People at the Dispensary or Health Center and Their Roles in the ILS

1. Dispensary or Health Center Storekeeper’s Role

At dispensaries or health centers, the level where services are delivered, the facility’s Storekeeper is the key manager in the ILS. The Storekeeper may be a pharmacist, nurse, or any other assigned person who has been placed in charge of drugs and related medical supplies. Storekeepers will:

#	Task	Section in Manual
1	Maintain stores records	III-A
2	Complete quarterly reports/orders	IV-A
3	Issue supplies within the facility	V-D
4	Receive supplies	VI-A
5	Handle orders that have been modified by MSD	VI-C
6	Store supplies properly	VII

2. Facility In-Charge’s Role

Another important manager of the ILS is the Facility In-Charge, usually a Clinical Officer, or a Medical Officer. The Facility In-Charge will:

#	Task	Section in Manual
1	Review/authorize quarterly reports/orders for the facility	IV-A-5

3. Facility's Other Staff Roles

Other staff members at the facility level are involved in the management of drugs for the facility:

- Prescribers are the clinical officers or clinical assistants, or medical officers who consult with clients and prescribe drugs for prevention and treatment. Prescribers send clients to Dispensers to receive their supplies.
- Dispensers are the pharmacists, pharmacy assistants, or pharmacy attendants or nurses who actually dispense drugs and related medical supplies to clients. Storekeepers issue supplies to Dispensers.
- Laboratory staff are the lab technicians, lab assistants, and lab attendants who conduct laboratory testing using reagents, consumable supplies, and equipment.

4. Dispensary or Health Center's Village Health Committee Role

The Village Health Committee also has a role to play at the dispensary or health center. The Committee is involved in witnessing the opening of in-coming shipments (see section VI-A). Committee members may also serve as guards for a dispensary or health center.

C. People at the District Level and Their Roles in the ILS

The responsibilities for each position are as follows:

1. District Pharmacist's Role

Throughout the manual, there are many references to the "District Pharmacist." Since not all districts have a qualified pharmacist in this position, this means the person who has been assigned the duties that are normally performed by the District Pharmacist. In the ILS, the District Pharmacist will:

#	Task	Section in Manual
1	Review orders from dispensaries and health centers and submit them for the DMO for authorization	IV-B
2	Submit requests for supplemental funding to the DMO	IV-B
3	Compile orders from dispensaries and health centers and submit these to MSD after they have been approved by the DMO.	IV-C
4	Organize the district's health facilities into groups of facilities to aid in efficient, regular delivery	IV-E
5	Ensure that supplies are delivered from the district to dispensaries and health centers	V-C
6	Supervise the work of the dispensaries and health centers that report to them	VIII

2. District Medical Officer's (DMO) Role

The DMO will:

#	Task	Section in Manual
1	Submit requests for supplemental funding to the Council Health Services Board.	IV-B

3. District's Other Staff Roles

Other staff members at the district level are also involved in the management of drugs for the district and the health facilities they serve. These are:

- The District Executive Director (DED) bears primary responsibility for overall financing of the district. Therefore, the DED will be consulted by the DMO when the required drug costs exceed the available government allocation. The DED will authorize use of district funds collected from user fees or National Health Insurance Fund (NHIF).
- The Council Health Services Board (CHSB) members will authorize the use of Community Health Fund (CHF) funds for supplemental drug purchases.
- The District Transport Officer (DTO) will ensure that pre-packaged deliveries from MSD, identified for each dispensary or health center, are delivered according to the established delivery schedule. The DTO will also assist health facilities in delivering their report and order forms to the Council Health Management Team (CHMT).
- Other members of the CHMT, including the District Health Officer, District Nursing Officer, District Health Secretary, District Dental Officer, District Lab Technologist, District Radiologist, and others such as the District AIDS Control Coordinator (DACC) and other co-opted members will serve as supervisors of the health centers and dispensaries below them.

D. People at the Hospital Level and Their Roles in the ILS

1. Hospital Pharmacist

The pharmacist in-charge at referral, regional, or district hospitals, or at the Designated District Hospital (DDH) is the Storekeeper for the hospital itself. The Hospital Pharmacist will:

#	Task	Section in Manual
1	Maintain stores records	III-B
2	Complete quarterly reports/orders	IV-C
3	Issue supplies within the facility	V-D
4	Take receipt of supplies	VI-B
5	Store supplies properly	VII

2. Hospital Therapeutic Committee (HTC)

The HTC will:

#	Task	Section in Manual
1	Review/approve orders for drugs and related medical supplies for the hospital.	IV-C
2	Authorize the use of supplemental funds to purchase additional drugs and related medical supplies from MSD	IV-C
3	Authorize the local purchase of drugs and related medical supplies	IV-C

3. Hospital's Other Staff Roles

The Hospital Pharmacist is tasked with preparing the one ILS order for all drugs and related medical supplies for the hospital. As an integrated system, the ILS eliminates the need for separate orders for each program. Consequently, a hospital's other staff will need to coordinate with the Hospital Pharmacist to order supplies needed for their program. For example, the MCH Coordinator at the hospital will no longer need to place a separate order for contraceptives; however, he or she will need to work with the Hospital Pharmacist to ensure that contraceptives are ordered in the ILS.

E. People at the Regional/Zonal Level and Their Roles in the ILS

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

F. People at the Central Level and Their Roles in the ILS

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

1. Pharmaceuticals and Supplies Unit (PSU)

- monitor the overall performance of the ILS
- liaison between MOH/PSU and other government ministries/agencies
- provide technical support
- complete annual forecasts of supplies based on facility data
- work with the Medical Stores Department to ensure timely procurement of supplies
- handle procurement/distribution problems
- analyze compiled data from facility reports

2. Program Managers

- assist in the preparation of annual forecasts of supplies needed
- determine, with the National Therapeutic Committee, 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

3. Medical Stores Department (MSD)

- procure supplies
- receive and process all orders for drugs and related medical supplies
- deliver supplies in sealed cartons, individually marked by dispensary or health center, to the district and deliver supplies directly to hospitals
- produce and distribute feedback reports to health facilities, districts, program managers and PSU
- maintain and produce financial statements; distribute facility statements of account and provide summaries to the district
- update price lists; distribute updates to facilities
- distribute forms to health facilities during routine deliveries

4. Donors

- provide donations of supplies (e.g., contraceptives from USAID and UNFPA)
- provide financial support to procure, clear, store, and distribute supplies
- provide technical assistance in logistics management
- request information and results of activities to advise programs

G. Forms and Worksheets Used in the ILS

In order to ensure the continuous availability of high-quality supplies (in other words, to fulfill the six rights), it is necessary to collect a minimal amount of information. In the ILS, information will be collected using a series of forms. The forms in the ILS are the following:

Number	Form Name	Purpose	Primary User
Form 1	Stores Ledger	To account for supplies stored in storerooms.	Dispensary or Health Center Storekeeper or Hospital Storekeeper
Form 2A	Dispensary or Health Center Report & Request for Priority Drugs and Related Medical Supplies	To order priority drugs, injections, lab reagents and testing supplies, as well as other supplies from MSD for dispensaries or health centers.	Dispensary or Health Center Storekeeper
Form 2B	Hospital Report & Request for Priority Drugs and Related Medical Supplies	To order priority drugs, injections, lab reagents and testing supplies, as well as other supplies from MSD.	Hospital Storekeeper
Form 2C	Blank Report & Request for Additional Drugs and Related Medical Supplies	To order additional drugs and related medical supplies not printed on Forms 2A or 2B. Hospitals will order many of their drugs and related medical supplies using Form 2C.	Dispensary or Health Center Storekeeper or Hospital Storekeeper
Form 3	Supplemental Funding	To determine if sufficient funds are available for placing facility orders that exceed central-level funding.	District Pharmacist or DMO
Form 4	Order Compilation	To determine if all facilities have sent in their reports and the total funding level needed.	District Pharmacist
Form 5	Shipment Advice	To inform a facility what MSD has sent and to compare what is received with what was ordered and approved.	Dispensary or Health Center Storekeeper or Hospital Storekeeper
Form 6	Facility Statement of Account	To inform facilities how much funding they have remaining in their allocation.	Facility In-Charge
Form 7	Packing Slip	To account for the number of packages received from MSD.	Dispensary or Health Center Storekeeper and MSD
Form 8	Summary Facility	To inform the district how	District

Number	Form Name	Purpose	Primary User
	Statement of Account	much funding remains in each facility's accounts with MSD for the facilities they supervise	Pharmacist or DMO

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 XV. Worksheets in the ILS include:

Number	Worksheet Name	Purpose	Primary User
1	Add/Modify/Delete a Facility	To track the number/type of facilities expected to complete ILS forms	District Pharmacist or DMO
2	Assigning Delivery Groups	To assign health facilities to a delivery schedule	District Pharmacist and DTO
3	Supervision Checklist	To use during supervisory visits	District Pharmacist and other CHMT Supervisors

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



III. COMPLETING STORES LEDGERS

A. Completing Stores Ledgers by Dispensary or Health Center Storekeepers

1. Guidelines for Completing the Stores Ledger for Priority Supplies

Stores ledgers are used by Storekeepers to track supplies received at the facility's storage area and issued within the facility to its various departments (e.g., MCH area, outpatient area). Storekeepers at all levels of the ILS, from dispensaries to referral hospitals, will rely on *Form 1: Stores Ledger* for data used in the ILS. This form is very similar to the previous ledger, Book 4: Ledger, from the HMIS.

Form 1: Stores Ledger is used in just one place—storerooms. A stores ledger should be kept in any place where supplies are stored for longer than one week. It is likely, for example, that contraceptives are issued from the storeroom to a desk drawer of an MCH nurse (one of the many types of Dispensers in a facility). However, if this supply will not last a week, or if the product is returned to the storage area regularly, it is not necessary to keep a separate stores ledger.

At least one page of a stores ledger should be kept for each product to be found in the storage area. Supplies should be differentiated by generic name (aspirin vs. paracetamol), the dosage of the product (e.g., Amoxicilin 500mg vs. Amoxicilin 250mg), and the form (e.g., tablet vs. suspension). For managing supplies under the ILS, Dispensary or health center Storekeepers need to keep a separate page for each of these unique characteristics. (For example, there needs to be one page for Amoxicilin 500 mg tabs and another page for Amoxicilin 250 mg tabs.) Fast-moving items should be given more than one page.

Dispensary or health center Storekeepers will need to work with the facility's laboratory staff to include the supplies stored in the laboratory area.

Each *Form 1: Stores Ledger* book contains a limited number of pages. Therefore, at most facilities it will be necessary to use two or more books to record receipts and issues. One book should be used for each category of supplies:

- priority supplies
- additional supplies
- special supplies

Each book contains a table of contents page that will help to find the needed product quickly. It is recommended that all supplies be entered in alphabetical order for the supplies in a single storage area within the facility. When additional pages are needed, these are referenced as being found on another page in the same book or even in another book. See the *Job Aid, "Starting A New Page in Form 1: Stores Ledger"* for detailed instructions.

Form 1: Stores Ledgers are used by the Dispensary or Health Center Storekeeper during the following activities:

Number	When to Use
1	When establishing ledgers for the first time.
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 a Dispenser, 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 as a positive adjustment.
6	Whenever supplies are borrowed from or lent to another facility, the adjustment 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 Page of *Form 1: Stores Ledger*” and “Updating *Form 1: Stores Ledger*.”

2. Completing *Form 1: Stores Ledger* for Additional Supplies

Additional Supplies should also have a *Form 1: Stores Ledger* completed and up-to-date for each product. They are completed the same as for all Priority Supplies, except that these will also make use of the “Minimum Stock Quantity.” See the *Job Aid*, “Calculating Minimum Stock Quantity for Additional Supplies.”

3. Completing *Form 1: Stores Ledger* for Special Supplies

Special supplies also make use of *Form 1: Stores Ledger*. Instructions for using this form for special supplies is included in each annex.

B. Completing Stores Ledgers by Hospital Storekeepers

Stores ledgers are used by Hospital Storekeepers to track supplies in the same manner as at the facility level. Hospitals often have multiple storage areas within its compound of buildings. It is therefore necessary to have *Form 1: Stores Ledgers* available in each storage area. See sub-section A above.

Form 1: Stores Ledger should be kept for all supplies in storage—including Priority Supplies, Additional Supplies, and Special Supplies.

IV. 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 they need to meet the needs of their clients. Dispensary and Health Center Storekeepers determine the quantities of supplies they need and ensure 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 and Health Center Report & Request for Priority Drugs and Related Medical Supplies."*

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

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*. The name, MSD code, unit of issue, and price for each item is pre-printed on the R&R form.

The Storekeeper 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 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 *Form 1: Stores Ledgers* 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:

Beginning Balance

The beginning balance is taken from the ending balance for the facility from the previous quarter's *Form 2: R&R*.

Received This Period

The quantity received this period is taken from *Form 1: 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 *Form 1: Stores Ledger* and would reflect the total net change in stock for the quarter due to expiration, damage, transfers, 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.

Ending Balance

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

Estimated Quarterly Consumed

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:

$$\begin{array}{ccccccc} \text{Beginning} & & \text{Received} & & & & \\ \text{Balance} & + & \text{This} & \pm & \text{Lost/} & - & \text{Ending} \\ & & \text{Period} & & \text{Adjusted} & & \text{Balance} \\ & & & & & & = \text{Estimated} \\ & & & & & & \text{Consumption} \end{array}$$

Quantity Needed is Based on a System of Maximum Stock Levels

The formula for ordering is based on ordering drugs and related medical supplies quarterly to reach a maximum of seven months of supplies. The maximum is the upper limit for quantities of supplies kept in a facility. The maximum stock level for priority drugs 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 that dispensaries, health centers, and hospitals 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.

If there is a stockout during the quarter, this means the facility has likely turned away a client to whom it should have been able to provide needed drugs or supplies. It will be necessary to adjust the estimated consumed to ensure that the period of the stockout is accounted for. This is explained in the *Job Aid*, "Handling Stockouts."

For priority supplies, this means that each quarter an order is placed to bring the stock level up to the maximum stock level for that product. In other words, order enough of the product so that there will be enough to last seven months, based on the estimated consumption for the quarter. The formula for ordering is:

Estimated consumption for the quarter $\div 3 \times 7$ - Ending Balance = Quantity Needed

Quantity Requested

The Quantity Requested is based on the unit of issue from MSD. Using the MSD Catalog, the quantity requested can be determined. 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, use common sense about rounding to the nearest unit of issue. For example, if 1,089 tablets are needed for a unit of issue of 1,000 tablets, round down to 1,000 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 drugs and related medical supplies.

Price/Cost/Total Cost

The price for each product is pre-printed on the form. Therefore, the cost for the quantity requested (col. I) can be determined by multiplying the Quantity Requested (col. G) by the 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. Completing *Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies*

The first decision made by the Storekeeper 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: Blank Report & Request for Additional Drugs and Related Medical Supplies*.

See *Job Aid, "Completing Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies."*

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

When the Dispensary or Health Center Storekeeper has completed *Form 2A: R&R* and *Form 2C: R&R* (if used) for the facility, including the total costs, the form should be reviewed by the Facility In-Charge.

The Dispensary or Health Center 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 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 powders for injection, then they should have 500 vials of water for injection, and 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 1st line treatments would generally be ordered in larger quantities than 2nd line treatments; small quantities of drugs 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 Storekeeper to consider the reasonableness of the request for supplemental funding. The Facility In-Charge and the Storekeeper 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 quarters.

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, 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

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 a facility 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.

6. Emergency Ordering

The formula on *Forms 2A: Report & Request for Priority Drugs and Related Medical Supplies* is intended to ensure that even though orders are placed quarterly, facilities order up to seven months of product. Emergency orders, therefore, should be rare. However, if it becomes apparent that a stockout will occur, prepare an emergency order and submit it to the district for immediate processing.

To place an emergency order, use a blank *Form 2C: R&R* page, and enter the information for the product to be ordered. Write "Emergency Order" on top of the form. Facilities should take the emergency order to the district (districts should take their order to MSD). Financing of emergency orders is the same as for routine orders.

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 budget? If a particular cause can be identified for the stock-outs, try to address and resolve the issue.

Refer to the *Job Aid, "Handling Stockouts when Completing Form 2: R&R"* for detailed information on adjusting the order in a quarter where a stockout has occurred.

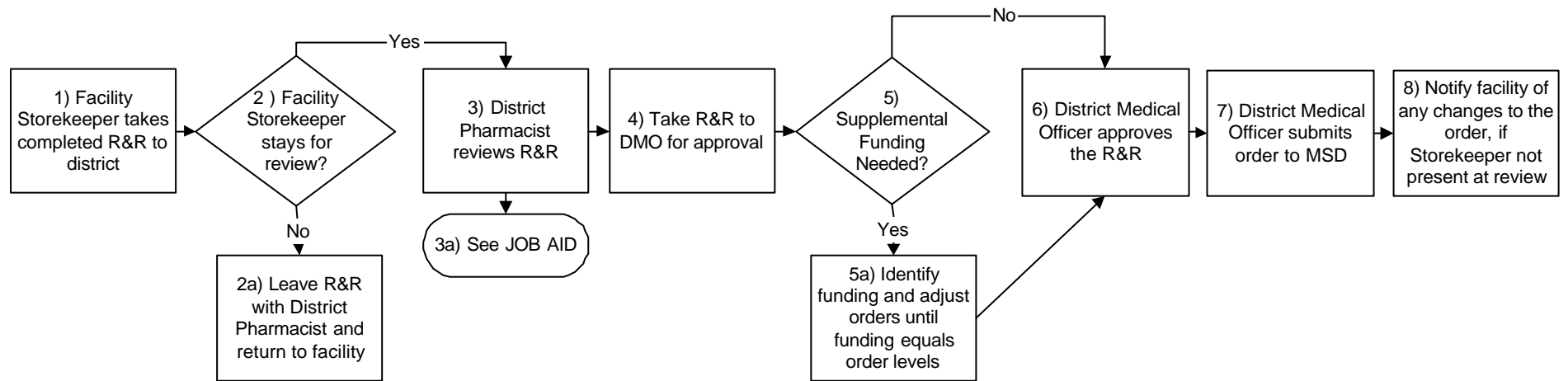
7. Ordering additional supplies that are not pre-printed on Form 2: R&R that may be needed

At the end of a quarter, look at the quantities of each product on the shelf. You may find that you feel that a product needs to be ordered. You may have the same feeling if at the end of each quarter you review *Form 1: Stores Ledger* for all supplies, not just those found on *Form 2A: R&R* or *Form 2B: R&R*. To determine if an order is needed, compare the current stock on hand balance in the storeroom and in the dispensing areas with the Minimum Stock Quantity on *Form 1: Stores Ledger*. If the stock on hand in the storeroom is less than the minimum stock quantity, count the available stock in the dispensing area. If the total stock on hand in the entire facility is less than the minimum stock quantity, order that product using *Form 2C: Blank R&R for Additional Supplies*.

Health facilities generally have the responsibility to determine the supplies that they need to order to serve their clients. If a product, especially one that has never been ordered, managed or used in the past is needed, include it on *Form 2C: Blank R&R*. When reviewing the R&R with the Facility In-Charge, discuss and decide together if the product is appropriate for use at the facility. Considerations 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?

B. District Review of Dispensary and Health Center Orders

After an order is completed and reviewed at the facility level, it is taken to the District Pharmacist for review. Reviewing an order involves a number of steps. Specifically, the various steps are represented by the following flow chart:



1) *Storekeeper 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 second month of the quarter.

2) *Can the Storekeeper stay for the review?:* Ideally, the Storekeeper of the facility 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.
- 2a) *If the Storekeeper cannot stay, leave R&R with the District Pharmacist and return to the facility.*

3) *District Pharmacist reviews the R&R:* The District Pharmacist reviews 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 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 1st line treatments would generally be ordered in larger quantities than 2nd line treatments; small quantities of drugs that are to be used “in rare instances” would be ordered.
- the individual calculations for each product being ordered are correct.
- 3a) See the Job Aid “Reviewing and Finalizing Form 2A-C: Report & Request For Drugs and Related Medical Supplies at the District Level” for detailed instructions.

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

4) *Take R&R to DMO for review and approval:* Once the order has been reviewed and portions completed by the District Pharmacist, *Form 2: R&R* goes to the District Medical Officer for his review and approval.

5) *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. *Form 3: Supplemental Funding* can be used for this purpose. 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.

5a) Adjust order quantities until the total value of order is equal to or less than funding.

When the district is forced to reduce order quantities due to budget limitations, 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 stockout 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 stockout.
Reduce the order quantity by one unit of issue at a time.	This will allow ordering the maximum quantity of an 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 stockout of the product in the near future.
Therefore, adjustments should be made with care.

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 two, the DMO approves the order and prepares it for transmittal to MSD.

Copies of the R&R are distributed as follows:

- bottom copy is retained by the facility
- middle copy is retained by the DMO
- top (original) copy is sent to MSD

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 4: Order Compilation*, on which he lists all facility orders being submitted. (See the *Job Aid, "Completing Form 4: Order Compilation"* for detailed instructions.)

8) In the event that the Storekeeper 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.

C. Role of the District Pharmacist in Order Scheduling

In order to spread the workload for dispensary and health center orders, the District Pharmacist should divide its facilities into three groups: Group A, Group B, and Group C. Each group will initiate its orders during one 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 will be receiving its previous order, another group's order will be in process at MSD, 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.

First, each facility should be described using *Worksheet 1: Add/Modify/Delete a Facility*. See the *Job Aid, "Completing Worksheet 1: Add/Modify/Delete a Facility"*. The worksheet is used so central-level managers will know what supplies are expected to be ordered or may not be ordered by a specific facility.

Second, to assist in dividing the facilities into three groups, use *Worksheet 2, Assignment of Facilities to Delivery Groups*. See the *Job Aid, "Completing Worksheet 2: Assignment of Facilities to Delivery Groups"* for detailed instructions. Be sure to inform facilities which group that they belong to, so 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 two weeks of the month during which they place an order.
- Facilities must submit their orders to the District Pharmacist no later than 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 no later than the end of 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 Storekeeper

- 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

Therefore, during a quarter, the activities at the facility, district, and MSD levels would be:

Month 1				
	week 1	week 2	week 3	week 4
Facility	Group A facilities take orders to district during weeks 1 and 2, preferably during week 1.		Group B facilities receive supplies from district.	Group B facilities prepare next orders
District	District receives and reviews all Group A facility orders by the end of week 2.		District sends Group A facility orders to MSD before end of week 3	
		District receives and dispatches Group B facility shipments	District dispatches remaining Group B facility shipments	

MSD	Group B orders delivered to district		MSD receives facility Group A facility orders by end of week 3	
Month 2				
	week 1	week 2	week 3	week 4
Facility	Group B facilities take orders to district during weeks 1 and 2.		Group C facilities receive supplies from district.	Group C facilities prepare next orders
District	District receives and reviews all Group B facility orders by the end of week 2.		District sends Group B facility orders to MSD before end of week 3	
		District receives and dispatches Group C facility shipments	District dispatches remaining Group C facility shipments	
MSD			MSD receives Group B facility orders by end of week 3	

Month 3				
	week 1	week 2	week 3	week 4
Facility	Group C facilities take orders to district during weeks 1 and 2.		Group A facilities receive supplies from district.	Group A facilities prepare next orders
District	District receives and reviews all Group C facility orders by the end of week 2.		District sends Group C facility orders to MSD before end of week 3	
		District receives and dispatches Group A facility shipments	District dispatches remaining Group A facility shipments	
MSD	MSD dispatches Group A facility shipments to districts		MSD receives facility Group C facility orders by end of week 3	

D. Role of the District Pharmacist in Compiling Orders

By the end of the second week of the month, the District Pharmacist 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 Pharmacist should immediately follow up with dispensaries and health centers that have not reported. The District Pharmacist should have reviewed all forms, and have had all forms approved by the DMO. To track which facilities have or have not submitted orders, *Form 4: Order Compilation* should be used. Using *Form 4: Order Compilation*, the District Pharmacist can:

- 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

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

- Complete *Form 4: Order Compilation* with the details on the form, keeping copy 2 of the form as a reference
- Obtain a check for the total supplemental funding from the appropriate financial authority
- Submit copy 1 of the completed *Form 4: Order Compilation*, submit copy 1 of all *Form 2: R&R* from each facility, and the check for payment of supplemental funds to MSD/zonal.
- File copies of the forms as a reference

Larger districts may need to use more than one page of *Form 4: 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 4: Order Compilation"* for detailed instructions on how to complete the form.

All facility orders approved by the DMO should be submitted by the District Pharmacist 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 Storekeeper, working with the hospital's pharmacists, pharmacy assistants, and pharmacy attendants in the pharmacy area. The Hospital Pharmacy Storekeeper should also work with the staff of the hospital's laboratory for supplies stored in the lab area.

Hospital orders should be placed using *Form 2B: Hospital Report & Request for Priority Drugs and Related Medical Supplies*. 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 Drugs and Related Medical Supplies* to order supplies not pre-printed.

All of the steps in Section III, sub-section A above, should be applied to hospital orders. See the *Job Aid, "Completing Form 2B: Hospital Report & Request for Priority Drugs and Related Medical Supplies,"* and, *"Completing Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies,"* for detailed instructions.

Following the completion of *Forms 2B: R&R* and *Form 2C: Blank R&R*, the Hospital Pharmacy Storekeeper should submit the hospital's order to the hospital's therapeutic committee (HTC) for review.

In the same way that the District Pharmacist reviews the orders of the facilities, the HTC 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 HTC will adjust the order if necessary.

The Hospital Pharmacy Storekeeper 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 April (based on consumption in January-March), July (based on consumption in April-June), October (based on consumption in July-September) and January (based on consumption in October-December of the previous calendar year).



V. ISSUING SUPPLIES BY MSD TO DISTRICTS

Supplies for dispensaries and health centers are shipped from MSD and through the districts. The process involves steps at MSD, between MSD and the districts and then between the districts and the facilities. As with preparing and submitting orders, issuing is done following a fixed schedule in which districts receive shipments during the second week of the month and deliver supplies to the facilities during the second and third weeks of the month. Supplies for hospitals are delivered to hospitals directly from MSD zonal warehouses.

A. Role of MSD in Issuing Supplies for Dispensaries and Health Centers

As MSD receives facility orders each month, it processes the orders by picking the quantities of supplies being ordered, conducting a quality check of the supplies being picked, packing the supplies for shipment to the district, and sealing the cartons of supplies for shipment.

With each facility's shipment, MSD will include *Form 7, Packing Slip*. This form will be used by the facility to verify that it has received the correct number of cartons in the shipment. (MSD will also include forms for verifying the contents of the cartons. This is discussed in the Section VI, Receiving by Dispensaries, Health Centers, and Hospitals.)

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 District Pharmacist. Orders should reach MSD no later than the end of the 3rd 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 check that is sent with the order. MSD cannot fill orders that are not fully funded.

3. MSD fills the orders

MSD staff members pick and pack the supplies and seal them in a carton. Inside one carton from the shipment, MSD will include *Form 5: Shipment Advice* and *Form 6: Facility Statement of Account*. The shipment advice 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 6: Facility 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. MSD will also deliver *Form 8: Summary of Facility Statement of Account* for use by the DMO. MSD will also include *Form 7: Packing Slip* to the district to be signed at the facility on delivery.

While MSD will do its best to adhere to the established delivery schedule, at times, due to special circumstances, a delivery may come late. If that is the case, then it becomes the responsibility of the district to try to quickly distribute shipments to the health facilities.

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 district level Supervisor 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 as soon as they arrive.

5. District receives the cartons for its facilities

The District Storekeeper receives the shipment by signing *Form 7: Packing Slip* for the entire order and stores the cartons in the storeroom.

See the *Job Aid, "Completing Form 7: Packing Slip"* and the *Job Aid, "Interpreting Form 8: Summary of Facility Statement of Account"* for detailed information.

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 drugs and related medical supplies. MSD can generally pick and pack the orders immediately and will also provide *Form 6: Facility Statement of Account*. Otherwise, MSD will deliver the order to the hospital.

C. Role of the District in Delivering Shipments to Each Dispensary or Health Center

The district must coordinate a number of activities to ensure the timely availability of transportation to deliver facility shipments to the facilities within the established timeframe. If shipments arrive late, facilities will risk stocking out of the supplies they need to provide quality service to their clients. Patients will not be able to obtain the health care they need, and national health program goals will not be met.

In order for districts to ensure timely delivery of facility supplies, these steps must be followed at the district level:

1. Obtain funds for deliveries

No later than the end of the 3rd week of each month, the DTO 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

If funds are available, and no later than the 1st week of the month, the DMO instructs the District Transport Officer to dispatch the orders to the group of facilities due for delivery during that month.

3. Driver and District Storekeeper load truck

On the day before or on the morning of the day that the vehicle will begin delivering the facility shipments, the driver and the District Storekeeper should load the cartons onto the delivery vehicle. As the cartons are being loaded, they should be checked to ensure that they have not been tampered with (the seals applied by MSD should be intact) and that there are no signs of damage to the outside of the cartons (which could indicate damage to the supplies inside the cartons). Cartons should be loaded 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.

4. Take supplies to dispensaries or health centers

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 order for that facility (the cartons to deliver to the facility), off-load the order, and hand over the order to the Facility In-Charge. The In-Charge should sign *Form 7: Packing Slip*, which notes the number of cartons that have been sent by MSD. The cartons should be inspected for damage, and any remarks should be noted on the shipping documents.

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 stockouts will increase.

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

5. Vehicle returns to district:

Once all of the supplies have been delivered to the facilities on the route, the vehicle returns to the district. At the district, the driver or the CHMT member who accompanied the shipments returns the signed *Form 7: Packing Slip* 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 Storekeeper in Issuing Supplies within a Facility

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

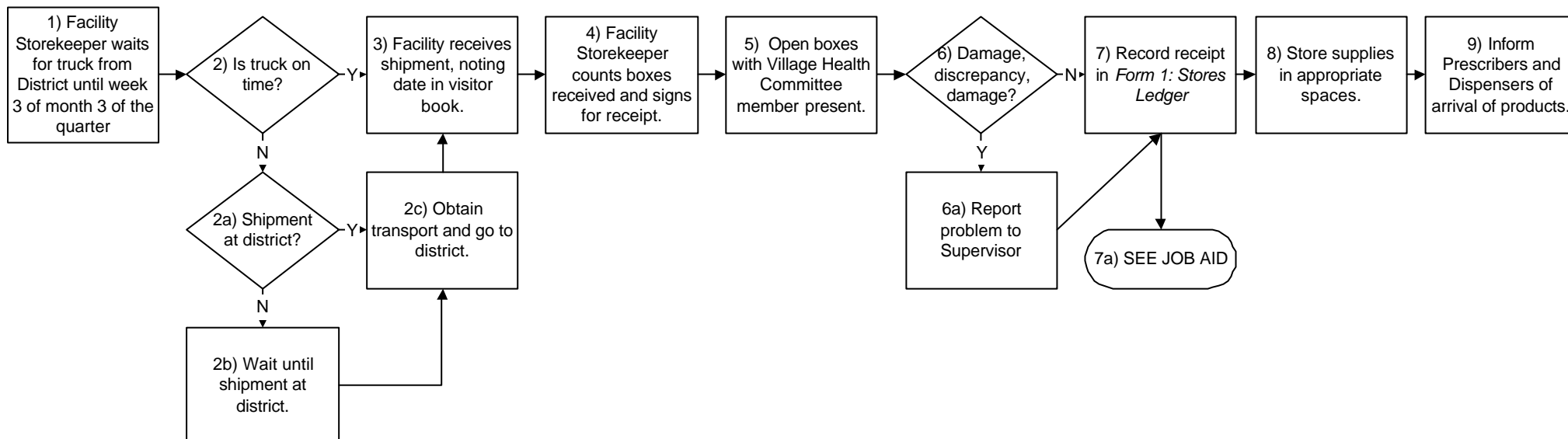
The best way to control the flow of supplies within a facility is for the Storekeeper to issue supplies from the storeroom no greater than one full bottle at a time. In a larger facility with more than one dispensing area, it may be possible to have the same product dispensed in more than one area. For example, condoms may be available in both the MCH area and in the STI clinic. Because it will be necessary to count the product at the end of the quarter, the Storekeeper will have to keep track of the most recently issued product based on *Form 1: Stores Ledger*.

As a general rule, storekeepers should issue supplies one bottle 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 bottle at a time. This practice can be difficult, because of the need for similar, clean bottles, and proper labeling of the bottles.

VI. RECEIVING SUPPLIES AT DISPENSARIES, HEALTH CENTERS, OR HOSPITALS

A. Dispensary or Health Center Storekeeper and Village Health Committee Role in Receiving Supplies and Opening Cartons

It is the responsibility of the District Pharmacist to ensure that the pre-packaged supplies it receives quarterly from MSD are delivered to each facility he or she supervises. The process by which the supplies are received at the facility can be represented by the following diagram:



- 1) **Facility waits for truck from district until week 3 of month 3 of the quarter.**—According to the delivery schedule in Section IV , Ordering, supplies should be delivered from the district to hospitals, 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 by the end of the third week of April.)
- 2) **Is truck on time?**—The Storekeeper should check to see if the truck coming from the district is on time.
 - 2a) **Shipment at district?**—If the truck is not on time, the Storekeeper 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) **Obtain transport and go to district.**—If the facility's order has arrived at the district and the district has not provided transportation, the Storekeeper should obtain transport and go to the district to pick up the supplies (or send a representative to do so). This will require permission of the Supervisor who will need to obtain allowances for fuel, transport, and/or per diem as appropriate. It is expected that this will not be the normal method for distribution, since transport at the facility level is generally more limited than transport from the district.

If a facility's order is not at the district, the facility should wait until it has arrived. Because each facility's supplies are packaged in individual cartons, the district does not store extra supplies to give to dispensaries or health centers. Therefore, it will not be helpful to go to the district if it cannot be confirmed that the facility's order has been received from MSD by the district.

- 3) **Facility receives shipment, noting date in visitor book.**—The date of the arrival of the district vehicle should be recorded in the visitor book at the facility. This will allow the facility to monitor the time between when an order is placed and when it is received.
- 4) **Dispensary or Health Center Storekeeper counts cartons received and signs for shipment.**—MSD will deliver sealed cartons to the district, labeled with the facility's name. The district should deliver these cartons, intact, to the facilities. Therefore, when they arrive at the facility, the Storekeeper can only count the number of cartons and sign for that receipt. The contents of the cartons will not be known until they are opened later.
- 5) **Open cartons with a Village Health Committee member present.**—As soon as possible after the shipment arrives from the district, the Storekeeper should request that a member of the Village Health Committee be present to acknowledge the contents of the cartons. Since the contents of the cartons cannot be dispensed until they have been placed in the storage area for issuing, it is necessary that this step be completed immediately after the receipt of the sealed cartons. The availability of a member of the committee

should not be difficult if the delivery is reliable. If a member of the Village Health Committee is not available, the Supervisor should name a second person to be a witness. Both the Storekeeper and the Village Health Committee member (or witness) should sign *Form 5: Shipment Advice* (packed inside one of the cartons), noting that the shipment has been accounted for. The signed form should be kept by the Storekeeper, if there are no damages, discrepancies, or expired supplies in the shipment. See the *Job Aid, Completing and Interpreting Form 5: Shipment Advice* for additional information. The box will also contain *Form 6: Facility Statement of Account* which should be given to the Storekeeper. 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 6: Facility Statement of Account* for additional information.

- 6) **Damage, discrepancy, expiry?**—The facility Storekeeper should check to see if the contents of the shipment are equal to the quantities issued (column C) on *Form 5: Shipment Advice*. (Also see Section VI-C below.)
 - 6a) **Report problem to the Facility In-Charge.**—If the supplies are not as reported, the facility Storekeeper should note the problem in column D of *Form 5: Shipment Advice*. After verifying all supplies, the completed form is given to the Facility In-Charge who should report the problem to the district.
- 7) **Record receipt in *Form 1: Stores Ledger***—All acceptable supplies should be recorded in *Form 1: Stores Ledger*. 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.
 - 7a) **See the *Job Aid, “Completing Form 1: Stores Ledger”* for detailed instructions.**
- 8) **Store supplies in appropriate spaces.**—See Section VI, Storing Health Supplies. Remember to store supplies so that the supplies first to expire are the first to be issued (FEFO, first expiry, first out).
- 9) **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. Hospital Storekeeper's Role in Receiving Supplies

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 2nd week of the 3rd 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 opening of shipments from MSD Zonal stores does not require a village council member, but should be witnessed by another member of the hospital staff.

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. This means that facilities should give preference to ordering supplies from MSD, because MSD's supplies offer the best quality and the best price. However, in instances when needed supplies are not available at MSD, districts can make purchases from local suppliers on behalf of a facility. In such cases, the District Pharmacist must prepare the local purchase order and have it approved by the DMO. 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 this, rules and regulations governing local procurement must be followed.

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 5: Shipment Advice*.

2. Modification for a substitute product

Sometimes a product that was not ordered on the R&R will be sent. There are several possible reasons for this, such as:

- a new product has come into the system,
- a product ordered was not available, so a substitute was provided,
- a specific program is beginning a new activity that requires a new product,
- MSD made an error due to names which look alike or differ in strength

If the substituted product can replace the requested product (it has the same pharmacological usage, is an equivalent), then use the substituted product.

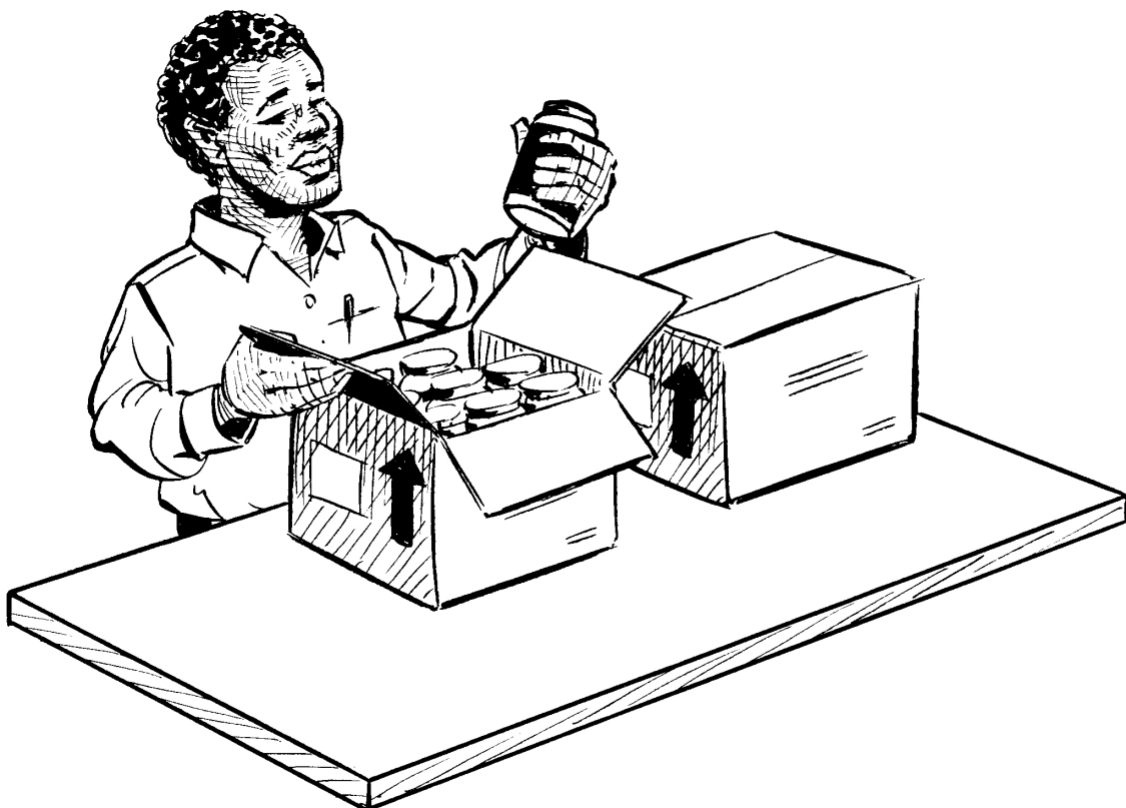
If the facility cannot use the product, notify the district and MSD; request permission to return the product. If given permission, return the unopened cartons/containers to MSD.

If the product is unfamiliar, be sure to 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 6: Facility Statement of Account*, that the total cost of the facility's order has actually been lowered. This is the result of the MOH receiving a limited supply of a donated product. (See Section I-C-Question 3 above.) Whenever possible, MSD will inform facilities of the availability of these free supplies in advance, so that the facility might then use its funding on other priority items. MSD will send this information on *Form 6: Facility Statement of Account*, which will note the availability of limited, donated product to the facility. In some cases, the donated items will be issued on a first-come, first-served basis. In other cases, the donated items will be issued without charge only to a selected facility or group of facilities, as determined by the program managers of the MOH working with the donors.

Facilities that receive donated supplies will not lose any of their funding allocation. If a facility receives supplies that they ordered and paid for, but which are donated, the appropriate credit will be applied.



VII. STORING DRUGS AND RELATED MEDICAL SUPPLIES

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 best condition possible helps ensure that supplies will not become damaged or otherwise unusable. 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 should be printed on the product cartons and boxes. The following are storage procedures that should be followed at all facilities:

Storage Procedure	Rationale
1. Clean and disinfect storeroom regularly, and take precautions to discourage harmful insects and rodents from entering the storage area.	<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. If the store becomes infested with pests, they must be killed. Appropriate pesticides and cats are effective against termites, rodents, roaches, etc. Once pests are cleared from the store, keep it clean. 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>
2. Store health supplies in a dry, well lit, and well ventilated storeroom—out of direct sunlight.	<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>
3. Protect storeroom from water penetration.	<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. 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>

Storage Procedure	Rationale
4. Keep fire safety equipment available, accessible, and functional, and train employees to use it.	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.
5. Store latex supplies away from electric motors and fluorescent lights.	Latex supplies, including condoms, 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 condoms. Condoms in their paper boxes and cartons should not be affected, and should therefore be left in their cartons. However, by simply moving condom cartons away from these sources, potential damage can be eliminated.
6. Maintain cold storage, including a cold chain, as required.	Cold storage, including the cold chain, is essential for maintaining the shelf life of drugs 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 Storekeepers and his/her assistants, 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.

Storage Procedure	Rationale
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 used to keep supplies off of floors, where they will be less susceptible to pest, water and dirt damage. Shelves should be placed away from walls and far enough apart to allow one to walk completely 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 walls.</p>
9. Arrange cartons with arrows pointing up (↑), and with identification labels, expiry dates, and manufacturing dates clearly visible.	<p>Arrows indicate that the product should be stored with the arrows pointing up. 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 make 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. 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.</p>
10. Store health supplies to facilitate “first-to-expire, first-out” (FEFO) procedures and stock management.	<p>Supplies that have been recently received may sometimes be older than the stores' existing stock.</p>

Storage Procedure	Rationale
<p>11. Store health supplies away from insecticides, chemicals, flammable supplies, hazardous materials, old files, office supplies, and equipment; always take appropriate safety precautions.</p>	<p>Insecticides and other chemicals may affect the shelf lives of a number of supplies. By keeping other supplies away from health supplies, the health supplies are easily accessed. Since some health supplies have a relatively short shelf life overall, they must move quickly to the client. Storing unusable supplies that get in the way may slow down access to supplies. Some medical procedures involve the use of flammable supplies. 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, near a fire extinguisher.</p>
<p>12. Separate damaged and expired health supplies from usable supplies, remove them from inventory immediately, and dispose of them using established procedures.</p>	<p>By separating these supplies out, FEFO is more easily implemented. By destroying or disposing of damaged supplies right away, more space is available.</p>

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 *Form 1: 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.

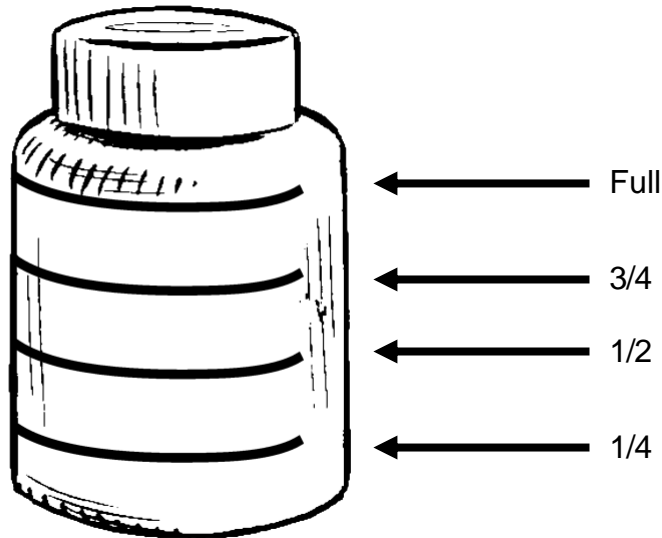
Quantities kept by Dispensers in the facility will also need to be counted. Using *Form 1: Stores Ledgers*, the Storekeeper should look for the most recent issues of a product from the storeroom to a Dispenser. The Storekeeper should then visit the Dispenser to count the product. Some supplies may have issues to more than one Dispenser. For example, Co-Trimoxazole may have recently been issued to both an STI nurse and to an MCH nurse. It will be necessary to count the product in both locations.

The Storekeeper 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 the Storekeeper estimate the quantity in a bottle, the Storekeeper may want to ask the Dispenser to follow these steps when opening a new bottle:

- 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 the ending 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 Drugs and Related Medical Supplies*.

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 *Form 1: 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 stockout had occurred, when in fact, there was no stockout. 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

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. Storekeepers and Dispensers 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. Storekeepers 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 drugs, 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.

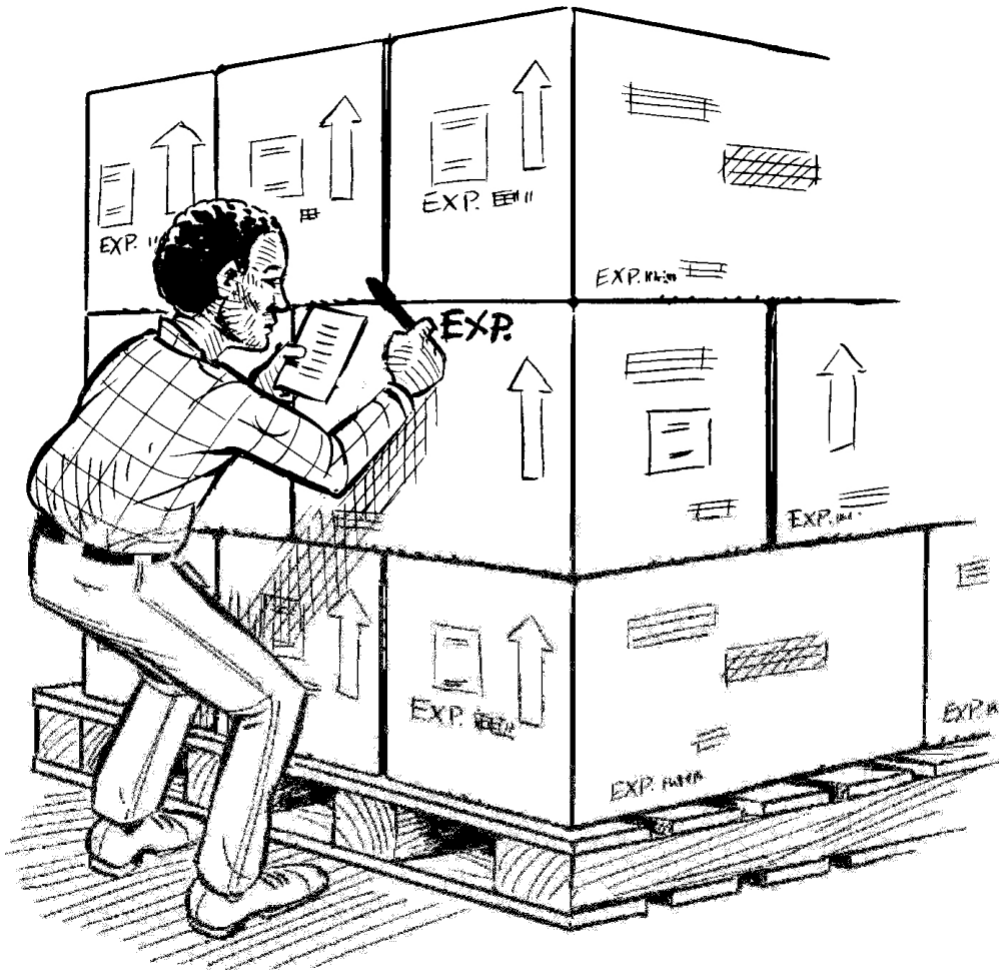
Condoms: Be sure to look for:

- 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 show signs of damage or spoilage

For supplies kept in storage:

- 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.



VIII. SUPERVISION OF THE ILS

This section of the manual generally refers to supervision of dispensaries and health centers by district-level supervisors. 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 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.

There are several reasons logistics personnel should be supervised:

- 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 logistics personnel. Supervisors should plan to spend time supervising and providing on-the-job training during each supervisory visit, whether they are in the same office or at a district or facility.

B. Monitoring Indicators

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

- Timeliness of reports: Did the reports arrive within the designated time period?
- 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?

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

C. The Supervisory Visit

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:

- Select the most important observations; organize observations into those that are general observations and those that are specific to the person supervised; give specific examples of things that need changing and do this in a non-threatening, friendly manner.
- Help the person being visited to participate in the process, by having him/her: It is important to help the person being supervised 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.
- Ask the opinion of any health workers involved in a decision before making a decision in which they are involved.
- Be ready to provide technical or other assistance when needed. Offer help without removing responsibility for action.
- Hold organized and productive meetings with an agenda that meets the needs of the meeting participants (health workers, district supervisors, etc.).
- Show interest in employees but give them independence and responsibility.
- Reinforce positive behavior!
- Give feedback in a timely manner.
- 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.

- Be conscious of worker needs that can be responded to.
- If discipline is required, be specific and consistent with all employees.
- Remove expired/damaged/excess supplies.

Worksheet 3: Supervision Checklist includes areas for Supervisors to review and discuss when supervising the ILS. While use of the checklist is not mandatory, Supervisors may find it useful.



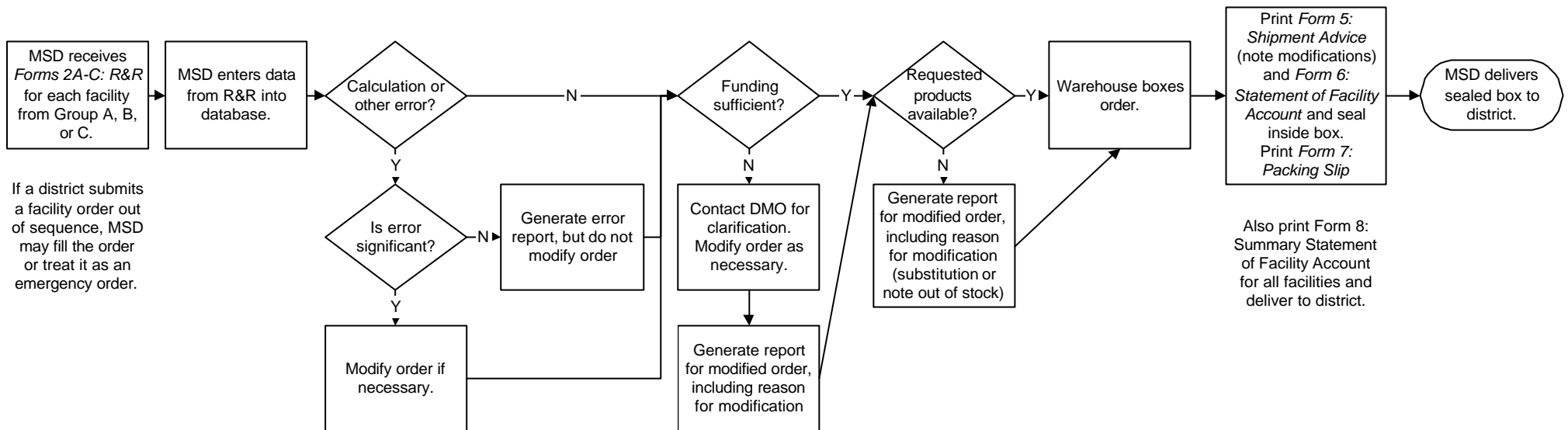
IX. ACTIONS AT THE CENTRAL LEVEL

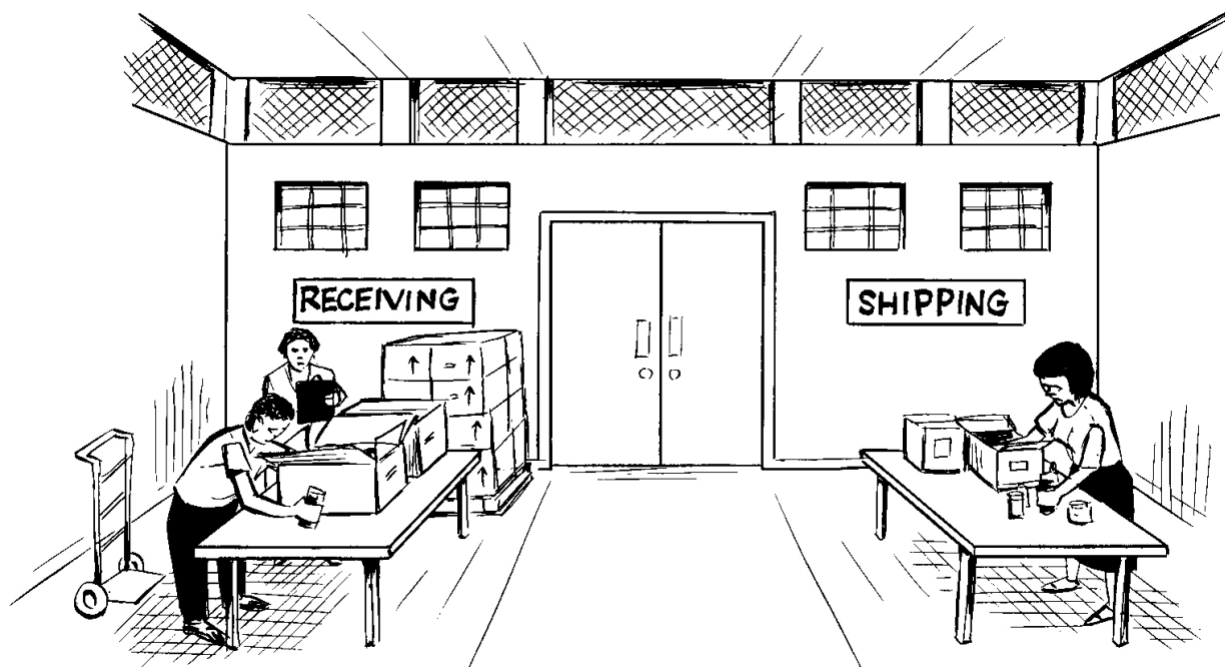
This manual is intended to be used primarily at the facility and district level. However, it may be helpful to understand how the central level will support districts and health facilities and how data will be used to make central-level decisions.

Data entered into the MSD database from *Form 2: Report & Request for Drugs and Related Medical Supplies* 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 drugs and related medical supplies
- Review the ILS structure and design, modifying it as necessary

The following diagram shows what will happen to an order received by MSD:





X. WHEN TO START USING THIS NEW SYSTEM? FIRST ORDERS

Dispensaries and health centers should be ready to implement the ILS following the ILS training. The following summarizes the steps to implement the ILS:

- **Obtain forms**—During the training, a copy of this manual and a sufficient quantity of forms to last one year should have been received.
- **Clear out the storeroom**—Take advantage of this opportunity to remove unusable supplies—all of the expired or damaged supplies in the storage spaces. Broken or unusable furniture and equipment should be removed. Old documents should also be removed. Shelves or cabinets may need to be built to store the supplies to store under the ILS. Work with the facility in-charge to determine which supplies may be usable, which should be thrown into the trash, and which supplies should be incinerated or buried. Keep all of the unusable supplies in a separate area. If there are drugs or other related medical supplies that cannot be buried or incinerated (e.g., expired drugs), these should be sent to the district. Health facilities should ask the DMO when and how to transport the facility's unusable drugs or other related medical supplies to the district.
- **Open any remaining drug kits at the dispensary or health center**—Since supplies will now be managed individually, rather than as a kit, it will be important to identify all remaining supplies.
- **Organize the storeroom**—Organize the storeroom or storage spaces within the facility. It is often easiest to organize the supplies in alphabetical order or by therapeutic category. Remember to organize the stocks to follow FEFO. The need for space will likely increase, because a greater volume of supplies will be kept. Be prepared through better organization of the available space.
- **Establish the opening balances on *Form 1: Stores Ledger* book for each product managed at the facility**—This will likely require the use of several ledger books. Remember to use at least one in each area where supplies are stored for one week or more. See the *Job Aid, "Creating A New Form 1: Stores Ledger"* for detailed instructions.

- **At the appropriate time, depending on whether the facility is in Group A, B, or C, complete the first order form using the ILS Report & Request for Supplies.**—Dispensaries and health centers should be informed by the District Pharmacist as to which ordering group it belongs to. The facility will not likely have had three months of information on which to base its first order. Consequently, *for the first order only*, the facility should estimate the quantity consumed during one month and multiply it seven and subtract the ending stock on hand. This should be entered into column F of *Form 2A: R&R*. Only during this first order should the formula in column F of the form be ignored. (If the dispensary or health center has had one full month of collecting information, this should be used instead of an estimate. If two full months have passed, divide the number in column E by two, multiply by seven, and subtract the ending stock on hand. If three full months have passed, use the formula as normal.) The Storekeeper should not be overly concerned about errors in estimating the quantity consumed, since the formula to be used in the next order will account for any over- or under-ordering.

Hospital should do the following to prepare for implementing the ILS after training:

- **Obtain forms**—During the training, a copy of this manual and a sufficient quantity of forms to last one year should have been received.
- **Clear out the storeroom**—As with dispensaries and health centers, take advantage of this opportunity to remove unusable supplies—all of the expired or damaged supplies in the storage spaces. Broken or unusable furniture and equipment should be removed. Old documents should also be removed. Shelves or cabinets may need to be built to store the supplies to store under the ILS. Work with the Medical Officer In-charge to determine which supplies may be usable, which should be thrown into the trash, and which supplies should be incinerated or buried. Keep all of the unusable supplies in a separate area. If there are drugs or other related medical supplies that cannot be buried or incinerated (e.g., expired drugs), these should be sent to MSD. Hospitals should ask the HTC to assist in obtaining the necessary authority to destroy expired drugs.
- **Organize the storeroom**—Organize the storeroom or storage spaces within the facility. It is often easiest to organize the supplies in alphabetical order or by therapeutic category. Remember to organize the stocks to follow FEFO. The need for space will likely increase, because a greater volume of supplies will be kept. Be prepared through better organization of the available space.
- **Establish the opening balances on *Form 1: Stores Ledger* book for each product managed at the facility**—This will likely require the use of several ledger books. Remember to use at least one in each area where supplies are stored for one week or more. See the *Job Aid, “Creating A New Form 1: Stores Ledger”* for detailed instructions.

- **At the first opportunity, April, July, October, or January, complete the first order form using the ILS Report & Request for Supplies.**— The hospital will not likely have had three months of information on which to base its first order. Consequently, *for the first order only*, the hospital should estimate the quantity consumed during one month and multiply it seven and subtract the ending stock on hand. This should be entered into column F of *Form 2B: R&R*. Only during this first order should the formula in column F of the form be ignored. (If the hospital has had one full month of collecting information, this should be used instead of an estimate. If two full months have passed, divide the number in column E by two, multiply by seven, and subtract the ending stock on hand. If three full months have passed, use the formula as normal.) The Hospital Storekeeper should not be overly concerned about errors in estimating the quantity consumed, since the formula to be used in the next order will account for any over- or under-ordering.

The district should do the following to prepare for implementing the ILS after training:

- **Review the current delivery schedule and change it as necessary to ensure that transport for deliveries each month to Group A, B, or C is available.**—The District Pharmacist and District Transport Officer, with the approval of the District Medical Officer, should assign all dispensaries and health centers to an ordering group A, B, or C. This should include all NGO and VA facilities that order drugs and related medical supplies from MSD.
- **Districts review orders and send orders to MSD**—Dispensaries and health centers will take their first order to the District Pharmacist for approval. The District Pharmacist and DMO will be prepared with additional funding for these first orders for those supplies pre-printed on the form. No equipment should be ordered during the first order. Remember that for the first order only, facilities that have not had three months to collect information about stock on hand will not be following the formula in column F of *Form 2A: R&R*.

XI. WHAT CHANGES TO EXPECT OVER TIME

A. Changes from the central level

The ILS is intended to be a dynamic system. That means that the system can be expected to change slightly on an annual basis. The following are some of the changes that are expected to occur:

- Changes to *Forms 2A and 2B: Report & Request for Priority Drugs and Related Medical Supplies*—The selection of drugs and related medical supplies pre-printed on each form may change from time to time.
- Additional forms and worksheets may be added when considered necessary for the smooth flow of supplies and information.

B. Changes from within the district

When a new facility opens in a district, arrangements will have to be made to integrate that facility into the ILS, so that they have the supplies they need to serve their clients. Actions to take include:

- Provide the facility with the tools (forms, worksheets, ILS procedures manual, etc.) that they will need to manage their supplies.
- Ensure that staff members are aware of the logistics tasks they must perform and that they are capable of performing them. Provide on-the-job training to develop their skills in product management. (This can be done in collaboration with staff from a nearby existing facility.)
- Ensure that the facility receives a “start-up” quantity of supplies. Use dispensed and issues data from another facility in the district that serves a similar size population.
- Ensure that an allocation fund is established at MSD so that the facility will be able to order its own supplies. Complete *Worksheet 1: Add/Delete/Modify a Facility* and forward to MSD so it can be added to the MSD database.
- Complete *Worksheet 2: Assignment of Facilities to Delivery Groups* to assign the facility to one of the groupings (A, B, or C) for the district and inform the facility in-charge of the schedule for placing and submitting orders and for receiving deliveries from the district.

When a facility closes in the district, arrangements will have to be made to redistribute the remaining stock of supplies held by the facility and to ensure that the final month's data are reported.

- Inform MSD of the facility closing and the last month during which they will be submitting an order. Complete *Worksheet 1: Add/Delete/Modify a Facility* and forward to MSD.
- Arrange to collect unused supplies, including ILS registers and forms, from the facility and develop a plan for re-distributing them to other facilities. These facilities should record the receipts as “adjustments.”

- Remove the facility from the transportation matrix and revise the schedule if necessary.

XII. JOB AIDS

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

Sub-section	Job Aid Name
A	Opening or Starting a New Page of <i>Form 1: Stores Ledger</i>
B	Updating <i>Form 1: Stores Ledger</i>
C	Calculating Minimum Stock Quantity for Additional Supplies on <i>Form 1: Stores Ledger</i>
D	Completing <i>Form 2A: Dispensary or Health Center Report & Request for Priority Drugs and Related Medical Supplies</i> , <i>Form 2B: Hospital Report & Request for Priority Drugs and Related Medical Supplies</i> , and <i>Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies at the Dispensary, Health Center, or Hospital</i>
E	Reviewing and Finalizing <i>Form(s) 2A and 2C: Dispensary or Health Center Report and Request for Drugs and Related Medical Supplies</i> by the District or <i>Form 2B: Hospital Report and Request for Drugs and Related Medical Supplies</i> by the Hospital Therapeutic Committee
F	Handling Stockouts when Completing <i>Forms 2A-C: R&R</i>
G	Completing <i>Form 3: Supplemental Funding</i>
H	Completing <i>Form 4: Order Compilation</i>
I	Completing and Interpreting <i>Form 5: Shipment Advice</i>
J	Interpreting <i>Form 6: Facility Statement of Account</i>
K	Completing <i>Form 7: Packing Slip</i>
L	Interpreting <i>Form 8: Summary Facility Statement of Account</i>
M	Completing <i>Worksheet 1: Add/Modify/Delete a Facility</i>
N	Completing <i>Worksheet 2: Assignment of Facilities to Delivery Groups</i>
O	Completing <i>Worksheet 3: Supervision Checklist</i>

Job Aid A: Opening or Starting a New Page of Form 1: Stores Ledger

TASK:	Creating a <i>Form 1: Stores Ledger</i> book for the first time, when opening a new set of books, or when starting a new page in a ledger
COMPLETED BY:	Dispensary or Health Center Storekeeper or Hospital Storekeeper
PURPOSE:	To open or start pages to <i>Form 1: Stores Ledger</i> for keeping track of supplies at a facility
WHEN TO PERFORM:	When there is no ledger page for a supply, to start a new page in a current ledger or, at the start of each new year
MATERIALS NEEDED:	One book for <i>Form 1: Stores Ledger</i> book should be used for each class of supplies—Priority, Additional, Special., pen, pencil

Step	Action	Notes
1	Select the action by using the decision tree: <i>IF</i>	<i>THEN</i>
	Opening a new Ledger Book.	Skip to step #2
	Starting a new page in <i>Form 1: Stores Ledger</i> book.	Skip to step #10
Opening a new Ledger Book		
2	Facility Code: This code should be provided to you by MSD.	This code can be found on <i>Form 6: Facility Statement of Account</i> .
3	Facility Name: Write the name of the facility as it appears from MSD forms.	
4	Type of Facility: Enter the type of facility.	Facilities can be: <ul style="list-style-type: none"> • (GOV) Government • (NGO) Non-government Organization • (FBO) Faith Based Organization • Other
5	Name of District: Enter the name of the district to which this facility reports.	
6	Date Ledger Book Opened: Enter the date this book was started.	New books should be started at the beginning of each year and when older ledgers are filled.
7	Date Ledger Book Closed: Enter the date of the last entry in this book.	When a <i>Form 1: Stores Ledger</i> book is filled, the balances should be transferred to a new book.
8	Book __ of __: Enter this book's number and the total number of open books for this category of supplies.	Use a pencil in case additional books are needed. Start from 1 at the beginning of each year.

Starting a new page in a Ledger Book		
9	Table of Contents	
	<i>IF</i>	<i>THEN</i>
	Opening a new Ledger Book.	Supply Item: Write the name of each supply to be noted in the Ledger Book next to a page number. Entering the names in alphabetical order will facilitate the process.
	Starting a new page in a Ledger Book.	Supply Item: Write in the name of the supply on the next available page number. Continued: Go to the line where this supply is previously recorded and write in the number of the new page in the "Continued" column. This may even be a reference to a page in another book.
	Note: The Table of Contents will help you to find the supplies in the Ledger Book.	
10	Page No.: Write in the corresponding page number.	
	<i>IF</i>	<i>THEN</i>
	Opening a new Ledger Book.	Start with page number 1 and number the pages sequentially.
	Starting a new page in a Ledger Book.	Look at the corresponding page number in the Table of Contents and write in that number.
11	Description of Supply Item: Write the name, strength and form of the item.	When entering the description of supplies follow the order in the Table of Contents. List one supply per page in the Ledger Book following the order Example: Condom 52 mm No Logo
12	MSD Code: Fill in the code number designated by MSD for each supply.	The number can be found on <i>Form 2: R&R</i> . If you do not have the number, or if there is no number, leave it blank. Example: 04938298
13	Unit of Issue: Write the packing size of the supply.	This information can be found in the MSD Product Catalog. If you have the supply on hand, the "unit of issue" is the smallest amount received through MSD. Example: Carton 3,000
14	Dispensing Unit: Write the minimum dispensing unit for the supply.	Dispensing units: tablet, vial, piece, cycle, etc. Example: 1 piece
15	Minimum Stock Quantity: If a Priority Supply, leave this space blank. If an Additional Supply, refer to the <i>Job Aid on "Calculating Minimum Stock Quantity for Additional Supplies on Form 1: Stores Ledger."</i>	
16	Date: Write the date of entry.	

17	Select the actions by using the decision tree:	
	<i>IF</i>	<i>THEN</i>
	Opening a new Ledger Book for the year.	To/From: Write "Physical Inventory" Balance: Write the current stock on hand quantity for the supply that is the result of a physical inventory
	Opening a new Ledger Book because previous ledger is full.	To/From: Write "Carryover Balance" Balance: Write the ending stock balance from the previous Ledger Book.
	Starting a new page in a Ledger Book.	To/From: Write "Carryover Balance" Balance: Write the ending stock balance from the previous record for the item.
	Note: the boxes for Qty Rec'd, Qty Issued, and Adjustments are left blank	
18	Remarks: Write remarks for the current entry.	Reference ledger and previous page numbers.
19	Initials: Write your initials.	Example: DM
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • The cover of the book is completely filled out. • Every supply managed at the facility is listed on Form 1: Stores Ledger Book. • New pages are filled and referenced to previous records • The person filling in the ledger has put his/her initials. • Table of contents is complete. 		

Job Aid B: Updating Form 1: Stores Ledger

TASK:	Updating <i>Form 1: Stores Ledger</i> book when recording receipts, issues, transfers/losses/adjustments and physical inventory.
COMPLETED BY:	Dispensary or Health Center Storekeeper or Hospital Storekeeper
PURPOSE:	<ul style="list-style-type: none"> • To record supplies received • To record supplies issued • To record changes in stock levels • To track supplies moved through non-routine methods (e.g., local purchase, transfers) • To track losses/adjustments
WHEN TO PERFORM:	<ul style="list-style-type: none"> • When supplies are received or issued • When supplies are purchased locally • When supplies are transferred to another facility • When supplies are transferred in from another facility (not the district or MSD) • When supplies are removed from the storage area for reasons other than for issuing to clients (e.g., for demonstrations, expiration, damage) • When recording the result of a physical inventory
MATERIALS NEEDED:	<i>Form 1: Stores Ledger</i> book, pen, supplies or receipt or issue voucher

Step	Action	Notes
1	Locate page to record supply transaction: Use the Table of Contents to identify the page you need.	
2	Date: 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.	To/From/Ref. No.: Write the Name of the Facility that shipped the supply and the reference number of the transaction. Quantity Received: Write in the quantity of supply received. Enter as the total Dispensing Units received. <i>Skip to Step #5</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>To/From/Ref. No.: Write in the Name of Location where the supply was Sent and the reference number of the transaction.</p> <p>Quantity Received: Skip</p> <p>Quantity Issued: Write in the quantity of supply issued. Enter as the total Dispensing Units issued.</p> <p><i>Skip to Step #5</i></p>
	Supply Transferred in from or to a facility.	<p>To/From/Ref. No.: Write in the Name of the Facility where transferred from or to and the reference number of the transaction.</p> <p>Supply Transferred, are supplies that have entered or left the facility's supply by means other than regular flow of supplies from MSD.</p> <p><i>Skip to Step #4</i></p>
	Supply Locally Bought in local market.	<p>To/From: Write "Local Purchase"</p> <p><i>Skip to Step #4</i></p>
	Supply Damaged in facility.	<p>To/From: Write "Damage"</p> <p><i>Skip to Step #4</i></p>
	Supply Expired in facility.	<p>To/From: Write "Expired"</p> <p><i>Skip to Step #4</i></p>
	Physical Inventory conducted in facility	<p>To/From: Write "Physical Inventory"</p> <p><i>Skip to Step #6</i></p>
4	<p>Adjustments: Write in the quantity of the adjustment.</p> <p>If the adjustments increases the supply of the supply, it is a positive adjustment, place a + sign next to the adjustment number.</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>Transferred supply can be an increase or decrease.</p> <p>Example: Condom - 3,000 Microval + 600</p> <p>Supply Locally Bought is an increase</p> <p>Supply Damaged or Expired is a decrease.</p> <p>Example : Condom - 200</p>

5	Balance: Bring the ledger page up to date by calculating the balance and write the quantity in the box. <i>Skip to Step #8</i>	Quantity Received is an increase to the supply and should be added to the balance. Quantity Issued is a decrease to the supply and should be subtracted from the balance. Adjustments can be an increase or decrease to supply. See previous step and calculate as appropriate.	
6	Balance: (From Physical Inventory) Count the actual quantity of usable supplies available and write the quantity you counted in the balance box.	Usable supplies should not include supplies that are damaged, expired, or supplies that will expire before they can be issued or used.	
7	Select the appropriate condition. <div style="display: flex; justify-content: space-between;"> <i>IF</i> <i>THEN</i> </div>		
	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.	There is a possibility that errors were made. Use the following steps to help locate an error or to validate the difference. 1. Check the ledger for math errors. 2. Recount the stock, there could have been an error when counting the stock. 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 adjustments column enter the quantity of the adjustment, (it can be positive or negative). Example : Condom + 100 4. If an adjustment is made, investigate why it had to be made.	
8	Remarks: Write any remarks relevant to transaction just entered	Adjustments should be explained in this box.	
9	Initials: Write your initials.		
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • The transaction is recorded in the To/From boxes • The quantity of the transaction is recorded in the Qty Received, Qty Issues, or Adjustment box. • The balance on the ledger page is brought up to date. • The transactions have been explained in the remarks box. • The person filling in the ledger book has put his/her initials. 			

Job Aid C: Calculating Minimum Stock Quantity for Additional Supplies on Form 1: Stores Ledger

TASK:	Calculating the “Minimum Stock Quantity” on <i>Form 1: Stores Ledger</i> for Additional Supplies
COMPLETED BY:	Dispensary or Health Center Storekeeper or Hospital Storekeeper
PURPOSE:	To calculate the Minimum Stock Quantity
WHEN TO PERFORM:	When any Additional Supply appears to be low on stock. Any time an Additional Supply is ordered.
MATERIALS NEEDED:	<i>Form 1: Stores Ledger</i> book, pencil, supplies or receipt or issue voucher

Step	Action	Notes
1	Add the total quantities issued from the storeroom for the previous 4 complete months.	Four months of supply is the minimum stock you should have on hand. Using data from the previous four complete months is a simple technique for determining the minimum.
2	Using a pencil, write in this total in the Minimum Stock Quantity box.	This is done in pencil so it can be erased and re-calculated.
3	If you are below the minimum level on <i>Form 1: Stores Ledger</i> and it is the end of the quarter, check to ensure that the volume of supply held by Dispensers is insufficient to bring the facility above the minimum level.	
4	If you are below the minimum level for the facility, order this supply using <i>Form 2C: Blank R&R</i> .	If there are insufficient funds for ordering this supply, the district may not approve supplemental funds for purchase. However, it is important to order the supply to avoid stocking out of it.
5	When ordering Priority Supplies quarterly, review the Minimum Stock Level for all Additional Supplies quickly and compare to the stock level on the shelf. For any Additional Supply that is below the Minimum Stock Level during this check, this supply should be ordered. Re-calculate the Minimum Stock Level for any Additional Supply that is ordered.	See the <i>Job Aid, “Completing Form 2C: Blank R&R for Drugs and Related Medical Supplies.”</i>
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> The Minimum Stock Quantity is updated and written in pencil on <i>Form 1: Stores Ledger</i> for Additional Supplies. 		

Job Aid D: Completing Form 2A: Dispensary or Health Center Report & Request for Priority Drugs and Related Medical Supplies, Form 2B: Hospital Report & Request for Priority Drugs and Related Medical Supplies, and Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies at the Dispensary, Health Center, or Hospital

TASK:	Completing <i>Form 2A-C: Report & Request for Drugs and Related Medical Supplies</i> at the Dispensary, Health Center or Hospital
COMPLETED BY:	Dispensary or Health Center Storekeeper or Hospital Storekeeper with the Dispensary or Health Center In-Charge
PURPOSE:	<ul style="list-style-type: none"> To report on the quantities of supplies received and dispensed during the quarter To determine order quantities for each supply To provide MOH with data and information on supply usage and stock levels
WHEN TO PERFORM:	Quarterly
MATERIALS NEEDED:	<p>Blank <i>Form 2A: Dispensary or Health Center Report & Request for Priority Drugs and Medical Supplies</i> or <i>Form 2B: Hospital Report & Request for Priority Drugs and Medical Supplies</i>, <i>Form 1: Stores Ledger</i> book(s) for all storage areas, the most recent <i>Form 6: Facility Statement of Account</i>, pen, calculator. <i>Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies</i> may also be needed.</p> <p>See Section IV-A of the ILS Manual for additional information.</p>

Step	Action	Notes
Select the appropriate form		
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 Drugs and Related Medical Supplies</i>
	If the facility is a hospital and ordering Priority Supplies.	Use <i>Form 2B: Hospital Report & Request for Priority Drugs and Related Medical Supplies</i>
	If any facility is ordering Additional Supplies.	Use <i>Form 2C: Blank Report & Request for Additional Drugs and Related Medical Supplies</i>
	Note: All dispensaries and health centers are expected to complete <i>Form 2A: R&R</i> first, by ordering up to their maximum stock level all priority supplies. All hospitals are expected to complete <i>Form 2B: R&R</i> first, by ordering up to their maximum stock level all priority supplies. Facilities can order Additional Supplies using <i>Form 2C: Blank R&R</i> , if funds are available.	
Completing the Top Section of the Page		
2	Facility Code: Write the facility code.	This code can be found on <i>Form 6: Facility Statement of Account</i> .

3	Facility Name: Write the facility name.	
4	Type of Facility: Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> • (GOV) Government • (NGO) Non-government Organization • (FBO) Faith Based Organization • Other
5	Name of District: Write the name of the district where the dispensary, health center, or hospital is located.	
6	Date Submitted: Write the date that the report is submitted.	
7	Reporting Period: Write the period that this report covers. Write in Beginning Month, Ending Month and Year.	Example: February – April, 2004
Calculating the Quantity to Request		
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	Unit of Issue: 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	Beginning Balance (A): Write the stock on hand balance at the beginning of the quarter.	The Beginning Balance for the current quarter equals the Ending Balance (column D) from the previous quarter.
11	Received This Period (B): Write the total quantity of the supply your facility received during the quarter.	The quantity received is found in <i>Form 1: Stores Ledger Book</i> .
12	Lost/Adjusted (C): 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>Form 1: 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>Ending Balance (D): Calculate and write the Ending Balance for the day the order form is completed.</p> <p>From <i>Form 1: 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 “Ending 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 VII-C of manual for instructions on estimating the supplies in a bottle.
14	<p>Estimated Consumed (E): Calculate and write the estimated consumption for the quarter.</p> <p>The Estimated Consumption (E) equals Beginning Balance (A) plus Received This Period (B) plus or minus Lost/Adjusted (C) minus Ending Balance (D) $E = A + B \pm C - D$</p>	If you experienced a stockout of this supply during the quarter, see the <i>Job Aid, “Handling Stockouts when Completing Forms 2A-C: R&R”</i> for detailed directions on estimating consumption during the stock period.
15	<p>Quantity Needed (F): 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) $(E \div 3) \times 7 - D$</p>	
16	<p>Quantity Requested (G): Write the quantity of the supply you will order, rounded to the nearest 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.</p> <p>Examples: 1,089 tablets are needed and come in bottles of 1000 tablets., Therefore, 1 bottle should be ordered. If 1,600 tablets are needed round up and order 2 bottles.</p>
17	<p>Price (H): The price is pre-printed on <i>Forms 2A</i> and <i>2B</i>. For Additional Supplies, write in the price.</p>	Use the most recent pricing information from the MSD Product Catalog.

18	<p>Cost (I): 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. $G \times H$</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.
Calculating the Cost and Funds Allocation for the Supplies		
20	<p>Total cost this page: 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 "Tot. approved cost this pg." Blank—this will be completed at the District level.
21	Cost Summary/Total Cost: 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	Sub-total: Add the costs from each page, 1-5.	This is the total cost for all priority supplies.
23	<p>Total cost of additional supplies from Form 2C:Blank R&R (if any):</p> <p>Leave this blank until Step 29.</p>	
24	Total cost of order: Leave this blank until Step 29.	
25	Total available allocation: 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 Form 6: Facility Statement of Account. 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>

27	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>
	If Supplemental Funding is needed, (a negative number in step #26.), leave the Total cost of additional supplies from <i>Form 2C: Blank R&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	Supplemental Funding Needed: Write the funding needed. This is the negative number that you got in step #27.	This is the amount of supplemental funding that will need to be requested from the DMO to complete the order.
	Write the number as a positive number. <i>Skip to Step # 31</i>	The District Pharmacist will fill out the appropriate forms when he/she review the order.
29	Complete <i>Form 2C Report & Request for Additional Drugs and Related Medical Supplies</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	Total cost of additional products from <i>Form 2C: Blank R&R</i>: Write in the total cost from all pages of <i>Form 2C: Blank R&R</i> .	
31	Total cost of order: Add the Sub-total and the Total cost of additional products from <i>Form 2C: Blank R&R</i> .	
32	Select the appropriate condition: <i>IF</i>	<i>THEN</i>
	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&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&R</i> , the funds will be used in the next quarter.

Signing and Approving the Forms		
33	Review the order with the Dispensary or Health Center In-Charge or the Medical Officer In-Charge: 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 page 18 of the ILS Procedures Manual for more detailed information.
34	Completed By and Signature: Person completing the form writes their name and signs.	
35	Approved By: Completed at the District Level. Leave blank.	
36	<p>Dispensaries and health centers should deliver <i>Form 2A: R&R</i> and <i>Form 2C: Blank R&R</i>, to the District for review by the District Pharmacist and approval by the District Medical Officer.</p> <p>Hospitals should deliver <i>Form 2B:R&R</i> and <i>Form 2C: Blank R&R</i>, to the Hospital Therapeutics Committee for review and approval.</p>	
37	File bottom copy of <i>Form 2A-C: R&R</i> . When the DMO or HTC has approved the form(s) a copy is filed at the dispensary, health center, or hospital.	If <i>Form 3: Supplemental Funding</i> was used a copy of it should be filed with <i>Form 2: R&R</i> .
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • The top section of the form(s) is (are) filled in. • 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." • The cost information has been filled on each page. • The cost summary table is filled in. • The form(s) have been delivered to the District Pharmacist for dispensaries and health centers or the HTC for hospitals for their review and approval. • The bottom copy of <i>Form 2A-C: R&R</i> is filed at the facility after the DMO or HTC has approved the order. 		

Job Aid E: Reviewing and Finalizing Form(s) 2A and 2C: Dispensary or Health Center Report and Request for Drugs and Related Medical Supplies by the District or Form 2B: Hospital Report and Request for Drugs and Related Medical Supplies by the Hospital Therapeutic Committee

TASK:	Reviewing and Finalizing <i>Form 2A and 2C: Report & Request for Drugs and Medical Supplies</i> at the District
COMPLETED BY:	District Pharmacist and DMO in consultation with the Facility Storekeeper for Dispensary and Health Center orders, the Hospital Therapeutic Committee (HTC) for Hospital orders
PURPOSE:	<ul style="list-style-type: none"> To ensure that supply orders are within available budget To approve order quantities for each supply To ensure that supply orders are within established guidelines
WHEN TO PERFORM:	<ul style="list-style-type: none"> For the District Pharmacist, at the beginning of each month, for ordering group A, B, or C For the HTC, at the beginning of every quarter.
MATERIALS NEEDED:	Form 2A-C: R&R for facility, pen, calculator, Form 3: Supplemental Funding, if applicable

Step	Action	Notes
Review of order by the District Pharmacist or HTC		
1	<p>Check the timeliness of dispensary or health center reports:</p> <ul style="list-style-type: none"> Was the report received by the end of the second week of the month? Did the dispensary or health center submit their order with the correct ordering group A, B, or C? <p>Hospital orders should also be on time.</p>	<p>If the report was not received on time, remind the dispensary or health center of the importance of timely reporting to avoid stockouts and to better use transport resources.</p>
2	<p>Review <i>Form 2A-C: Report & Request for Drugs and Medical Supplies</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"> Is the top section of the form complete? Are all priority supplies on <i>Form 2A</i> or <i>2B</i> that are offered by the facility ordered? Are the quantities needed (column F) reasonable given the Ending Balance and the Estimated Consumed? Are the Quantities Requested (column G) correctly calculated based on the unit of issue? Are the Costs (column I) correct? On the last page are the Total cost of order and the Total available allocation correct? If the facility is ordering using <i>Form 2C: Blank R&R</i>, are they only ordering supplies that it will dispense/use? 	<p>Select a few supplies at random to check the full calculation. If you find errors, check additional supplies or check all supplies.</p> <p>For the total available allocation, refer to <i>Form 8: Summary Facility Statement of Account</i>.</p>

3	Compare the total cost of the order and the total available allocation.	
	<i>IF</i>	<i>THEN</i>
	Total cost of the order is less than or equal to the Total available allocation	then no adjustment needs to be made, <i>Skip to Step #8</i>
3	Total cost of the order is greater than the Total available allocation	<i>Skip to Step #4</i>
		Note: The Storekeeper should have already written Supplemental Funding needed on the Cost Summary table.
Supplemental Funding to be requested from DMO or HTC		
4	Complete Form 3: Supplemental Funding with the DMO or HTC to identify funding sources that can be used to supplement the facility's available allocation.	<p><i>Form 3: Supplemental Funding</i> will document funding sources that can be accessed to cover the total cost of the order.</p> <p>See the <i>Job Aid "Completing Form 3: Supplemental Funding"</i></p> <p>When Supplemental Funding Sources have been identified and approved by the DMO or HTC, <i>skip to Step #5</i></p>
Verification or Adjustment of the Quantities to Order by District Pharmacist or HTC		
5	Calculate the Total Available Funding: Add the Total available allocation figure and the total of the approved Supplemental Funding figure to get the Total Available Allocation under the "Cost Approved" column on the Cost Summary chart.	<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 are the funds that the facility has in the Total available allocation figure.</p>
6	Compare the total cost of the order and the total available funding.	
	<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>
6	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 Form(s) 2A-C:R&R. Below are some suggestions for reducing quantities due to budget limitations:</p> <ul style="list-style-type: none"> • 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. • 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. • 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. • 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. <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>Approved Quantity: For each supply being ordered on Form(s) 2A-C:R&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>Approved Cost: 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). $K = J \times H$</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>Total approved cost this page: 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	Cost Approved: 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.	
12	Total cost of order: Add up the Total Cost Approved column on the Cost Summary table and write the total in the Total Cost of Order box in the "Cost Approved" column.	
13	Total available allocation: Write the current amount of allocated funds available to the facility.	The current amount of allocated funds available is found on the most recent <i>Form 8: Summary Facility Statement of Account</i> , in column E on the facility line. If allocated funds are not available then write zero.
14	Supplemental funding needed: Write the amount of Supplemental Funding Needed identified and approved by the DMO or HTC.	This information can be found on <i>Form 3: Supplemental Funding</i> . This is the amount that will be paid by check by the DMO or HTC.
15	Deliver the Report and Request Form(s) to the District Medical Officer or HTC.	Submit <i>Form 2A and 2B: R&R</i> and other forms used for the order, they could included: <i>Form 2C: Blank R&R</i> plus <i>Form 3: Supplemental Funding</i>
Order Approval by the DMO or HTC		
16	DMO or HTC reviews and verifies that the available funding covers the total cost of the order.	The Total cost of order should be less than or equal to the sum of the Total available allocation and the Supplemental funding needed.
17	Approved By and Signature: The DMO or HTC approving the form writes their name and signs.	
18	Distribution of Form(s): <ul style="list-style-type: none"> The top (original) copy is sent to MSD by the District DMO or HTC The middle copy is retained by the DMO or HTC The bottom copy is retained by the dispensary, health center, or hospital placing the order. 	Accompanying forms are distributed in the same manner
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> The District Pharmacist has reviewed and corrected errors made in making the order. If needed, Supplemental Funding Sources have been identified and approved by the DMO. The total funding available covers the full cost of the supplies being ordered. All forms used to make the order have been approved by the DMO. Forms are distributed as per Step #18. 		

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

TASK:	Adjusting the Quantity Needed on <i>Forms 2A-C: Report & Request for Drugs and Related Medical Supplies</i> when a stockout has occurred during the quarter.
COMPLETED BY:	Dispensary or Health Center Storekeeper or Hospital Storekeeper
PURPOSE:	To adjust the Quantity Needed
WHEN TO PERFORM:	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.
MATERIALS NEEDED:	<i>Forms 2A and C: R&R</i> for dispensaries or health centers, <i>Forms 2B and C: R&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 Consumed 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 Estimate Consumed is the figure you wrote down in step #1. Example: $120 \div 0.89 = 134.83$ or 135
6	Substitute the new figure to calculate the Quantity Needed (column F). 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 Ending 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	Complete the rest of the columns on the form.	

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 G: Completing Form 3: Supplemental Funding

TASK:	Completing <i>Form 3: Supplemental Funding</i>
COMPLETED BY:	District Medical Officer and District Pharmacist in conjunction with the Dispensary or Health Center Storekeeper or the Hospital Therapeutic Committee (HTC) with the Hospital Storekeeper
PURPOSE:	To determine the sources of funds to be used to supplement facility pre-authorized allocations.
WHEN TO PERFORM:	Each time the total cost of a drug and related medical supply order exceeds its total allocation available
MATERIALS NEEDED:	<i>Form 3: Supplemental Funding</i> , Completed <i>Forms 2A-C: R&R</i> , pen, calculator

Step	Action	Notes
Identifying the Need for Supplemental Funding		
1	<p>Total Allocation Available (A): Write the total allocation available in the facility's MSD account.</p> <p>The total allocation available should equal the current quarter's allocation plus any unused funds from previous quarters.</p>	The Total Allocation Available can be found on <i>Form 6: Facility Statement of Account</i> , or in the Cost Summary table of <i>Form(s) 2A-C:R&R</i> .
2	<p>Total Cost of Current Order (B): Write the total cost of the facility order.</p>	This is the Total Cost of Order listed in the Cost Summary table of <i>Form(s) 2A-C:R&R</i> .
3	<p>Difference (C): Write the difference between the facility's available allocation and the total cost of the order.</p> <p>This is the amount that will need to be funded through other sources.</p>	This is the Supplemental Funding Needed listed in the Cost Summary table of <i>Form(s) 2A-C:R&R</i> .
Identification of Funding Sources by DMO or HTC		
4	<p>Supplemental Funding Sources:</p> <p>Select the supplemental funding source(s), from the list on the right.</p> <p>Write the amount of funding that each source will provide in the Supplemental Funding Approved By DMO or HTC. Place the amount(s) so it corresponds to the funding source.</p>	<p>The potential funding sources are:</p> <ul style="list-style-type: none"> Locally Managed Funds, which includes user fees, CHF, and NHIF. Other, which could include donor-funds, private insurance, etc. Other Government Funding

5	Total Supplemental Funding (G): Add up the total for the Supplemental Funding Sources and write in the space provided. $G = D + E + F$	This is the total of the different funding from supplemental sources identified in Step #4.
6	Approved By, Signature, Date: DMO or HTC writes name, signs and dates the Supplemental Funding Form.	The DMO or HTC's signature authorizes the use supplemental funds that have been written in column "Supplemental Funding Approved by DMO or HTC." This amount will be paid for by check.
7	Attach <i>Form 3: Supplemental Funding</i> to the <i>Form(s) 2A-C:R&R</i> ordering the supplies.	
8	District or hospital files a copy of <i>Form 3: Supplemental Funding</i>	This form will be filed with the district or hospital copy of <i>Form(s) 2A-C:R&R</i>
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • The Total Allocation Available, Total Cost of Current Order and Difference figures are copied from the Cost Summary table of <i>Form(s) 2A-C:R&R</i>. • The DMO or HTC has signed and approved the use of supplemental funding. • <i>Form 3: Supplemental Funding</i> is attached to the facility's 2A-C:R&R. • A copy of the <i>Form 3: Supplemental Funding</i> is filed by the district or hospital. 		

Job Aid H: Completing Form 4: Order Compilation

TASK:	Completing <i>Form 4: Order Compilation</i>
COMPLETED BY:	District Pharmacist
PURPOSE:	<ul style="list-style-type: none"> To summarize the value of orders placed by dispensaries and health centers in the district. To determine if all dispensaries and health centers have ordered To calculate the total amount of supplementary funds needed to pay for the supplies ordered
WHEN TO PERFORM:	Monthly, at the end of each ordering cycle—A, B, or C
MATERIALS NEEDED:	Forms 2A-C: <i>Report & Request for Drugs and Related Medical Supplies</i> for all dispensaries and health centers in the district, blank <i>Form 4: Order Compilation</i> , pen, calculator

Step	Action	Notes
1	District Name: Write name of district.	
2	Group: Write the ordering group letter of the health facilities that will be listed on the form.	Groups are either A, B, or C.
3	Beginning Month/Ending Month/Year: 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.
For each dispensary or health center that will be listed on the form		
4	Dispensary or Health Center Code: Write the code number that designates the dispensary or health center.	
5	Dispensary or Health Center Name: Write the name of the dispensary or health center.	
6	Approved Cost of Order: Write the total approved cost of the order being placed by the dispensary or health center.	<p>This is the Total Approved Cost listed in the Cost Summary portion on the last page of <i>Form 2A-C: R&R</i> for the dispensary or health center.</p> <p>Example: T/Sh 4,192,000</p>
7	<p>Supplemental Funds Used: Write the amount of supplemental funds that will be used to cover the cost of the dispensary or health center's order.</p> <p>If Supplemental Funds were not requested for this facility, write "0" in the box.</p>	<p>This is the Total Approved Supplemental Funding Needed listed in the Cost Summary portion on the last page of <i>Form 2A-C: R&R</i> for the dispensary or health center.</p> <p>Each <i>Form 2A-C: R&R</i> should be accompanied with <i>Form 3: Supplemental Funding</i> that has the DMO's signature authorizing the use of these funds.</p> <p>Example: T/Sh 1,370,000</p>

8	Select the appropriate action:	
	<i>IF</i>	<i>THEN</i>
	More dispensaries and health centers need to be recorded.	<i>Skip to 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>
Calculating the Totals and Submitting the Form		
9	Total/Approved Cost of Order: Add up and write the total Approved Cost of Order amounts for all facilities listed on the form	Example: T/Sh 28,170,000
10	Total/Supplemental Funds Used: 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 Funds Used is the amount covered by check. Example: T/Sh 5,640,000
11	Check number: Write the number of the check that is being submitted with the order.	
12	Dated: Write the date on which the check is being written.	
13	In the amount of: Write the amount of the check.	The amount of the check is the result of step #10. Example: T/Sh 5,640,000
14	Submitted to MSD on (date): Write the date on which the DMO sends the order to MSD.	<i>Form 4: Order Compilation Form</i> should be finalized and sent to MSD no later than the end of week 3 of the 1st month of the quarter.
15	DMO Signature: The DMO signs Form 4: Order Compilation.	
16	Distribution of Form 4: Order Compilation <ul style="list-style-type: none"> The original is sent to MSD The District keeps the bottom copy for their records 	<i>Form 4: Order Compilation</i> is submitted to MSD with the originals of <i>Form(s) 2A-C: R&R</i> and any <i>Form 3: Supplemental Funding</i> , as appropriate
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> All orders for the current group of facilities are listed on the form. A check is drawn and recorded on the form, for the total supplementary funds used. The original of <i>Form 4: Order Compilation</i> and <i>Form(s) 2A-C: R&R</i> and any <i>Form 3: Supplemental Funding</i>, as appropriate, have been submitted to MSD by the end of week 3 of the 1st month of the quarter. 		

Job Aid I: Completing and Interpreting Form 5: Shipment advice

TASK:	Completing and Interpreting <i>Form 5: Shipment Advice</i>
COMPLETED BY:	MSD Personnel complete the form and it is used by Dispensary or Health Center Storekeepers or Hospital Storekeepers
PURPOSE:	<ul style="list-style-type: none"> MSD: To document the quantity and value of supply issued the facility. Facility: To verify the quantity of supplies received from MSD
WHEN TO PERFORM:	When an order is shipped to a facility
MATERIALS NEEDED:	<i>Forms 2A-C: Report & Request for Drugs and Related Medical Supplies</i> from facility placing the order, pen, and calculator

Step	Action	Notes
Interpreting how MSD has completed the form		
1	Page __ of __: This is the page number 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	District: This is the name of the district for which the facility has ordered.	
3	Facility Code: This is the MSD-assigned code number that designates the dispensary, health center, or hospital that has ordered.	.
4	Facility Name: This is the name that designates the dispensary, health center, or hospital that has ordered.	
5	Date facility noted as submitted: This is the date that the facility reported as the date submitted 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	Date order received by MSD: This is the date on which <i>Form(s) 2A-C: R&R</i> were received at MSD.	
7	MSD Code: This is the MSD code number for the supply.	
8	Supply Item: This is the name, strength/size and form of the supply at MSD.	
9	Unit of Issue: This is the packing size of the supply.	
10	Quantity Requested (A): This is the quantity requested by the facility from column G on <i>Forms 2A-C:R&R</i> .	
11	Quantity Approved (B): This is the quantity approved by the DMO or HTC from column J on <i>Forms 2A-C:R&R</i> .	If the DMO or HTC has changed the quantity requested, MSD will only deliver the quantity approved.

12	Order Note (C): If applicable, MSD will select and write the letter that represents the Order Note. Errors are errors on the part of the facility making the order. MSD will not change the order, but is notifying the facility of the error with these codes.	The codes are: <ul style="list-style-type: none"> • Ending balance of last quarter not equal to beginning balance this quarter—column D of the previous report should equal column A of the current report. • Math error in estimated consumption—in calculating column E, an error was made • Math error in quantity requested—the math in column F is incorrect • Math error in cost—the calculation in column I is incorrect
13	Quantity Issue (D): This is the quantity of the supply issued by MSD.	
14	Total Value (E): This is the total value of the supply issued by MSD.	
15	Mod. Code (F): [Modification Code] If applicable, MSD may not be able to supply the quantity approved. In this case, MSD will note the reasons for the modification of the quantity issued: <ul style="list-style-type: none"> • MSD low/out of stock • Change in unit of issue • Change in strength • Change in form • Change in price • Substitute equivalent • Supply no longer available • Insufficient facility funds • Facility not authorized for this item 	<ul style="list-style-type: none"> • 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) • 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 • Change in strength—if the strength of a supply changes, for example, from 500mg to 250mg, the total quantity may be changed • Change in form—if a product changes form, for example, from a tablet to a capsule, this will be noted • Change in price—if the price has changed, MSD will note it, sending the total amount possible, given the financial constraints • Substitute equivalent—if an equivalent supply is available, the requested supply may be 0 and the new supply will be the amount issued • Supply no longer available—if a supply is no longer available, the quantity issued will be 0 • Insufficient facility funds—if the order exceeds the amount of funds, MSD will reduce the order • Facility not authorized for this supply—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

16	<p><i>Form 5: Shipment Advice</i> 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.</p>	This carton will also contain <i>Form 6: Facility Statement of Account</i> .
Completing the Shipment Advice at the Dispensary or Health Center or Hospital when the shipment arrives		
17	<p>Inform the Village Health Committee or HTC that the cartons have arrived.</p> <p>In the presence of a committee member:</p> <ul style="list-style-type: none"> • Open the carton that has the documents. • Retrieve <i>Form 5: Shipment Advice</i> • Quantity Received (G): Count the quantity of a supply received and write in the number in column G for the appropriate supply. Repeat this sub-step for each supply listed on the Shipment Advice and supplies in cartons. • Received by and Date: Write the name of the Storekeeper that receives the supply and the date. • Witnessed by and Date: Write the name of the person that witnessed the receipt of the supply and the date. 	
18	<p><i>Form 5: Shipment Advice</i> distribution:</p> <ul style="list-style-type: none"> • If there are no discrepancies, the facility keeps the signed form. • If there are discrepancies report the problem to the District Pharmacist. 	
<p>THIS TASK IS COMPLETED WHEN:</p> <ul style="list-style-type: none"> • The facility has counted the supply and completed the Quantity Received column. • The person receiving the supplies and the witness have signed and filed the form or taken the appropriate action. 		

Job Aid J: Interpreting Form 6: Facility Statement of Account

TASK:	Interpreting <i>Form 6: Facility Statement of Account</i>
COMPLETED BY:	MSD Personnel complete the form and it is used by Dispensary or Health Center Storekeepers or Hospital Storekeepers
PURPOSE:	<ul style="list-style-type: none"> To calculate the new available allocation for the dispensary, health center, or hospital. To inform the facility of their current account balance.
WHEN TO PERFORM:	Every time an order is issued to a facility
MATERIALS NEEDED:	None

Step	Action	Notes
1	Facility Code: This is the MSD-assigned code number that designates the dispensary, health center, or hospital that has ordered.	
2	Facility Name: This is the name that designates the dispensary, health center, or hospital that has ordered.	
3	Type of Facility: This is the type of facility.	Facilities can be: <ul style="list-style-type: none"> (GOV) Government (NGO) Non-government Organization (FBO) Faith Based Organization Other
4	District: This is the name of the district for which the facility has ordered.	
5	Statement Date: This is the date that the statement was prepared by MSD.	
6	Ending Balance Previous Quarter (A): This is the ending balance in the facility's account after the previous quarter's order was filled.	This information comes from the previous quarters <i>Form 6: Facility Statement of Account</i> . Example: 3,000,000 Tsh
7	Value of Current Order (B): This is the value of the current order.	This information comes from <i>Form 5: Shipment Advice</i> . It is the value of the current shipment. Example: 4,060,000 Tsh
8	Supplemental Funds Used (C): 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>Form 3: Supplemental Funding</i> or from Approved Supplemental Funding Needed on the Cost Summary Table on <i>Forms 2A-C: R&R</i> . Example: 1,370,000 Tsh

9	<p>New Funds Added (D): 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>Ending Balance (E): MSD will calculate the ending balance for the facility by using the following formula.</p> <p>$A - B + C + D = E$</p>	<p>Example: 4,310,000 Tsh</p>
11	<p><i>Form 6: Facility Statement of Account</i> will be placed by MSD in the carton that contains the "Documents".</p>	<p><i>Form 6: Facility Statement of Account</i> will be accompanied by Form 5: Shipment Advice, in the sealed carton.</p>
<p>THIS TASK IS COMPLETED WHEN:</p> <ul style="list-style-type: none"> The facility has reviewed the form for accuracy. 		

Job Aid K: Completing Form 7: Packing Slip

TASK:	Completing <i>Form 7: Packing Slip</i>
COMPLETED BY:	MSD, district and dispensary, health center, or hospital personnel
PURPOSE:	To track the shipment status of an order
WHEN TO PERFORM:	Whenever supplies are shipped from MSD to districts and hospitals, and from districts to dispensaries or health centers
MATERIALS NEEDED:	Cartons of received supplies

Step	Action	Notes
Cartons are shipped by MSD accompanied by <i>Form 7: Packing Slip</i> for each of the facilities that will be receiving an order.		
1	Facility Code: This is the MSD-assigned code number that designates the dispensary, health center, or hospital that has ordered.	
2	Facility Name: This is the name that designates the dispensary, health center, or hospital that has ordered.	
3	Type of Facility: This is the type of facility.	Facilities can be: <ul style="list-style-type: none"> • (GOV) Government • (NGO) Non-government Organization • (FBO) Faith Based Organization • Other
4	District: This is the name of the district for which the facility has ordered.	
5	Shipment Date: MSD will note the date the cartons were shipped from MSD	Dispensaries, health centers, and hospitals can use this information to see how long it takes to receive their order from MSD
6	Number of Cartons Shipped by MSD: MSD will note the number of cartons that were being shipped for the facility	Example: 8

Actions at the district level when the shipment arrives from MSD		
7	<ul style="list-style-type: none"> • Visually inspect all the cartons. Look for signs of damage, opened, etc. • Number of cartons received by the district: Count the number of cartons and write the number received for each facility on <i>Form 7: Packing Slip</i>. • Received by at the district and date: The person receiving the shipment writes their name and the date that they received the shipment. • Number of cartons received by the facility: At the district level, this space is left blank. • Distribution of <i>Form 7: Packing Slip</i>: The bottom copy is returned to the truck driver to be delivered to MSD. The remaining copies stay with the shipment. 	See Section VII for details on visual inspection.
Actions at the dispensary, health center, or hospital when the shipment arrives from the district		
8	<ul style="list-style-type: none"> • Visually inspect all the cartons. Look for signs of damage, opened, etc. • Number of cartons received by the facility: Count and write the number of cartons received by the facility. • Received by at the facility and date: The person receiving the shipment writes their name at the date that they received the shipment. • Distribution of <i>Form 7: Packing Slip</i>: The district staff delivering the shipment retains the original to give to the DMO. The remaining copy is filed at the receiving dispensary or health center. Hospitals keep the original and discard the remaining copy. 	If the number of cartons does not match the number shipped, notify MSD immediately.
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • The district has received and signed for the cartons to be delivered to the dispensaries and health centers they supervise. • A copy of <i>Form 7: Packing Slip</i> with the district acknowledgement of receipt is returned to MSD. • The dispensary, health center, or hospital has received and signed for the cartons arriving at the facility. • The original <i>Form 7: Packing Slip</i> is returned to the DMO and a remaining copy if filed at the dispensary or health center. Hospitals keep the original and discard the remaining copy. 		

Job Aid L: Interpreting Form 8: Summary Facility Statement of Account

TASK:	Interpreting <i>Form 8: Summary Facility Statement of Account</i>
COMPLETED BY:	MSD for use by the District Pharmacist and DMO
PURPOSE:	To summarize <i>Form 6: Facility Statement of Account</i> for all dispensaries and health centers in the district. The DMO can use the form to help determine which dispensaries or health centers may require supplemental funds when they order.
WHEN TO PERFORM:	When preparing to send shipments to the dispensaries and health centers from the district.
MATERIALS NEEDED:	None

Step	Action	Notes
1	District Code: This is the MSD-assigned code number that designates the district.	
2	District Name: This is the name that designates the district.	
3	Statement Date: This is the date that the statement was prepared by MSD.	
For each facility:		
4	Facility Code: This is the MSD-assigned code number that designates the dispensary, health center, or hospital that has ordered.	
5	Facility Name: This is the name that designates the dispensary, health center, or hospital that has ordered.	
6	Ending Balance Previous Quarter (A): This is the ending balance in the facility's account after the previous quarter's order was filled.	This information comes from the previous quarters <i>Form 6: Facility Statement of Account</i> . Example: 3,000,000 Tsh
7	Value of Current Order (B): This is the value of the current order.	This information comes from <i>Form 5: Shipment Advice</i> . It is the value of the current shipment. Example: 4,060,000 Tsh
8	Supplemental Funds Used (C): 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>Form 3: Supplemental Funding</i> or from Approved Supplemental Funding Needed on the Cost Summary Table on <i>Forms 2A-C: R&R</i> . Example: 1,370,000 Tsh

9	<p>New Funds Added (D): 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>Ending Balance (E): MSD will calculate the ending balance for the facility by using the following formula.</p> $A - B + C + D = E$	<p>Example: 4,310,000 Tsh</p>
11	<p>A copy of <i>Form 8: Summary Facility Statement of Account</i> is sent to the district.</p>	<p>The form will be sent by MSD with the cartons that are issued to the district.</p>
12	<p>When dispensaries and health centers submit orders, DMOs can use the form to help determine how to use supplemental funds. Some possibilities include:</p> <ul style="list-style-type: none"> • Larger dispensaries and health centers may routinely need supplemental funds and you should be prepared to use the funds for them • Some facilities may be requesting supplemental frequently for supplies that are not Priority Supplies. Speak with the Storekeeper to determine why the facility is frequently requesting supplemental funding. • Some facilities may not be using their full allocation and may have large balances. Speak with the Storekeeper to determine why the facility has excess funds. 	
<p>THIS TASK IS COMPLETED WHEN:</p> <ul style="list-style-type: none"> • The District Pharmacist and the DMO have reviewed the form. 		

Job Aid M: Completing Worksheet 1: Add/Modify/Delete a Facility

TASK:	Completing <i>Worksheet 1: Add/Modify/Delete a Facility</i>
COMPLETED BY:	District Pharmacist or Hospital Storekeeper
PURPOSE:	<ul style="list-style-type: none"> To provide information to the MOH and to MSD about dispensaries or health centers in the district. To provide information to the MOH and to MSD about hospitals.
WHEN TO PERFORM:	<ul style="list-style-type: none"> When initiating the ILS in the district. When adding a new facility to the ILS. When deleting a facility in the ILS. When modifying information about a facility.
MATERIALS NEEDED:	Blank <i>Worksheet 1: Add/Modify/Delete a Facility</i> and Pen

Step	Action	Notes
1	District: Enter the name of the district.	Example: Uyui
2	Action: Tick the action being performed for this facility: <ul style="list-style-type: none"> To add a new dispensary, health center, or hospital, tick “add.” To change information about a dispensary or health center or hospital, tick, “modify.” To delete a dispensary, health center, or hospital, tick “delete.” 	Example: Add X .
3	Facility Code: Enter the MSD-supplied code for the dispensary, health center, or hospital. If this is a new facility, enter “new.”	MSD will provide the code once the facility is registered Example: New
4	Facility Name: Enter a unique name to identify the dispensary or health center.	Example: Karamba Dispensary
5	Facility Physical Address: Enter sufficient location information to identify the physical location of the facility.	Example: Corner of Chole and Haile Selassie Road, Plot 113, Dar es Salaam
6	Facility Mailing Address: Enter the P.O. Box number and city.	Example: Box 23304, DSM
7	Facility Phone Number: Enter the land line phone number for the facility. If no land line is available, enter the number (and contact) of the nearest land line.	Example: 260-1502 (private residence of the in-charge)

8	Facility Fax Number: Enter the fax number for the facility. If no fax number is available, enter the number (and contact) for the nearest fax. If there is none within a reasonable distance, write “not available.”	Example: 260-1502 (same as phone)
9	Name of Facility In-Charge: Enter the name and title of the facility in-charge.	Example: Michael Mmari, Clinical Officer
10	Phone of Facility In-Charge: Enter the cell phone number of the facility in-charge. If s/he has no cell phone, enter the number (and contact) of the nearest cell phone. If there is no coverage, write “not available.”	Example: 0745-486-691
11	Name of Facility Storekeeper: Enter the name of the facility’s storekeeper or person assigned to manage the supplies and their title. If it is the Facility In-Charge, enter the name of a secondary contact.	Example: Emma Urasa, Nurse Assistant
12	Phone of Facility Storekeeper: Enter the cell phone number of the facility storekeeper. If s/he has no cell phone, enter “not available.”	Example: Not available
13	<p>Name of Priority Supplies NOT Managed by This Facility: Enter the name of any supply on <i>Form 2A or 2B: Report & Request for Priority Drugs and Related Medical Supplies</i> that is not managed by this facility.</p> <p>“Not managed” signifies that this supply is not intended to be stocked at this dispensary or health center. This means that the facility never uses or intends to use the supply—not simply that the supply is not being ordered during a specific order.</p> <p>If all Priority Supplies are managed by the facility, enter “none.”</p>	<p>This information will be used by the MOH to understand which Priority Supplies are offered at which facilities.</p> <p>Example: Some facilities, for example, may not be able to offer IV fluids to patients at any time.</p>
14	Enter any other information that might be helpful.	Example: Facility in-charge has been at this facility for ten years.
15	<p>Distribution of Forms:</p> <ul style="list-style-type: none"> • Original goes to MSD • One copy is kept by the district • Bottom copy is filed at the facility. 	
<p>THIS TASK IS COMPLETED WHEN:</p> <ul style="list-style-type: none"> • All information on the form is complete. • The form has been distributed as per step #13. 		

Job Aid N: Completing Worksheet 2: Assignment of Facilities to Delivery Groups

TASK:	Completing <i>Worksheet 2: Assignment of Facilities to Delivery Groups</i>
COMPLETED BY:	District Pharmacist working with the District Transport Officer
PURPOSE:	To assign all facilities in the district to an ordering group
WHEN TO PERFORM:	<ul style="list-style-type: none"> • When initiating the ILS in the district. • When changing the routing system for deliveries.
MATERIALS NEEDED:	Map of the district, names of all facilities, pen, district transport plan (if up to date)

Step	Action	Notes
1	District Name: Enter the name of the district.	Example: Uyui
2	Date of Assignment/Re-assignment: Enter the date the form has been completed.	The current worksheet will take the place of any previous worksheets.
3	Facility Code: Enter the MSD-assigned facility code.	Example: 0213123
4	Facility Name: Enter the unique name of the facility.	Example: Jumla Health Center
5	Town/village Name: Enter the name of the town or village where the facility is.	Example: Jumla
6	Group: Enter 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 drugs and related medical supplies within a 2-week period after receipt of cartons from MSD.
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • All facilities in the district have been assigned to a route. • A copy of the worksheet has been sent to MSD. 		

Job Aid O: Completing Worksheet 3: Supervision Checklist

There is no job aid for *Worksheet 3: Supervision Checklist*.

XIII. FORMS

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

Form #	Form Name
1	Stores Ledger
2A	Dispensary or Health Center Report & Request for Priority Drugs and Related Medical Supplies
2B	Hospital Report & Request for Priority Drugs and Related Medical Supplies
2C	Blank Report & Request for Additional Drugs and Related Medical Supplies
3	Supplemental Funding
4	Order Compilation
5	Shipment Advice
6	Facility Statement of Account
7	Packing Slip
8	Summary Facility Statement of Account

INTEGRATED LOGISTICS SYSTEM

FORM 1: STORES LEDGER

FACILITY CODE: _____

FACILITY NAME: _____

TYPE OF FACILITY (GOV/NGO/FBO/OTHER): _____

NAME OF DISTRICT: _____

DATE LEDGER BOOK OPENED: _____

DATE LEDGER BOOK CLOSED: _____

BOOK: _____ OF _____

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

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

Name of District: _____ Date Submitted: _____

Reporting Period: Beginning Month: _____ Ending Month: _____ Year: _____

PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
10011001	Acetylsalicylic Acid (Aspirin) Tabs 300mg	1000T								1800			
10011002	Albendazole Tabs 200mg	100T								1200			
10011007	Amoxicillin Caps 250mg	1000T								26000			
10011028	Co-Trimoxazole Tabs 400mg/80mg	1000T								6700			
10011033	Doxycycline Caps 100mg	1000T								10800			
10011036	Erythromycin Tabs 250mg	1000T								27000			
10011037	Ferrous Sulphate + Folic Acid Tabs 200/0.25mg	1000T								4200			
10011038	Folic Acid Tabs 5mg	1000T								1300			
10011050	Magnesium Trisilicate BPC Compound Tabs	1000T								3500			
10011053	Metronidazole Tabs 200mg	1000T								4000			
10011059	Paracetamol Tabs 500mg	1000T								3200			
10011070	Quinine Tabs 300mg	1000T								30200			
10011073	Sulphadoxine+Pyrimethamine Tabs 500/25mg	500T								12400			
10011084	Ciprofloxacin Tabs 500mg	100T								2800			
10011113	Amodiaquine Tabs 200mg	1000T								15000			
10018100	Microgynon Tabs	Each								0			

Tot. cost this pg.:		Tot. approved cost this pg.:	
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PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
10018101	Lo-Femenal Tabs	Each								0			
10018102	Microval Tabs	Each								0			
10101016	Erythromycin granules 125mg/5ml	100ML								700			
10101023	Oral rehydration salts (ORS) Pdr for 1 litre	100P								10000			
10101032	Tetracycline 1% ointment, Tube	5GM								500			
10101050	Amoxicillin suspension 125mg/5ml, 100ml	24P								10200			
10101054	Chloramphenicol eye ointment 1%	100P								16300			
10101055	Clotrimazole 1% cream/ointment, Tube 2gm	24P								6100			
10101057	Paracetamol Syrup 120mg/5mls, 100mls	24P								7000			
10101059	Amodiaquine 100mls	24P								9600			
10101060	Co-Trimoxazole Suspension 200/40mg/5ml, 100ml	24P								9500			
10101061	Podophylline 10% in water 60ml	60ML								16300			
10112006	Dispensing Envelope	100P								900			
10123001	Chlorhexidine + Cetrimide (Savlon) liquid 1.5%/15%	5LT								7500			
10123003	Cresol Saponated (Lysol) Liquid 50%	5LT								16000			
10123007	Methylated Spirit Liquid 70%	5LT								8400			
10123012	Povidone Iodine Liquid 10%	250ML								1300			
10123014	Washing Soap Bar	Each								500			
10140001	Spectinomycin 2g inj	1VL								4400			
10141001	Adrenaline 1ml inj 1mg/ml	10VL								2400			
10141007	Benzathine penicillin Inj 2.4mu	50VL								17800			
10141008	Benzyl Penicillin Pdr for inj, 5mu	50VL								17800			
10141010	Ceftriaxone Powder Inj 250mg	20VL								16200			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
10141011	Chloramphenicol Pdr for inj, 1gm	50VL								14500			
10141020	Diazepam Inj 5mg/ml, 2ml	10VL								1300			
10141050	Procaine Penicillin Fortified Pdr for inj, 4mu	50VL								16000			
10141052	Quinine Inj 300mg/ml, 2ml	10VL								1800			
10141060	Water For Injection 10ml	100VL								4500			
10141075	Ergometrine Inj 0.5mg	1VL								200			
10148103	Depo-Provera 150 mg	Each								0			
20025016	Industrial Gloves	1pair								1800			
20036003	Catgut Chromic 0, 75cm, 1/2 circ, round body, 40mm	12P								16500			
20036008	Catgut Chromic 2, 75cm, 1/2 circ, hvy tapercut, 35mm	12P								16500			
20036027	Silk Braided 0, 75cm, 3/8 circ, reverse cutting, 45mm	12P								9000			
20036035	Umbilical Cotton Tape 3mm Roll, 100m	Each								2800			
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								10400			
20111042	Gloves Surgical Size 7.5	50pair								9300			
20111045	Syringe disposable w/needle, 10cc	100P								4200			
20111046	Syringe disposable iw/ needle 2cc	100P								4200			
20111047	Syringe disposable w/needle 5cc	100P								4200			
20133002	Blood lancets	200P								2200			
20133004	I.V. giving set	25P								4700			
20144004	I.V. canula 20 G	50P								15600			
20144005	I.V. canula 22 G	50P								15600			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
20155011	Scalp vein set 23 G	100P								6600			
20166009	Bandage hospital quality 7.5cm x 4m	12P								900			
20166012	Cotton w ool absorbent 500 G	Each								1600			
20166013	Gauze absorbent BPC 90 Cm X 100m	Each								8000			
20166028	Plaster Zinc Oxide 2.5cmx5m	12P								5400			
20211803	Prescription Form A5	100P								3100			
20211805	Daily Collection Register Book	100P								1700			
20211808	Drug Revolving Fund Report A4	50P								2800			
20211811	OPD Cards	250P								2900			
20211812	Ante-Natal Cards MCH #4	25P								500			
20211813	MCH Growing Charts MCH #1	25P								500			
20211814	Client Card MCH #5	Each								0			
20211842	Daily Dispensing Register Book	EACH								1500			
20255026	Scalpel Blade Size 10	100P								7000			
20277002	Albustix Protein in Urine Reagent Strip	50P								3800			
20277004	Clinistix strips	50P								3800			
20277007	Urinalysis strips (Multistix)	100P								21000			
20291539	RPR for syphilis antigen test 100 tests	KIT								5700			
20297075	Field Stain A	25GM								4300			
20297076	Field Stain B	25GM								4000			
20297088	Oil for microscope (Oil Immersion)	25ML								5700			
20307102	Applicator Stick Wood	100P								500			
20307121	Stool Specimen Container Plastic Disposable	EACH								200			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR DISPENSARIES AND HEALTH CENTERS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
20307214	Silver nitrate single use stick	Each								2200			
20307383	Cover Slips 22x22mm	100P								800			
20318439	Patient Register	Each								0			
30018134	Copper T IUD	Each								0			
30018135	Norplant implant	Each								0			
30308105	Male condoms	Each								0			

Tot. cost this pg.:		Tot. approved cost this pg.:	
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COST SUMMARY		
PAGE	TOTAL COST	COST APPROVED
1		
2		
3		
4		
5		
Sub-total		
Total cost of additional supplies from <i>Form 2C:</i> <i>Blank R&R</i> (if any)		
Total cost of order		
Total available allocation		
Supplemental funding needed		

Completed by: _____

Signature: _____

Approved by: _____

Signature: _____

FORM 2B: HOSPITAL REPORT & REQUEST FOR PRIORITY DRUGS AND RELATED MEDICAL SUPPLIES

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

Name of District: _____ Date Submitted: _____

Reporting Period: Beginning Month: _____ Ending Month: _____ Year: _____

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
10011001	Acetylsalicylic Acid (Aspirin) Tabs 300mg	1000T								1800			
10011002	Albendazole Tabs 200mg	100T								1200			
10011007	Amoxicillin Caps 250mg	1000T								26000			
10011015	Chloramphenicol Caps 250mg	1000T								17600			
10011020	Chlorpromazine Tabs 25mg	500T								2900			
10011027	Cloxacillin Caps 250mg	1000T								27000			
10011028	Co-Trimoxazole Tabs 400/80mg	1000T								6700			
10011029	Diazepam Tabs 5mg	500T								1900			
10011031	Diclofenac Tabs 50mg	100T								600			
10011033	Doxycycline Caps 100mg	1000T								10800			
10011036	Erythromycin Tabs 250mg	1000T								27000			
10011037	Ferrous Sulphate + Folic Acid Tabs 200/0.25mg	1000T								4200			
10011038	Folic Acid Tabs 5mg	1000T								1300			
10011039	Frusemide Tabs 40mg	1000T								4300			
10011041	Griseofulvin Tabs 500mg	1000T								45000			
10011045	Hyoscine-N-Butylbromide Tabs 10mg	500T								14600			

Tot. cost this pg.:		Tot. approved cost this pg.:	
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PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
10011050	Magnesium Trisilicate BPC Compound Tabs	1000T								3500			
10011053	Metronidazole Tabs 200mg	1000T								4000			
10011054	Nifedipine Retard Tabs 20mg	100T								2400			
10011058	Nystatin Tabs 500000 IU	100T								5400			
10011059	Paracetamol Tabs 500mg	1000T								3200			
10011060	Phenobarbital Tabs 30mg	1000T								2600			
10011063	Phenytoin Tabs 100mg	1000T								10800			
10011066	Prednisolone Tabs 5mg	1000T								8200			
10011070	Quinine Tabs 300mg	1000T								30200			
10011073	Sulphadoxine+Pyrimethamine Tabs 500/25mg	500T								12400			
10011080	Vitamin B Complex Tabs	1000T								1300			
10011084	Ciprofloxacin Tabs 500mg	100T								2800			
10011113	Amodiaquine Tabs 200mg	1000T								15000			
10011335	Glibenclamide Tabs 5mg	100T								1000			
10018100	Microgynon Tabs	Each								0			
10018101	Lo-Femenal Tabs	Each								0			
10018102	Microval Tabs	Each								0			
10022005	Morphine Inj 10mg/ml	10VL								3200			
10022007	Pethidine Inj 50mg/ml	10VL								2300			
10022008	Pethidine Inj 100mg/2ml	10VL								2700			
10044019	Dextrose 5% Inj 500ml	24P								9100			
10044020	Dextrose 5% Inj 1000ml	12P								9000			
10044021	Sodium Chloride 0.9% Inj 500mls	12P								9000			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
10044022	Sodium 0.9% Inj 1000mls	28P								9200			
10044023	Sodium Chloride + Dextrose Isotonic, Inj 500ml	24P								9000			
10044024	Sodium Chloride + Dextrose I Isotonic, Inj 1000ml	12P								9000			
10044025	Sodium Lactate Compound (Hartmann's), Inj 500mls	24P								9000			
10044026	Sodium Lactate Compound (Hartmann's), Inj 1000mls	12P								9000			
10044028	Sodium Chloride Injection 0.9% for IV, 500ml	24P								6600			
10101016	Erythromycin granules 125mg/5ml	100ML								700			
10101022	Nystatin Susp 100000 IU/ml	30ML								900			
10101023	Oral rehydration salts (ORS) Pdr for 1 liter	100P								10000			
10101032	Tetracycline 1% ointment Ttube	5GM								500			
10101050	Amoxicillin Suspension 125mg/5ml, 100ml	24P								10200			
10101053	Chloramphenicol Syrup 125mg/5ml, 100ml	24P								12800			
10101054	Chloramphenicol Eye Ointment 1%	100P								16300			
10101055	Clotrimazole 1% Cream/Ointment, Tube 2gm	24P								6100			
10101057	Paracetamol Syrup 120mg/5mls, 100mls	24P								7000			
10101059	Amodiaquine 100mls	24P								9600			
10101060	Co-Trimoxazole Suspension 200/40mgs/5ml, 100ml	24P								9500			
10101061	Podophylline 10% in water 60ml	60ML								16,300			
10112006	Dispensing Envelopes	100P								900			
10123001	Chlorhexidine + Cetrimide (Savlon) liquid 1.5%+15%	5LT								7500			
10123003	Cresol Saponated (Lysol) Liquid 50%	5LT								16000			
10123007	Methylated Spirit Liquid 70%	5LT								8400			
10123009	Rectified Spirit (Ethanol) Liquid	5LT								9200			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
10123012	Povidone Iodine Liquid 10%	250ML								1300			
10123014	Washing Soap Bar	Each								500			
10140001	Spectinomycin 2g inj vial	1VL								4400			
10141001	Adrenaline Inj 1mg/ml, 1ml	10VL								2400			
10141002	Aminophylline Inj 25mg/ml, 10ml	10VL								1400			
10141004	Ampicillin Pdr for inj, 500mg	50VL								7800			
10141006	Atropine Inj 1mg/ml, 1ml	10VL								1500			
10141007	Benzathine penicillin Inj 2.4mu vial	50VL								17800			
10141008	Benzyl Penicillin Pdr for inj 5mu	50VL								17800			
10141010	Ceftriaxone Pd for inj 250mg	20VL								16200			
10141011	Chloramphenicol Pdr for inj, 1gm	50VL								14500			
10141016	Cloxacillin Pdr for inj, 500mg	50VL								8200			
10141019	Dexamethasone Inj 4mg/ml,	10VL								1600			
10141020	Diazepam Inj 5mg/ml, 2ml	10VL								1300			
10141021	Diclofenac Sodium Inj 25mg	10VL								1300			
10141026	Frusemide Inj 10mg/ml, 2ml	10VL								1500			
10141027	Gentamycin Inj 40mg/ml, 2ml	10VL								900			
10141028	Gentamycin Inj 10mg/ml, 2ml	10VL								900			
10141031	Hydralazine Pdr for inj 20mg, 1ml	5VL								6500			
10141041	Lignocaine 2% Inj 30 ml	10VL								1120			
10141045	Metronidazole Inj 5mg/ml, 100ml	10VL								4500			
10141048	Oxytocin Inj 5iu/ml, 1ml	10VL								1800			
10141050	Procaine Penicillin Fortified Pdr for inj, 4mu	50VL								16000			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
10141051	Promethazine Inj 25mg/ml 2ml	10VL								1400			
10141052	Quinine Inj 300mg/ml, 2ml	10VL								1800			
10141056	Suxamethonium Chloride Inj 50mg/ml, 2ml	10VL								2600			
10141057	Thiopental Pdr for inj, 500mg	25VL								41000			
10141058	Thiopental Pdr for inj, 1gm	1VL								1200			
10141059	Vitamin B Complex Inj 2ml	10VL								1000			
10141060	Water For Injection 10ml	100VL								4500			
10141061	Ketamine Inj 50mg/M, 10ml	25VL								30700			
10141074	Ceftriaxone Pdr for onj, 1g	1VL								2100			
10141075	Ergometrine Inj 0.5mg	1VL								200			
10141085	Insulin Human Suspension (Soluble), Inj 100IU	10VL								71000			
10141086	Insulin Human Zinc Suspension (Lente), Inj 100IU	10VL								71000			
10148103	Depo-Provera 150mg	Each								0			
20013006	Film X-Ray (Green Sensitive) 24 X 18 cm	100P								26500			
20013007	Film X-Ray (Green Sensitive) 35 X 35 cm	100P								64200			
20013018	Film X-Ray (Green Sensitive) 30 X 24cm	100P								41700			
20013019	Film E-Ray (Green Sensitive) 40cm X 30cm	100P								68300			
20013020	Film X-Ray (Green Sensitive) 43cm X18cm	100P								46600			
20025001	Barium Sulphate	1KG								7700			
20025005	Lopamiro 370/Omnipaque 300 50ml	1VL								22200			
20025016	Industrial Gloves	1pair								1800			
20025019	Barium Sulphate 95% W/W For Double Contrast Radiography	300GM								4100			
20036003	Catgut Chromic 0, 75cm, 1/2 circ, round body, 40mm	12P								16500			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
20036008	Catgut Chromic 2, 75cm, 1/2 circ, hvy tapercut, 35mm	12P								16500			
20036027	Silk Braided 0, 75cm, 3/8 circ, reverse cutting, 45mm	12P								9000			
20036035	Umbilical cotton tape 3mm Roll, 100m	Each								2800			
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								10400			
20111042	Gloves Surgical Size 7.5	50pair								9300			
20111045	Syringe disposable w/ needle, 10cc	100P								4200			
20111046	Syringe disposable w/needle 2cc	100P								4200			
20111047	Syringe disposale w/needle 5cc	100P								4200			
20133002	Blood Lancets	200P								2200			
20133004	I.V. giving set	25P								4700			
20144004	I.V. canula 20 G	50P								15600			
20144005	I.V. canula 22 G	50P								15600			
20155011	Scalp vein set 23 G	100P								6600			
20166009	Bandage Hospital Quality 7.5cm x 4 m	12P								900			
20166012	Cotton Wool Absorbent 500 G	Each								1600			
20166013	Gauze Absorbent BPC 90cm X 100m	Each								8000			
20166028	Plaster Zinc Oxide 2.5cmx5m	12P								5400			
20211803	Prescription Form A5	100P								3100			
20211805	Daily Collection Register Book	100P								1700			
20211808	Drug Revolving Fund Report A4	50P								2800			
20211809	Ball Point Pen	Each								150			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)x7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [GxH] (I)	Approved Quantity (J)	Approved Cost (K)
20211811	Opd Cards	250P								2900			
20211812	Ante-Natal Cards MCH #4	25P								500			
20211813	MCH Growing Charts MCH #1	25P								500			
20211814	Client Card MCH #5	Each								0			
20211842	Daily Dispensing Register Book	Each								1500			
20222004	Cassettes for x-ray film 24x18cm, w/intensifying screen	Each								150000			
20222005	Cassettes for x-ray film 30x24cm, w/intensifying screen	Each								200000			
20222006	Cassettes for x-ray film 35x35cm w/intensifying screen	Each								300000			
20222007	Cassettes for x-ray film 40x30cm w/intensifying screen	Each								290000			
20222009	Cassettes X-Ray Films 43x35cm w/intensifying screen	Each								340000			
20255026	Scalpel Blade Size 10	100P								7000			
20277001	A- B- O- D- Blood Grouping Reagents, kit of 4	KIT								10800			
20277002	Albustix protein in urine Reagent Strip	50P								3800			
20277004	Clinistix strips	50P								3800			
20277005	Glucostix glucose In blood Reagent strip	50P								17800			
20277007	Urinalysis strips (Multistix)	100P								21000			
20277009	Widal Reagent	KIT								8500			
20277010	Coombs Reagents	10ML								5900			
20277011	Icomplete Ant -D	10ML								5400			
20277012	Bovine Albumin 22%	10ML								3300			
20277430	Pregnancy test strips	25P								5500			
20291539	RPR for syphilis antigen test 100 tests	KIT								5700			
20297075	Field Stain A	25GM								4300			
										Tot. cost this pg.:		Tot. approved cost this pg.:	

PRIORITY SUPPLIES FOR HOSPITALS													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price FY 04 (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
20297076	Field Stain B	25GM								4000			
20297088	Oil For Microscope (Oil Immersion)	25ML								5700			
20297092	Sodium Chloride	500GM								2500			
20307102	Applicator Stick Wood	100P								500			
20307121	Stool Specimen Container Plastic disposable	Each								200			
20307123	Swab sterile	Each								70			
20307214	Silver nitrate single use stick	Each								2200			
20307383	Cover Slips 22x22mm	100P								800			
20318439	Patient Register	Each								0			
30018134	Copper T IUD	Each								0			
30018135	Norplant implant	Each								0			
30308105	Male condoms	Each								0			

Tot. cost this pg.:		Tot. approved cost this pg.:	
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COST SUMMARY		
PAGE	TOTAL COST	COST APPROVED
1		
2		
3		
4		
5		
6		
7		
8		
Sub-total		
Total cost of additional supplies from <i>Form 2C</i> : <i>Blank R&R</i> (if any)		
Total cost of order		
Total available allocation		
Supplemental funding needed		

Completed by: _____

Signature: _____

Approved by: _____

Signature: _____

FORM 2C: BLANK REPORT & REQUEST FOR DRUGS AND RELATED MEDICAL SUPPLIES

ADDITIONAL SUPPLIES													
MSD Code	Supply Item	Unit of Issue	Beginning Balance (A)	Received This Period (B)	Lost/ Adjusted (C)	Ending Balance (D)	Estimated Consumed [A+B±C-D] (E)	Quantity Needed [(E÷3)×7-D] (F)	Quantity Requested (G)	Price (H)	Cost [G×H] (I)	Approved Quantity (J)	Approved Cost (K)
	1												
	2												
	3												
	4												
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	11												
	12												
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FORM 3: SUPPLEMENTAL FUNDING

(A) TOTAL ALLOCATION AVAILABLE: [FROM FORM 6: FACILITY STATEMENT OF ACCOUNT OR FORM 8: SUMMARY FACILITY STATEMENT OF ACCOUNT]	
(B) TOTAL COST OF CURRENT ORDER : [FOR DISPENSARIES OR HEALTH CENTERS, FROM FORM 2A AND 2C: R&R, OR FOR HOSPITALS, FROM FORM 2B AND 2C: R&R]	
(C) DIFFERENCE: $C = A - B$	

SUPPLEMENTAL FUNDING SOURCES	SUPPLEMENTAL FUNDING APPROVED BY DMO OR HTC
(D) Locally Managed Funds: (includes user fees, CHF, and NHIF)	
(E) Other: (e. g.: donor-funded, private insurance)	
(F) Other Government Funding:	
(G) Total Supplemental Funding: $G = D + E + F$	

APPROVED BY: _____

SIGNATURE: _____

DATE: _____

FORM 4: ORDER COMPILATION

DISTRICT _____

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:				

Check enclosed with order to cover supplemental funds used:

Check number: _____

dated: _____

in the amount of: _____

Submitted to MSD on (date): _____

DMO Signature: _____

FORM 5: SHIPMENT ADVICE

District: _____

Facility Code:

Facility Name:

Date facility noted as submitted: _____ Date order received by MSD: _____

[illegible]

	(a)	(b)	(c)	(d)
Order Note	End last \neq beginning this quarter	Math error in estimated consumption	Math error in quantity requested	Math error in cost

Mod. Code	(1) MSD low/out of stock	(2) Change in unit of issue	(3) Change in strength	(4) Change in form	(5) Change in price	(6) Substitute equivalent	(7) Product no longer available	(8) Insufficient facility funds	(9) Facility not authorized this item
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Received by: _____

Date: _____

Witnessed by: _____

Date: _____

FORM 6: FACILITY STATEMENT OF ACCOUNT

Facility Code: _____ Facility Name: _____

Type of Facility: _____ District: _____

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 7: PACKING SLIP

Facility Code: _____ Facility Name: _____

Type of Facility: _____ District: _____

Shipment Date: _____

NUMBER OF CARTONS SHIPPED BY MSD	NUMBER OF CARTONS RECEIVED BY THE DISTRICT	NUMBER OF CARTONS RECEIVED BY THE FACILITY

Packed at MSD by: _____

Date: _____

Received by at the District: _____

Date: _____

Received by at the Facility: _____

Date: _____

[illegible]

XIV. WORKSHEETS

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

Worksheet #	Form Name
1	Add/Modify/Delete a Facility
2	Assignment of Facilities to Delivery Groups
3	Supervision Checklist

WORKSHEET 1: ADD/MODIFY/DELETE A FACILITY

DISTRICT : _____

ACTION: ADD _____ MODIFY _____ DELETE _____

FACILITY CODE: <small>(ADDED FACILITIES WILL RECEIVE A NUMBER FROM MSD)</small>	
FACILITY NAME:	
FACILITY PHYSICAL ADDRESS:	
FACILITY MAILING ADDRESS:	
FACILITY PHONE NUMBER:	
FACILITY FAX NUMBER:	
NAME OF FACILITY IN-CHARGE:	
PHONE OF FACILITY IN-CHARGE:	
NAME OF FACILITY STOREKEEPER:	
PHONE OF FACILITY STOREKEEPER:	
NAME OF PRIORITY SUPPLIES NOT MANAGED BY THIS FACILITY:	
NOTES:	

WORKSHEET 2: ASSIGNMENT OF FACILITIES TO DELIVERY GROUPS

District Name: _____

Date of Assignment/Re-Assignment: _____

[illegible]

WORKSHEET 3: SUPERVISION CHECKLIST

District: _____

Dispensary or Health Center Name: _____

Date of supervision visit: _____

Name and title of the staff member visited: _____

Name and title of the supervisor: _____

A. Preparation for a supervision visit

1. Arrange with the DTO for transport and allowances at least one week prior to visit.
2. Notify the dispensary or health center of your visit after you have confirmed transport.
3. Liaise with the District Pharmacist to obtain a supply of ILS forms after confirming transport.
4. Review the report from the previous visit and the recommendations that were made.
5. Review *Forms 2A-C: Report & Request for Drugs and Related Medical Supplies* completed since the previous visit and the recommendations that were made.
6. Develop an objective for the visit.
7. Collect an *ILS Procedures Manual* and a calculator.
8. Ask the District Pharmacist or another member of the CHMT to be included in the supervision visit if possible.

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 (pharmacy, lab, and providers).
2. Assemble the staff when business permits.
3. Make any necessary introductions.
4. Explain the objectives of your visit.
5. Ask, "How is the supply of drugs and medical supplies going?"
6. Ask, "Do you believe you have sufficient drugs and medical supplies to do your work?"
7. Ask, "Do you have any other problems related to your work?"

C. Check Storage Area

TASK:	Storing supplies
PURPOSE:	To verify that the storage area follows the guidelines for good storage.
MATERIALS NEEDED:	See Section VII

Step	Criteria	Criteria Met		Remarks
		Yes	No	
1	Clean and disinfect storeroom regularly, and take precautions to discourage harmful insects and rodents from entering the storage area.			

Step	Criteria	Criteria Met		Remarks
		Yes	No	
2	Store health supplies in a dry, well lit, and well ventilated storeroom—out of direct sunlight.			
3	Protect storeroom from water penetration.			
4	Keep fire safety equipment available, accessible, and functional, and train employees to use it.			
5	Store latex supplies away from electric motors and fluorescent lights.			
6	Maintain cold storage, including a cold chain, as required.			
7	Limit storage area access to authorized personnel and lock up controlled substances.			
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.			
9	Arrange cartons with arrows pointing up (↑), and with identification labels, expiry dates, and manufacturing dates clearly visible.			
10	Store health supplies to facilitate “first-to-expire, first-out” (FEFO) procedures and stock management.			
11	Store health supplies away from insecticides, chemicals, flammable supplies, hazardous materials, old files, office supplies, and equipment; always take appropriate safety precautions.			
12	Separate damaged and expired health supplies from usable supplies, remove them from inventory immediately, and dispose of them using established procedures.			

D. Reviewing *Form 1: Stores Ledger*

TASK:	Reviewing <i>Form 1: Stores Ledger</i> book
PURPOSE:	<ul style="list-style-type: none"> • Make sure that quality commodities are available. • Make sure that the stock in the Store Ledger Book corresponds to the physical stock. • Make sure that the information in the Stores Ledger Book matches the information on the stock cards.
MATERIALS NEEDED:	See Sections III and IV-C.

Step	Criteria	Criteria Met		Remarks
		Yes	No	
1	Quantities noted on <i>Form 1: Stores Ledger</i> match the physical stock.			
2	<i>Form 1: Stores Ledger</i> correctly and completely filled out (in units, with dates, etc.)			
3	Physical inventory results noted at least monthly for Priority Supplies.			
4	Each priority or additional supply recorded separately.			
5	Ledgers are mathematically correct.			
6	Expired and damaged supplies separated from usable supplies.			
7	Losses and adjustments (due to theft, expiration and damage) noted, with the reasons, in <i>Form 1: Stores Ledgers</i> .			
8	<i>Form 1: Stores Ledger</i> completed for every entry, every issue, and every inventory.			

E. Reviewing other ILS forms

TASK:	Reviewing other ILS forms.
PURPOSE:	<ul style="list-style-type: none"> • Verify that all ILS forms are filed and organized. • Verify that the Storekeeper fills forms appropriately. • Verify the amounts reported on forms.
MATERIALS NEEDED:	See Section IV

Step	Criteria	Criteria Met		Remarks
		Yes	No	
1	The forms filled, organized and accessible.			
2	Job aids to complete the forms available for Facility storekeepers			
3	The beginning Balance (A) for the current report equal to the Ending Balance (E) from the previous report.			
4	The math of the Ending Balance (E) equal ($E=A+B\pm C-D$)			
5	The math of the Quantity Required (F) equal ($F=[C\div 3]\times 7-E$)			
6	The Cost equals ($I=G\times H$)			
7	Report sent and received on time			

F. Describe problems identified in the action plan during the end of the last supervisory visit that remain.

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

H. Action plan for problems identified

#	Problem	Possible solutions	Actions
1			
2			
3			

I. Summary of the visit

1. Positive points:

2. Points for improvement:

3. Recommendations:

Supervisee Signature

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 drugs, HIV tests, and anti-retroviral (ARV) drugs. Consequently, the following annexes are included to detail the modified procedures for managing these supplies:

Annex	Annex Name
A	Handling Vaccines
B	Handling TB/Leprosy Drugs
C	Handling HIV Test Kits
D	Handling Anti-Retroviral Drugs (ARVs)

ANNEX A—HANDLING VACCINES

A. What makes vaccines a special category of supply?

Vaccines are a special category of supply because they require cold storage (4-8°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 monitoring 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. Districts pick up vaccines from the region and also deliver vaccines 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) and other partners. This support has included logistics management practices that have been proven effective. The ILS, therefore, is intended to support those practices with only minor modifications.

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 a special diluent 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 4-8 °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 10 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 4-8 °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 vials of 10 doses. Once opened, a vial can be used for up to 4 weeks. Vials should be stored at 4-8 °C.
Measles	The measles vaccines 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 4-8 °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 only be used for 4 weeks. It should be stored at a temperature of 4-8 °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 to the regions. 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 during which the facility will use a vaccine carrier to collect vaccines from the nearest facility. At the end of the day, the remaining vaccines are sent back for storage.

People and their role in vaccination

At the facility level, the Prescriber for vaccines is usually an MCH nurse who provides vaccines in the MCH area of the facility. The MCH nurse also usually serves as the Storekeeper for vaccines, although the Facility or Hospital Storekeeper could assume responsibility for storing and distributing vaccines. 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 under normal circumstances 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
Form 1	Stores Ledger	To account for supplies stored in storerooms.	Dispensary or Health Center Storekeeper (MCH Nurse) or Hospital Storekeeper (MCH Nurse) or DCCO or RCCO

Form VAC1	Vaccine Tally Sheet	To account for the use of vaccines.	Dispenser (MCH staff)
Form VAC2	Report & Request for Vaccines for Facilities	To order vaccines for the region or district.	DCCO 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 Form 1: 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, *Form 1: Stores Ledgers* should be recorded in doses.

See the job aids for *Form 1: 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 1-1/2 month supply, rather than a seven month supply for most ILS supplies. A one and a half 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 two weeks 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 Form 1: 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 is necessary to establish a separate book for this storage area.

See the job aids for *Form 1: 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 do not collect information about actual consumption, but instead use issues data, as with most ILS supplies. Because districts pick up supplies monthly from the region, the time between placing an order and receiving the supply is only the transport time. Consequently a 1-1/2 month supply will provide a district with sufficient stock of each vaccine to issue during a full month, plus a buffer stock of two weeks, 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 Form 1: 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 *Form 1: 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 dispensaries or health facilities. This is because regions do not collect information about actual consumption, but instead use issues data, as with most ILS supplies. Because regions are located close to MSD stores, the time between placing an order and receiving the supply is not much more than the transport time. Consequently a 1-1/2 month supply will provide a region with sufficient stock of each vaccine to issue during a full month, plus a buffer stock of two weeks, 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.

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 *Form 1: 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 *Form 1: Stores Ledger* and the return of unused vaccines recorded as a receipt, so that the balance is correct. In most cases, however, vaccines are received directly at the MCH area and the MCH Nurse is the Storekeeper for these supplies.

Within the facility, as with all other drugs, 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 VII 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 4 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 should be permanently recorded on sheets and recorded on chalk boards which are erased monthly.

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 safety box immediately after use
- keep the safety box where the injections are given
- do not overfill the safety box (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

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

A. Each time a vaccine is administered

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

B. At the end of the month

Step	Action	Notes
1	Total: 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	Grand Total for Month: 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.
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> The "Total" is completed for each vaccine and each number. The "Grand Total for Month" is calculated for each vaccine type 		

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

TASK:	Completing <i>Form VAC2: Report & Request for Vaccines for Dispensaries or Health Centers</i>
COMPLETED BY:	District Cold Chain Officer (DCCO)
PURPOSE:	<ul style="list-style-type: none"> To report on the quantities of vaccines administered during the month To report on the quantities of vaccines lost/adjusted (wastage) during the month To determine order quantities for each vaccine To provide MOH with data and information on supply usage and stock levels
WHEN TO PERFORM:	At the end of each month
MATERIALS NEEDED:	Blank <i>Form VAC2: Report & Request for Vaccines for Dispensaries or Health Centers</i> , <i>Form 1: Stores Ledger</i> book for vaccines, <i>Form VAC1: Vaccine Tally Sheet</i> , pen, calculator.

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

10	(D) Actual dispensed: Write in the quantity of the supply dispensed from <i>Form VAC1: Vaccine Tally Sheet</i> .	Example: 72
11	(E) Estimated Lost/Adjusted: 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	(F) Total Removed from Stock: 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	(G) Quantity Needed: Write the quantity of the supply needed to reach the maximum stock level.	The Quantity Needed is Calculated as: (Total removed from Stock x 1.5) – Ending Balance Example: $(100 \times 1.5) - 60 = 90$
14	(H) Quantity Issued: 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: $90 = 9$ (vials of 10 doses)
Repeat Steps 7-14 for each vaccine		
15	The form should be signed by the Facility Storekeeper and the DCCO.	
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • Data columns A through H have been filled for each vaccine. • The form is signed. • The DCCO has left the Quantity Issued for each vaccine, including the proper amount of vaccine syringes, water for solution, and diluents. 		

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

TASK:	Completing <i>Form VAC3: Report & Request for Vaccines for Districts or Regions</i>
COMPLETED BY:	District Cold Chain Officer (DCCO) or Regional Cold Chain Officer (RCCO)
PURPOSE:	<ul style="list-style-type: none"> To report on the quantities of vaccines received and issued during the month To determine order quantities for each vaccine To provide MOH with data and information on vaccine usage and stock levels
WHEN TO PERFORM:	At the end of each month
MATERIALS NEEDED:	Blank <i>Form VAC3: Report & Request for Vaccines for Districts or Regions</i> , <i>Form 1: Stores Ledger</i> book for vaccines, pen, calculator.

Step	Action	Notes
Completing the Top Section of the Page		
1	Facility Code: Write the facility code.	This code can be found on <i>Form 6: Facility Statement of Account</i> .
2	Facility Name: Write the facility name.	
3	Type of Facility: Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> (GOV) Government (NGO) Non-government Organization (FBO) Faith Based Organization Other
4	Name of District: Write the name of the district where the dispensary, health center, or hospital is located.	
5	Date Submitted: Write the date that the report is submitted.	
6	Reporting Month: Write the month and year that this report covers.	Example: February 2004
Calculating the Quantity to Request		
7	(A) Beginning Balance: 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: 300
8	(B) Received This Month: Write the quantity of the vaccine received during the month.	The quantity received is found in <i>Form 1: Stores Ledger</i> book and on <i>Form 5: Shipment Advice</i> . Example: 100

9	(C) Lost/Adjusted: Write the total quantity of losses/adjustment during the month. If they were not any losses/adjustments enter 0.	The quantity lost/adjusted is found in <i>Form 1: 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	(D) Ending Balance: 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: 180 doses
11	(E) Estimated Issued: 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) $E = A + B \pm C - D$	If you experienced a stockout of this supply during the period, see the <i>Job Aid, "Handling Stockouts when Completing Forms 2A-C: R&R"</i> for detailed directions on estimating consumption during the period. $E = 300 + 100 - 0 - 180 = 220$
12	(F) Quantity Needed: Write the quantity of the supply needed to reach the maximum stock level.	The Quantity Needed is Calculated as: (Estimated Issued x 1.5) – Ending Balance Example: $(300 \times 1.5) - 300 = 330$
13	(G) Quantity Requested: Convert the quantity needed (f) to the number of vials.	330 doses becomes 33 vials of 10 doses per vial.
14	(H) Quantity Approved: Write the quantity of the vials the RCCO will issue to the district or that MSD will issue to the region.	
Repeat Steps 7-13 for each vaccine		
15	The form should be signed by the DCCO and the RCCO at the district level and by the RCCO only at the regional level.	
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> Data columns A through H have been filled for each vaccine. The form is signed. 		

FORM VAC1: VACCINE TALLY SHEET

Month: _____

Year: _____

	GIVE BCG AND POLIO 0 SOON AFTER BIRTH							
	Age less than 1 year					Total	Over 1 year	Total
BCG	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
Polio 0	0000000000	0000000000	0000000000	0000000000	0000000000		Do not give Polio 0 to a child over 14 days old.	
	0000000000	0000000000	0000000000	0000000000	0000000000			
	0000000000	0000000000	0000000000	0000000000	0000000000			

GIVE DPT-HB 1 AND POLIO 1 AT THE FIRST VISIT, AT LEAST 4 WEEKS AFTER BIRTH								
Age less than 1 year						Total	Over 1 year	Total
DPT-HB 1	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
Polio 1	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	

GIVE DPT-HB 2 AND POLIO 2 4 WEEKS AFTER DPT-HB 1 AND POLIO 1								
Age less than 1 year						Total	Over 1 year	Total
DPT-HB 2	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
Polio 2	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	

GIVE DPT-HB 3 AND POLIO 3 4 WEEKS AFTER DPT-HB 2 AND POLIO 2								
Age less than 1 year						Total	Over 1 year	Total
DPT-HB 3	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
Polio 3	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	
	0000000000	0000000000	0000000000	0000000000	0000000000		0000000000	

GIVE MEASLES AFTER AGE 9 MONTHS								
Age between 9 months and 1 year				Total	Over 1 year			Total
Measles	0000000000	0000000000	0000000000		0000000000	0000000000	0000000000	
	0000000000	0000000000	0000000000		0000000000	0000000000	0000000000	
	0000000000	0000000000	0000000000		0000000000	0000000000	0000000000	

GIVE TETANUS TOXOID TO EVERY WOMAN ACCORDING TO THE SCHEDULE												
TT 1 (at first ANC visit, whether pregnant or not)				TT 2 (4 weeks after TT1)				TT 3, 4, and 5 (annually after TT2 up to a max of 5)				
TT	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
Total:				Total:				Total:				

GRAND TOTAL FOR MONTH				
BCG	Polio	DPT-HB	Measles	TT

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	Beginning Balance (A)	Received This Month (B)	Ending 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×1.5) -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								

Reasons for Lost/Adjust: _____

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 District: _____

Date Submitted: _____ Reporting Month/Year: _____

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 [F=(E×1.5) -D] (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								

Reasons for Lost/Adjust: _____

Completed by: _____

Signature: _____

Approved by : _____

Signature: _____

ANNEX B—HANDLING TUBERCULOSIS AND LEPROSY DRUGS

A. What makes TB/leprosy drugs a special category of products?

TB/leprosy programs have been in existence for many years in Tanzania. The National TB/Leprosy Program (NTLP) in Tanzania already has established a successful logistics system for monitoring and ordering drugs using systems accepted by numerous international programs, including the World Health Organization (WHO). The purpose of this annex, therefore, is not to create a new logistics system for these products, but to reinforce this system and to note its similarities to the ILS. All of the information in this annex is available through the “Manual of the National Tuberculosis and Leprosy Programme in Tanzania” (fourth edition, 2002).

The TB/L logistics system distributes drugs and related medical supplies in a slightly different way from other products. MSD delivers TB/L drugs from its central and zonal stores directly to regional facilities. Regions deliver to districts and districts deliver to facilities. The addition of the region to the supply chain makes TB/L drugs a special category of product. The TB/L program employees District and Regional TB/Leprosy Coordinators (DTLCs and RTLCS) who help support the TB/L drug logistics system.

Some of the factors that make TB/L drugs a special category of product and their effect for logistics are:

Factor	Logistics Effect
Potency	TB/L drugs are highly potent and can have many side effects, although most clients will not have any serious side effects. Nonetheless, patients must be monitored for side effects.
Long-term usage	Clients will need to have access to TB drugs for eight months and for leprosy drugs anywhere from six to twelve months. Therefore, inventory control for these products will have to be carefully managed.
Multi-drug treatment	Treating one TB client will require the use of at least four different drugs. In some cases, these will be in fixed-dose combination (FDC) tablets of more than one drug. It will be necessary to ensure that all drugs in the treatment regimen be available at all times. For leprosy, at least two different drugs are needed.

Drug resistance	Because TB and leprosy have developed resistance to several drugs, multi-drug treatment was created. It is important to ensure that clients comply with treatment. For TB, this means that clients must be observed taking their medication. This is referred to as direct observed therapy, short-course (DOTS) because patients are required to visit a health facility to be observed taking their medication during the first two months of treatment.
Pairing with laboratory products	TB programmes require laboratory products to detect TB through staining and to monitor sputum during treatment. These lab products are ordered based on the number of cases under treatment and are therefore included in this category of products.

Leprosy drugs are included in this category because the medication is similar to that for TB and because the course of treatment is also long.

B. What TB and Leprosy Drugs and Related Medical Supplies are Used?

What TB drugs are used?

The current TB drugs for use in Tanzania are:

Short Name	Name	Strength/Form
RH	Rifampicin/Isoniazid	150/100mg FDC tablet
EH	Ethambutol/Isoniazid	400/150mg FDC tablet
Z	Pyrazinamide	400mg tablet
S	Streptomycin	1g vial powder for injection
E	Ethambutol	400mg tablet

*FDC=fixed-dose combination

To be effective, TB drugs are used in combinations of drugs (i.e., regimens) based on the weight of the client. TB drugs are used in three combinations. The recommended TB regimens from the National TB/L Programme (NTLP) are as follows:

Drug Regimen	Use
2R/H+Z+E and 6 E/H	Called Category I. Used in new sputum smear positive pulmonary TB cases. During the first two months, Rifampicin/Isoniazid is given as an FDC and Pyrazinamide and Ethambutol is given daily under direct observation (DOTS), followed by six months of treatment daily with Ethambutol/Isoniazid.

2S+R/H+Z+E and 1R/H+Z+E and 6 R/H+E	Called Category II. Used for relapse, treatment failure, and sputum smear positive return after default. During the first two months, Spectinomycin is injected and Rifampicin/Isoniazid and Pyrazinamide and Ethambutol are given for two months. This is followed by one month of daily treatment with Rifampicin/Isoniazid and Pyrazinamide and Ethambutol for one month. The first three months of treatment should be provided as DOTS, but preferably DOTS should be used for the entire course of treatment. For the final five months of treatment, Rifampicin/Isoniazid and Ethambutol are taken daily.
2R/H+Z and 6 E/H	Called Category III. Used for new sputum smear negative cases and extra-pulmonary TB (less severe forms). During the first two months, Rifampicin/Isoniazid and Pyrazinamide are taken daily as DOTS. This is followed by six months of daily treatment with Ethambutol/Isoniazid.

This table is produced here for informational purposes only. See the “Manual of the National Tuberculosis and Leprosy Programme in Tanzania” (Fourth Edition 2003) for appropriate clinical information, dosing, contraindications and other critical information.

What leprosy drugs are used?

The current leprosy drugs for use in Tanzania are:

Name	Strength/Form
Rifampicin	150mg or 300mg tablet
Clofazimine	50mg or 100mg tablet
Dapsone	50mg or 100mg tablet

To be effective, leprosy drugs are used in combinations of drugs (i.e., regimens) based on whether the client is a child (10-14 years) or an adult. Leprosy drugs are used in four combinations in blister packs lasting for 29 days. The recommended leprosy regimens from the National TB/L Programme (NTLP) are as follows:

Drug Regimen	Use
Day 1: Rifampicin 600mg + Clofazimine 300mg + Dapsone 100mg Days 2-28: Clofazimine 50mg + Dapsone 100mg	Adult multibacillary (MB) treatment, for adults with 6 or more leprosy skin lesions and a positive skin smear for <i>M. leprae</i> . These are taken for 12 months within a period of 12-18 months.
Day 1: Rifampicin 600mg + Dapsone 100mg Days 2-28: Dapsone 100mg	Adult paucibacillary (MB) treatment, for adults with 1-5 leprosy skin lesions and a negative skin smear for <i>M. leprae</i> . These are taken for 6months within a period of 6-9 months.

Day 1: Rifampicin 450mg + Clofazimine 150mg + Dapsone 50mg Days 2-28: Clofazimine 50mg (every other day) + Dapsone 50mg (daily)	Child multibacillary (MB) treatment, for children with 6 or more leprosy skin lesions and a positive skin smear for <i>M. leprae</i> . These are taken for 12 months within a period of 12-18 months.
Day 1: Rifampicin 450mg + Dapsone 50mg Days 2-28: Dapsone 50mg	Child paucibacillary (MB) treatment, for children with 1-5 leprosy skin lesions and a negative skin smear for <i>M. leprae</i> . These are taken for 6months within a period of 6-9 months.

What related medical supplies are used?

In addition to drugs, facilities diagnosing TB cases will need several specific laboratory supplies. These are:

- Basic Fuschin
- Methyline Blue
- Microscope Oil
- Sulfuric Acid 95%
- Phenol (Liquid)
- Xylol
- Methanol
- Sputum Containers
- Slides

These supplies are ordered using the same form as TB drugs.

C. Facilities, People, & Forms for Managing TB/L Drugs

Faciliites offering TB and leprosy drugs

TB/L drug distribution is available through TB/leprosy coordinators in all regions and districts in Tanzania. At the district level, DTLCs will stock drugs for use throughout the district. Drugs will be issued to dispensaries and health centers only if they have a TB or leprosy patient in their care, and then only in sufficient quantity to serve previously identified patients. Consequently, most dispensaries and health centers do not keep TB/L drugs on hand at all time and when they do, only in limited quantities.

Hospitals do not usually stock TB or leprosy drugs, since these are dispensed through out-patient services.

People and their role in TB/leprosy drug management

At the dispensary or health center level, the Prescriber for TB/L drugs will be the District TB/L Coordinator (DTLC). The DTLC will confirm the suspected diagnosis of TB for each TB patient. If TB is confirmed, the DTLC will provide the dispensary or health center with sufficient drugs to treat the entire course of therapy for each patient. The Dispensary or Health Center Storekeeper will assume responsibility for storing TB/L Drugs. The Dispenser of TB/L Drugs at the dispensary or health center level is the person who has been assigned by the DTLC to provide directly observed therapy, short course (DOTS).

At the district level, the District TB/Leprosy Coordinator (DTLC) manages stocks of TB/L Drugs for all facilities in the district. In the TB/L program, the DTLC visits each facility with a sufficient level of supplies for the number of TB/L patients they serve. Therefore, unlike for priority drugs in the ILS, health facilities do not order TB/L Drugs; they wait until they have identified a patient and the DTLC provides the diagnosis, at which time they are given TB/L drugs by the DTLC. The DTLC calculates the amount to be left at the facility.

At the regional level, the Regional Tuberculosis/Leprosy Coordinator (RTLTC) manages stocks of TB/L drugs for all districts in the region. The RTLTC receives supplies of TB/L drugs from MSD and issues them to DTLCs.

Forms in TB/L Drugs management

There are five forms associated with TB/L drug and related medical supplies management. These are:

Number	Form Name	Purpose	Primary User
Form 1	Stores Ledger	To account for products stored in storerooms.	Hospital Storekeeper
	DOT and Rifampicin Accounting Register	To account for the use of Rifampicin and patients under DOTS.	Dispenser (Clinical Staff)
TB08	TB Drugs and Drugs Suppliers Order Calculation Form	To order TB drugs.	District TB/Leprosy Coordinator or Regional TB/Leprosy Coordinator
LEP08	Leprosy Drug Order Calculation Form	To order leprosy drugs.	District TB/Leprosy Coordinator or Regional TB/Leprosy Coordinator

TB/ LEP03	Regional TB/leprosy drug laboratory material stock position report form	To report on the quantity of all TB/leprosy drugs and related medical supplies in the region, by district	Regional TB/Leprosy Coordinator
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There are a number of additional forms used in the TB and leprosy program. While important for TB program management, they are not used for managing drugs. For TB, these include:

- TB01—Treatment card
- TB02—Client card
- TB03—Unit register
- TB04—District register
- TB05—Laboratory register
- TB06—Culture and sensitivity request form
- TB07—Quarterly case notification report of tuberculosis (printed on the front side of Form TB08)
- TB09—Quarterly report on the results of treatment of tuberculosis patients

For leprosy, these include:

- LEP01—Leprosy patient record card
- LEP02—Client card
- LEP03—Unit register
- LEP04—District register
- LEP05—Laboratory register
- LEP06—POD register (prevention of disabilities)
- LEP07—Quarterly case notification report of leprosy (printed on the front side of Form LEP08)
- LEP09—Quarterly report on the results of treatment of tuberculosis patients
- LEP10—Annual report on prevention of disabilities

Both the TB and leprosy drugs also share the use of some forms not related to drug management. These include:

- TB/LEP01—Request form for AFB microscopy
- TB/LEP02—Referral/transfer form
- TB/LEP04—Supervision checklist form

All of these forms are supplied through the National Tuberculosis and Leprosy Program (NTLP) and are not specifically labeled for the ILS, although these forms can be ordered using *Form 2C: Blank R&R*.

D. Completing Forms for Managing TB/L Drugs at the Dispensary or Health Center

Completing *Form 1: Stores Ledgers* for TB/L Drugs

Stores ledgers are used for TB/L drugs in the same way as for all other supplies.

See the job aids for *Form 1: Stores Ledger* for detailed information.

Completing *DOT and Rifampicin Accounting Register*

When a patient has been diagnosed with tuberculosis, the patient is prescribed an eight-month course of treatment of daily drugs. As noted above, during the first two months, Rifampicin/Isoniazid (RH) is given as an FDC and Pyrazinamide and Ethambutol is given daily under direct observation (DOTS). Therefore, the *DOT and Rifampicin Accounting Register* is used to account for the RH drug given during the first two months.

The *DOT and Rifampicin Accounting Register* is used by Dispensers. See the *Job Aid, "Completing DOT and Rifampicin Accounting Register"* for detailed information.

Completing *Form TB09: TB Drugs and Drugs Suppliers Order Calculation Form* at the dispensary or health center

Form TB09: TB Drugs and Drugs Suppliers Order Calculation Form is not used by the dispensary or health center (as noted above) because they do not place orders for TB/L drugs.

Completing *LEP08: Leprosy Drug Order Calculation Form* at the dispensary or health center

LEP08: Leprosy Drug Order Calculation Form is not used by the dispensary or health center (as noted above) because they do not place orders for TB/L drugs.

F. Completing Forms for TB/L Drugs at the District Level by the DTLC or at the Regional Level by the RTLC

Completing *Form 1: Stores Ledgers* for TB/L drugs

TB/L drugs will be stored at the district level in bulk for all dispensaries and health centers in the district. Stores ledgers are used for TB/L drugs in the same way as for all other supplies.

See the job aids for *Form 1: Stores Ledger* for detailed information.

Completing *TB09: TB Drugs and Drugs Suppliers Order Calculation Form* and *LEP08: Leprosy Drug Order Calculation Form* for districts or regions

The DTLC will need to order bulk supplies of TB/L drugs for distribution to the dispensaries and health centers. The RTLC will likewise need to order bulk supplies of TB/L drugs for regional distribution to the districts. Therefore, both the DTLC and RTLC will need to complete *TB09: TB Drugs and Drugs Suppliers Order Calculation Form* and *LEP08: Leprosy Drug Order Calculation Form* to order TB/L drugs.

The formula for ordering TB and leprosy drugs is different from the formula for most supplies in the ILS. The formula is based on several key differences:

- the quantity of TB/L drugs ordered is not based on consumption, but on the number of patients that require the drug
- the quantity of additional supplies is also based on the number of patients that will require lab tests

The maximum level for orders for districts and regions is also different from most supplies in the ILS. The maximum stock level for districts and regions is only a 6 month supply (using the information for 3 months or one quarter and the buffer level of 2.0), rather than a seven month supply for most ILS supplies. A 6 month supply will provide a district or region sufficient stock of each TB/L drug to use for all of the current patients in the district or region, plus sufficient stock for any new patients that may be diagnosed during the quarter.

See the *Job Aid, "Completing Form TB09: TB Drugs and Drugs Suppliers Order Calculation Form for Districts or Regions"* and the *Job Aid, "LEP08: Leprosy Drug Order Calculation Form for Districts or Regions"* for detailed information.

Completing *TB/LEP 03 Regional TB/Leprosy Drug Laboratory Material Stock Position Report Form* at the Regional Level

Quarterly, the RTLC should take a complete inventory of all drugs and related medical supplies in the TB/leprosy program. This is done through a stock-taking by DTLCs that is reported to the RTLC. The RTLC should complete *TB/LEP03 Regional TB/Leprosy Drug Laboratory Material Stock Position Report Form*.

See the *Job Aid, "Completing TB/LEP 03 Regional TB/Leprosy Drug Laboratory Material Stock Position Report Form"* for detailed information.

G. Receiving/Issuing and Storing TB/L Drugs

The DTLC will issue and deliver TB/L drugs directly to each dispensary or health center for each patient diagnosed. The quantity of drugs issued will be individualized for each patient (based on body weight) and the dispensary or health center will receive a sufficient supply to last for the entire treatment period for that patient. The receipts should be recorded on *Form 1: Stores Ledger*.

The DTLC will receive bulk supplies of drugs for the district from the RTLC and the RTLC will receive bulk supplies from MSD. The receipts should be recorded on *Form 1: Stores Ledger*.

For storage, all of the guidelines in Section VII of the main text apply to TB/L drugs. In most facilities, because TB/L drugs are not part of the general supply of drugs, they may be kept in a separate storage area.

Job Aid TBL1: Completing the DOT and Rifampicin Accounting Register

TASK:	Completing the <i>DOT and Rifampicin Accounting Register</i>
COMPLETED BY:	Dispensers at Dispensaries, Health Centers, or Hospitals who dispense TB/L drugs
PURPOSE:	To document the dispensing of TB drugs containing Rifampicin under directly observed therapy (DOT)
WHEN TO PERFORM:	Daily, every time a TB drug containing Rifampicin is dispensed
MATERIALS NEEDED:	Pen, calculator, <i>TB01: Tuberculosis Treatment Card</i> for each patient that is added to the register

Step	Action	Notes
For each new patient		
1	S/N: (Serial number) Enter the number of the patient in the order in which they have been written in the register.	
2	Registration Number: Enter the registration number of the patient	The registration number may be taken from <i>TB01: Tuberculosis Treatment Card</i> or <i>TB03: Unit Register</i> .
3	Type of Treatment: Enter one of RHZE, RHZ, SEHZE	
4	Patient Name: Write the name of the patient	
5	Body Weight: Write the body weight of the patient at the time the patient name is first written.	The body weight will determine the dosage of each drug during the DOT phase.
Daily		
6	Patient attendance and number of RH tablets given: Write in the number of RH tablets in the box daily for each patient who receives RH.	Only the number of RH (Rifampicin-containing) tablets is recorded on the form. The patient should be observed by the Dispenser as having taken the RH tablet.
7	Total: At the end of the day, add the total for the day.	
8	Received: At the end of the day, enter the quantity of tablets received by the facility for that day.	
9	Balance: At the end of the day, calculate the balance of tablets in the facility at the end of the day.	The formula for calculating the balance is: Pill Count from the previous day + Received – Total
10	Pill Count: At the end of the day, enter the count of total tablets available in the facility.	
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> Any new patients have been added to the register The number of tablets given to each patient and directly observed has been recorded The total dispensed for the day is calculated The total received (if any) has been entered A pill count for the day has been entered 		

Job Aid TBL2: Completing TB09: TB Drugs and Drugs Suppliers Order Calculation Form at the District or Regional Level

TASK:	Completing <i>Form TB09: TB Drugs and Drugs Suppliers Order Calculation Form</i> at the district level
COMPLETED BY:	District TB/Leprosy Coordinator (DTLC) or Regional TB/Leprosy Coordinator (RTLCL)
PURPOSE:	To calculate the quantity of TB drugs and related laboratory supplies needed for the district or region
WHEN TO PERFORM:	Quarterly
MATERIALS NEEDED:	Pen, calculator, <i>Form TB07</i>

Form TB07: Quarterly case notification report of tuberculosis is printed on the reverse side of *Form TB09*. Instructions for completing this form are not included.

Step	Action	Notes
Calculate quantity of drugs required		
1	Patients: Enter the number of each type of patient registered during the quarter of the types: <ul style="list-style-type: none"> • 2HRZE/6EH • 2HRZ/6EH • 2HRZES/1HRZE 	This information is taken from the front side of the form, <i>Form TB07</i> . Note that the regimen 1½RHIV3Z ₃ E ₃ HIV3/6½EH is recorded under the 2RHZ/6EH heading. The regimen 2RHZ/4RH is not included in these calculations. (Similarly, the regimen 2RHZE/6EH is printed twice on the front of the form and is not used.)
2	Total (a): Multiply the number of 2HRZE/6EH patients by the factor for each drug and write the result in the box.	Example: For 100 patients on this regimen: RH 100 x 210 =21,000 Z400 100 x 210 =21,000 EH 100 x 360 = 36,000 E 100 x 150 = 15,000
3	Total (b): Multiply the number of 2RHZ/6EH patients by the factor for each drug and write the result in the box.	Example: For 105 patients on this regimen: RH 105 x 210 =22,050 Z400 105 x 210 =22,050 EH 105 x 360 = 37,800
4	Total (c): Multiply the number of 2RHZES/1HRZE patients by the factor for each drug and write the result in the box.	Example: For 2 patients on this regimen: RH 2 x 540 =1,080 Z400 2 x 310 =620 S 2 x 6.0 =12 H 2 x 190 =380 E 2 x 450 =900
5	Total (d): Add the total of a+b+c for each drug	Example: For RH: d=21,000+22,050+1,080=44,130
6	Total need (e): Multiply the total (d) by the period factor	Example: For RH: E=44,130 x 2 = 88,260
7	In stock (f): Enter the quantity of each drug available at the district store.	This should be the result of both a physical inventory and should match the quantity on <i>Form 1: Stores Ledger</i> .

8	Total order (g): Calculate the quantity of each drug to order by subtracting the total in stock (f) from the total need (e)	Example: For RH: $55,020 - 9,000 = 46,020$
9	To order (unmarked): Convert the total to order to the number of units of issue from MSD.	Example: For RH: $46,020 = 46$ bottles of 100 tablets each
Calculate quantity of laboratory supplies required		
10	Patients: Enter the total number of AFB+ patients, not including the category "others including chronic excretors"	This information is taken from the front side of the form, <i>Form TB07</i> .
11	Total (a): Multiply the number of AFB+ patients by the factor for each laboratory supply and write the result in the box.	Example: For 60 AFB+: Phenol $8.3 \times 60 = 498$
12	Total need (b): Multiply the total (a) by the period factor	Example: Phenol $498 \times 2 = 996$
13	In stock (c): Enter the quantity of each laboratory supply available at the district or regional store.	This should be the result of both a physical inventory and should match the quantity on <i>Form 1: Stores Ledger</i> .
14	Total order (d): Calculate the quantity of each laboratory supply to order by subtracting the total in stock (c) from the total need (b)	Example: Phenol $996 - 500 = 496$
15	To order (unmarked): Convert the total to order to the number of units of issue from MSD.	Use the MSD catalog to determine the unit of issue for laboratory supplies. Example: Phenol $496 = 1\text{gm}$
Report on number of TB drugs in the district store and at dispensaries and health centers		
16	Opening stock at the beginning of Quarter: Enter the total stock at the beginning of the quarter at the district and all its facilities or at the region and all of the levels below it for each drug.	This should be taken from the "Closing stock at the end of Quarter" from the previous report.
17	Amount received during the Quarter: Enter the amount received by the district from the region for each drug or by the region from MSD for each drug.	
18	Amount distributed during the Quarter: Enter the amount distributed by the district to its facilities for each drug or by the region to its districts for each drug.	The total issues can be taken from <i>Form 1: Stores Ledger</i>
19	Closing stock at the end of Quarter: Enter the total stock at the district and its facilities or at the region and all of the levels below it at the end of the quarter for each drug.	This should be the result of a physical inventory.
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • All drug order quantities have been calculated. • All laboratory supply order quantities have been calculated. • The table at the bottom of the form has been completed with stock information. 		

Job Aid TBL3: Completing LEP08: Leprosy Drug Order Calculation Form at the District or Regional Level

TASK:	Completing <i>LEP08: Leprosy Drug Order Calculation Form</i> at the District or Regional Level
COMPLETED BY:	District TB/Leprosy Coordinator (DTLC)
PURPOSE:	To calculate the quantity of leprosy drugs needed for the district or region
WHEN TO PERFORM:	Quarterly
MATERIALS NEEDED:	Pen, calculator, Form <i>LEP07</i>

Form LEP07: Quarterly case notification report of leprosy is printed on the reverse side of *Form LEP08*. Instructions for completing this form are not included.

Step	Action	Notes
Calculate quantity of drugs required		
1	Patients registered for MDT: Enter the number of each type of patient registered during the quarter of the types: <ul style="list-style-type: none"> • MB Adult (a) • MB Child (b) • PB Adult (c) • PB Child (d) 	This information is taken from the front side of the form, <i>Form LEP07</i> #6.
2	Patients with reactions: Enter the number of each type of patient who started treatment with corticosteroids in the quarter (either RR or ENL or both)	This information is taken from the front side of the form, <i>Form LEP07</i> #7. Note that the number of patients with reactions is a portion of the total patients registered for MDT.
3	Total ENL patients (e): Add the total of all patients with ENL.	
4	Total RR patients (f and g): Enter the total of all patients with RR.	The total of RR patients is the same for both (f) and (g).
5	Multiply the number of total patients in each "Patients Registered for MDT" box by the factor for each drug and write the result in the box.	Example: For 17 patients with MB Adult: $17 \times 12 = 204$
6	Multiply the total ENL patients (e) by the factor for Clofazimine and write the result in the box.	Example: 2 patients with ENL $2 \times 650 = 1,300$
7	Multiply the total RR patients by the factor for Box of BCPs Prednipac (f) and by the factor for Tabs prednisolone (g) and write each result in the corresponding box.	Example: 4 patients with RR $4 \times 1 = 1$ prednipac and $4 \times 336 = 1,344$ tabs of prednisolone
8	Total qtr. consumption (h): Add the total for each blister pack or drug	Example: For MB adult = 204

9	Total need (i): Multiply the total (h) by the period factor	Example: For MB adult: $204 \times 2 = 408$
10	In stock (j): Enter the quantity of each drug available at the district or regional store.	This should be the result of both a physical inventory and should match the quantity on <i>Form 1: Stores Ledger</i> .
11	Total order (k): Calculate the quantity of each drug to order by subtracting the total in stock (f) from the total need (e)	Example: For MB adult: $408 - 106 = 302$
Report on number of leprosy drugs in the district store and at dispensaries and health centers		
12	Opening stock at the beginning of Quarter: Enter the total stock at the beginning of the quarter at the district and all its facilities or at the region and all of the levels below it for each drug.	This should be taken from the "Closing stock at the end of Quarter" from the previous report.
13	Amount received during the Quarter: Enter the amount received by the district from the region for each drug or by the region from MSD for each drug.	
14	Amount distributed during the Quarter: Enter the amount distributed by the district to its facilities for each drug or by the region to its districts for each drug.	The total issues can be taken from <i>Form 1: Stores Ledger</i>
15	Closing stock at the end of Quarter: Enter the total stock at the district and its facilities or at the region and all of the levels below it at the end of the quarter for each drug.	This should be the result of a physical inventory.
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • All drug order quantities have been calculated. • The table at the bottom of the form has been completed with stock information. 		

Job Aid TBL4: Completing TB/LEP03 TB/Leprosy Drug Laboratory Material Stock Position Report Form

TASK:	Completing <i>TB/LEP03 TB/leprosy Drug Laboratory Material Stock Position Report Form</i>
COMPLETED BY:	Regional TB/leprosy Coordinator (RTLTC)
PURPOSE:	To document the quantity of all TB/leprosy program items available in the region
WHEN TO PERFORM:	Quarterly
MATERIALS NEEDED:	Pen, information from districts

Step	Action	Notes
1	Enter the name of each district in the region on each line.	
2	For each drug or related medical supply, enter the stock on hand for the regional store and for each district in the region.	Skip the line labeled "district pharmacy position."
3	Grand Total: Add the total quantity for each column.	
4	Completed on: Enter the day, month, and year that the form is completed.	
5	(printed name): Print the name of the RTLTC.	
6	Signature: The RTLTC should sign the form.	
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • All items have been entered for the region and for each district. • The grand total for each item has been calculated. 		

DOT AND RIFAMPICIN ACCOUNTING REGISTER

[illegible]

Quarterly case identification report of tuberculosis

District: _____

District Code: _____

Notifications during quarter: _____ of 20_____

Name of DTLC: _____

Signature: _____

Date prepared: _____ / _____ /20_____

Date received by RTLC: _____ / _____ /20_____

All cases registered during the quarter

	AFB+	AFB-	Extra-Pulm.	Total
New				
Relapse				
Failure				
Return				
Others including chronic excretors				

New AFB positive cases only

Age group (years)																
0-14		15-24		25-34		35-44		45-54		55-64		65+		Total		
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total

New AFB negative only

Sex	Age group (years)		
	0-14	=15	Total
M			
F			

New Extra-Pulmonary only

Sex	Age group (years)		
	0-14	=15	Total
M			
F			

Definitions

- New Patient who has never previously had treatment for tuberculosis
- Relapse Patient previously treated and declared cured or treatment completed and is diagnosed with bacteriologic positive tuberculosis
- Failure Patient with a positive smear at 5 months or more after start of treatment
- Return Patient who returns to treatment with positive bacteriology following interruption of treatment for 2 months or more
- Other Patient not fitting in any category, but excluding patients transferred in

Enrollment on regimen during the quarter

²RHZE/₆EH

²RHZ/₄RH

²SRHZE/₁RHZE/₅RHIV3E₃

²RHZE/₆EH

1½ RHIV3Z₃E₃HIV3/6½
EH

I certify that I have checked this report and find it correct. Signature of RTLC: _____

Regimen	Patients	RH 150/100	Z400	S 1g	EH 150/400	HIV100	E400	
2HRZE/6EH	Factor Total (a)	210 <input type="text"/>	210 <input type="text"/>	<input type="text"/>	360 <input type="text"/>	<input type="text"/>	150 <input type="text"/>	a=pts x factor
2HRZ/6EH	Factor Total (b)	210 <input type="text"/>	210 <input type="text"/>	<input type="text"/>	360 <input type="text"/>	<input type="text"/>	<input type="text"/>	b=pts x factor
2HRZES/1HRZE	Factor <input type="text"/>	540 <input type="text"/>	310 <input type="text"/>	6.0 <input type="text"/>	<input type="text"/>	190 <input type="text"/>	405 <input type="text"/>	c=pts x factor
TOTAL	(d)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	d=a+b+c
Add 2 period factor		2.0	2.0	2.0	2.0	2.0	2.0	
TOTAL NEED	(e)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	e=d x 2.0
In STOCK	(f)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	f
TOTAL ORDER	(g)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	g=e-f
		RH 150/100	Z400	S 1g	EH 150/400	HIV100	E400	

Patients		Basic Fuschin	Meth. Blue	Micro Oil	Sulfuric Acid 95%	Phenol (Liquid)	Xylol	Methanol	Sputum Containers	Slides
Factor		1.7	0.5	3.3	45	8.3	33	33	33	33
All smear positive										
Add 2 period factor		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL NEED	(b)									
IN STOCK	(c)									
TOTAL ORDER	(d)									
Total Order/Unit										
				gram	ml	gram	ml	ml	no	no

Report on number of TB drugs in the district store							
	Spectinomycin 1gm vial	Rifampicin 150+ Isoniazid 100mg T/100	Pyrazinamide 400mg T/1000	Ethambutol 400mg T/1000	Etambutol 400mg+ Isoniazid 150mg T/1000	Isoniazid 100mg T/1000	Isoniazid 300mg T/1000
Opening stock at the beginning of the Quarter							
Amount received during the Quarter							
Amount distributed during the Quarter							
Closing stock at the end of Quarter							

To include stock at your district pharmacy and health facility level

Quarterly case notification report of Leprosy

District: _____

District Code: _____

Notifications during quarter: _____ of 20_____

Name of DTLC: _____

Date prepared: _____ / _____ /20_____

Signature: _____

Date received by RTLC: _____ / _____ / 20_____

Date received by TLCU: _____

1. Cases Registered for MDT by the end of previous quarter

Classification	MB (A)	MB (C)	PB (A)	PB (C)	Total
Total (a)					

2. Cases Registered during the quarter of the report

	MB (A)	MB (C)	PB (A)	PB (C)	Total
New					
Return after default					
Relapse after MDT					
Relapse after DDS/Others					
Total notifications (b)					

3. Age and Sex distribution of New cases registered during the quarter

	0-14		15-24		25-34		35-44		45-54		55-64		65+		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
MB																
PB																

4. Disability grading of New cases registered during the quarter

	MB (A)	MB (C)	PB (A)	PB (C)	Total
Grade 0					
Grade 1					
Grade 2					
Total					

5. Cases removed from register during the quarter of the report

	MB (A)	MB (C)	PB (A)	PB (C)	Total
Treatment completed					
Died					
Transferred out					
Defaulter					
Total (c)					

6. Cases Registered for MDT at the end of the quarter

	MB (A)	MB (C)	PB (A)	PB (C)	Total
(a) + (b) – (c)					

7. Number of patients who started treatment with corticosteroids in the quarter

MB (A)	MB (C)	PB (A)	PB (C)	Total

Definitions

- New: Patient with incident leprosy never treated before for longer than 4 weeks
- Relapse MDT: Patient with active leprosy successfully treated in the past 2 years or more with MDT
- Relapse DDS: Patient with active leprosy successfully treated in the past with DDS
- Return after default: PB or MB defaulters returning to treatment with active disease after failing to take more than half of the required doses
- Others: Not fitting in any of the above

I certify that I have checked this report and found it correct. Signature of RTLC: _____

Calculation of Order of Leprosy drugs (MDT regimen and reaction drugs)

	MB (A) B/Pack	MB (C) B/Pack	PB (A) B/Pack	PB (C) B/Pack	Clofazamine 100mg	Prednipac B/Pack course	Prednisolone 5mg
Opening stock at the beginning of Quarter							
Amount Received during the Quarter							
Amount distributed during the Quarter							
Closing stock at the end of Quarter							

STOCK POSITION OF _____ REGION AT THE END OF 1ST/2ND/3RD/4TH QUARTER _____

ITEM	RH T/000	PZA T/000	EH T/000	E T/000	H T/000	Strep 1gram	MB (A)	MB (C)	PB (A)	PB (C)	Clofazamine	Pred. T/1000	Pred. P4/84	Methylene Blue	Basic Fuschin	Immersion Oil	Slides pkt/50	Sputum container Bo/1000	Universal Bottle EA	Methanol/Pure 1Lt 98%	Sulphuric Acid 1Lt	Phenol 500mls Bt	Phenol 1Lt Bt	Phenol 1Lt Bt	Box for keeping Slides EA	Xylene 1 Lt Bt	Grease Pencil pkt/12	Microscope EA	Bulb for microscope	Objective lens x100 EA	Cleaning Tissue pkt/100	
Regional Pharmacy Stock Position																																
District Pharmacy Stock Position																																
1																																
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
GRAND TOTAL (regions+districts)																																

Completed on ____/____/____ by _____ (printed name) _____ Signature.

ANNEX 16: REGIONAL TB/LEPROSY DRUG LABORATORY MATERIAL STOCK POSITION REPORT FROM

TB/LEP03

STOCK POSITION OF _____ REGION AT THE END OF 1ST/2ND/3RD/4TH QUARTER _____

ITEM	Filer pager Pkt/100	Wire nichel- Chrome roll	Wireloop holder EA	Metal-spirit Burner EA	Surgical blade pkt/100	Diamond Pencil EA	TB 01 Bd/250	TB 02 Bd/250	TB 03 EA	TB 04 EA	TB 05 EA	TB 06 Pd/250	TB 07/08 Pd/250	TB 09 Pd/250	PB 10 Pd/250	LEP 01 Bd/250	LEP 02 Bd/250	LEP 03 EA	LEP 04 EA	LEP 05 EA	LEP 06 EA	LEP 07/08 Pd/250	LEP 09 Pd/250	LEP 10 Pd/250	TB/LEP 01 Pd/250	TB/LEP 02 Pd/250	TB/LEP 03 Pd/250	TB/LEP 04 EA	Quality assurance or AFB	CRIN EA	Payment Voucher EA	Official Receipt EA	Delivery Note EA	QA Checklist EA	DOT Register EA	
Regional Pharmacy Stock Position																																				
District Pharmacy Stock Position																																				
1																																				
2																																				
3																																				
4																																				
5																																				
6																																				
7																																				
8																																				
9																																				
10																																				
GRAND TOTAL (regions+districts)																																				

Completed on ____/____/____ by _____ (printed name) _____ Signature.

ANNEX C—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
Form 1	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 Form 1: 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 *Form 1: 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 Drugs and Related Medical Supplies*.

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 Drugs and Related Medical Supplies*. See Section IV-B of the main text above for instructions on reviews at the district level and Section IV-C 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 VII 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 *Form 1: Stores Ledger* for the main storage area since the supplies would not be stored there for any length of time. *Form 1: Stores Ledger* should then be kept in the laboratory.

Within the laboratory, as with all other drugs, 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

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

A. Each time an HIV test is conducted

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

B. At the end of the month

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

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

TASK:	Completing <i>Form HIV2: Report & Request for HIV Tests and Related Supplies</i>
COMPLETED BY:	Dispensary or Health Center Storekeeper or Hospital Storekeeper
PURPOSE:	<ul style="list-style-type: none"> To report on the quantities of HIV tests received and performed during the quarter To determine order quantities for each test To provide MOH with data and information on supply usage and stock levels
WHEN TO PERFORM:	At the end of each month
MATERIALS NEEDED:	Blank <i>Form HIV2: Report & Request HIV Tests and Related Supplies</i> , <i>Form 1: Stores Ledger</i> book for HIV tests, <i>Form 5: Shipment Advice</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	Facility Code: Write the facility code.	This code can be found on <i>Form 6: Facility Statement of Account</i> .
2	Facility Name: Write the facility name.	
3	Type of Facility: Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> (GOV) Government (NGO) Non-government Organization (FBO) Faith Based Organization Other
4	Name of District: Write the name of the district where the dispensary, health center, or hospital is located.	
5	Date Submitted: Write the date that the report is submitted.	
6	Reporting Month: Write the month and year that this report covers.	Example: February 2005

B. For HIV tests

Step	Action	Notes
7	(A) Beginning Balance: 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) Received This Month: Write the quantity of the HIV test your facility received from MSD during the month.	The quantity received is found in <i>Form 1: Stores Ledger</i> book and on <i>Form 5: Shipment Advice</i> . Example: 1,000

9	(C) Actual dispensed: Write in the quantity of the HIV “Test by Type” performed from <i>Form HIV1: HIV Test Tally Sheet</i> .	Example: 750
10	(D) Lost/Adjusted: 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 Form 1: 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	(E) Ending Balance: 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 <i>Form 1: 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	(F) Quantity Needed: 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	(G) Quantity Requested: 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	(A) Beginning Balance: 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) Received This Period: Write the quantity of the product your facility received from MSD during the quarter.	The quantity received is found in <i>Form 1: Stores Ledger</i> book and on <i>Form 5: Shipment Advice</i> . Example: 1,000

16	<p>(C) Lost/Adjusted: 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> <p>See the <i>Job Aid, "Updating Form 1: Stores Ledger."</i></p>	<p>Note losses and other removals from stock with a negative number (e.g., -5).</p> <p>Note additions to stock with a positive number (e.g., 25).</p> <p>Example: 0</p>
17	<p>(D) Ending Balance: Add the "Balance" from <i>Form 1: 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>(E) Estimated Consumption: 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: $1,500 + 1,000 \pm 0 - 1750 = 750$</p>
19	<p>(F) Quantity Needed: Write the quantity of the product needed to reach the maximum stock level.</p>	<p>The Quantity Needed is Calculated as:</p> $[(\text{Estimated Consumption} \times 3) - \text{Ending Balance}]$ <p>Example: $[(750 \times 3) - 1,750] = 500$</p>
20	<p>(G) Quantity Requested: 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		

D. For the totals table

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

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

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

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

Step	Action	Notes
1	<p>Review Form HIV2: Report & Request for HIV Tests and Related Supplies 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"> Is the top section of the form complete? Are the quantities needed (column F) reasonable given the Ending Balance and the Estimated Consumed? Are the Quantities Requested (column G) correctly calculated based on the unit of issue? Is the Totals table completed? 	Select a few supplies at random to check the full calculation. If you find errors, check additional supplies or check all supplies.
2	<p>Approved Quantity: For each supply being ordered on <i>Form HIV2: R&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>Approved By and Signature: The DMO or HTC approving the form writes their name and signs.</p>	

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

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
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
Total by Purpose: ⁽¹⁾							
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
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
Total by Purpose: ⁽²⁾							
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
	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000	0000000000
Total by Purpose: ⁽³⁾							

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 D—HANDLING ANTI-RETROVIRAL DRUGS (ARVs)

A. What makes ARVs a special category of supplies?

Anti-retroviral drugs (ARVs) are a special category of supplies because they are a new group of drugs 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 drugs 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 drugs. 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 drugs in the treatment regimen are available at all times. Drugs in treatment may be changed for patients experiencing side effects.
Limited sites	ARVs, as a new class of drugs, 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 drugs 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 drugs (i.e., regimens), making the management of these drugs more complicated than other drugs. 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.

Drug Regimen	Adult Use
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.

Drug Regimen	Pediatric Use
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

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 Drugs (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 Form 1: Stores Ledger for ARVs

Form 1: Stores Ledger is used to manage ARVs as it is for all other drugs 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 Form 1: Stores Ledger* for additional information.

Completing Form ARV1: Dispensing Register for Anti-Retroviral Drugs (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 *Form 1: Stores Ledger*. *Form ARV1: Dispensing Register for Anti-Retroviral Drugs (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 Drugs (ARVs)

Form ARV2: Report & Request for Anti-Retroviral Drugs (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 drugs 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 drugs ordered to the number of drugs 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 *Form 1: 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 drugs are pre-packaged for a one-month supply, so most drugs 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

TASK:	Completing <i>Form ARV1: Dispensing Register for ARVs</i>
COMPLETED BY:	Dispenser who dispenses ARVs to the patient
PURPOSE:	To document products that are issued to each patient
WHEN TO PERFORM:	<ul style="list-style-type: none"> • Each time ARVs are dispensed to a patient • When the end of a page in the register is reached • At the end of the month
MATERIALS NEEDED:	<i>Form ARV1: Dispensing Register for ARVs</i> , pen

A. Cover page

Step	Action	Notes
1	Facility Code: Write the facility code.	This code can be found on <i>Form 6: Facility Statement of Account</i> .
2	Facility Name: Write the facility name.	
3	Type of Facility: Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> • (GOV) Government • (NGO) Non-government Organization • (FBO) Faith Based Organization • Other
4	Name of District: Write the name of the district where the dispensary, health center, or hospital is located.	
5	Date Submitted: Write the date that the report is submitted.	
6	Starting Date: Write the day, month and year that this register is first used.	Example: 2 February 2005
7	Ending Date: Write the day, month and year that this register is last used.	This would be the date that the book is completely filled, or that a new book is started because the old one has been replaced.

B. Each time ARVs are dispensed

Step	Action	Notes
1	Name: Write the name or patient ID number.	
2	Products dispensed: Document the quantity of each product dispensed to the patient by writing the # of units dispensed in the column for that product.	Write the number of tablets dispensed. For liquids, write the number of bottles dispensed.
3	At the end of each day, write in the total quantity of each product dispensed during the day: Add the quantities of each product dispensed and write in the totals.	Draw a line below the last patient and write the total for the day below the line. Then skip a line after writing the totals for the day.

4	At the end of each page, add the quantities of each product dispensed and recorded on the page and write the totals in the line labeled “Totals.”	
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> • One line for each patient is completed. • Daily totals are summed for each day. • Page totals are summed, at the end of each page. 		

Job Aid ARV2: Completing Form ARV2: Report & Request for Anti-Retroviral Drugs (ARVs) at the Hospital

TASK:	Completing <i>Form ARV2: Report & Request for Anti-Retroviral Drugs (ARVs)</i> at the Hospital
COMPLETED BY:	Hospital Storekeeper
PURPOSE:	<ul style="list-style-type: none"> To report on the quantities of ARVs received and dispensed during the month To determine order quantities for each supply To provide MOH with data and information on supply usage and stock levels
WHEN TO PERFORM:	At the end of each month
MATERIALS NEEDED:	Blank <i>Form ARV2: Report & Request for ARVs</i> , <i>Form 1: Stores Ledger</i> book for ARVs, <i>Form 5: Shipment Advice</i> for all shipments received during the month, <i>Form ARV1: Dispensing Register for ARVs</i> , pen, calculator.

Step	Action	Notes
1	Facility Code: Write the facility code.	This code can be found on <i>Form 6: Facility Statement of Account</i> .
2	Facility Name: Write the facility name.	
3	Type of Facility: Write the type of facility.	Facilities can be: <ul style="list-style-type: none"> (GOV) Government (NGO) Non-government Organization (FBO) Faith Based Organization Other
4	Name of District: Write the name of the district where the dispensary, health center, or hospital is located.	
5	Date Submitted: Write the date that the report is submitted.	
6	Reporting Period: Enter the month and year for this report.	Example: February 2005
7	(A) Beginning Balance: Write the stock on hand balance at the beginning of the month.	The Beginning Balance for the current month equals the Ending Balance from the previous month. Example: 1,500
8	(B) Received This Month: Write the quantity of the product your facility received from MSD during the month.	The quantity received is found in <i>Form 1: Stores Ledger</i> book and on <i>Form 5: Shipment Advice</i> . Example: 1,020
9	(C) Actual dispensed: Write in the quantity of the supply dispensed from <i>Form ARV1: Dispensing Register for ARVs</i> .	Example: 840

10	<p>(D) Lost/Adjusted: Write the quantity of any supplies 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> <p>See the <i>job aid</i>, “<i>Updating Form 1: Stores Ledger</i>.”</p>	<p>Note losses and other removals from stock with a negative number (e.g., -5).</p> <p>Note additions to stock with a positive number (e.g., 25).</p> <p>Example: 0</p>
11	<p>(E) Ending Balance: Use the formula to calculate the ending balance. This should also be the result of a physical inventory.</p>	<p>The ending balance should equal the balance on <i>Form 1: 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.</p> <p>Example: $1,500 + 1,020 - 840 = 1,680$</p>
12	<p>(F) Quantity Needed: Write the quantity of the supply needed to reach the maximum stock level.</p>	<p>The Quantity Needed is Calculated as:</p> <p>(Actual dispensed x 3) – Ending Balance</p> <p>Example: $(840 \times 3) - 1,700 = 840$</p>
13	<p>(G) Quantity Requested: Write the quantity of the supply you will order from MSD.</p>	<p>Round the Quantity Needed to the nearest MSD unit of issue.</p> <p>Example: $840 \div 60 = 14$ (bottles of 60)</p> <p>Note: Supplies must be ordered according to MSD units of issue. You may not order less than the minimum unit of issue.</p>
Repeat Steps 1-7 for each supply		
14	<p>Completed By and Signature: Person completing the form writes their name and signs.</p>	
15	<p>Approved By: Completed by the HTC</p>	
16	<p>Take the completed form to the HTC for approval</p>	
<p>THIS TASK IS COMPLETED WHEN:</p> <ul style="list-style-type: none"> Data columns A through G have been filled for all products. 		

Job Aid A3: Reviewing and Finalizing Form ARV2: Report and Request for Anti-Retroviral Drugs by the Hospital Therapeutic Committee

TASK:	Reviewing and Finalizing <i>Form ARV2: Report & Request for Anti-Retroviral Drugs</i> by the Hospital Therapeutic Committee
COMPLETED BY:	Hospital pharmacist in consultation with the Hospital Therapeutic Committee (HTC)
PURPOSE:	<ul style="list-style-type: none"> To approve order quantities for each ARV To ensure that supply orders are within established guidelines
WHEN TO PERFORM:	<ul style="list-style-type: none"> Monthly
MATERIALS NEEDED:	<i>Form ARV2: R&R for ARVs</i> , pen, calculator

Step	Action	Notes
1	Review Form ARV2: Report & Request for ARVs for appropriateness and correctness and correct any errors found on the form. Below are questions to answer: <ul style="list-style-type: none"> Is the top section of the form complete? Are the quantities needed (column F) reasonable given the Ending Balance and the Estimated Consumed? Are the Quantities Requested (column G) correctly calculated based on the unit of issue? 	Select a few ARVs at random to check the full calculation. If you find errors, check additional supplies or check all supplies.
2	Approved Quantity: For each supply being ordered on <i>Form ARV2: R&R</i> write the final Approved Quantity (based on units of issue).	<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	Approved By and Signature: The HTC approving the form writes their name and signs.	
4	Distribution of Form(s): <ul style="list-style-type: none"> The top (original) copy is sent to MSD by the HTC The bottom copy is retained by the hospital. 	
THIS TASK IS COMPLETED WHEN: <ul style="list-style-type: none"> The HTC has reviewed and corrected errors made in making the order. Forms are distributed as per Step #4. 		

INTEGRATED LOGISTICS SYSTEM

FORM ARV1: 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: _____

Name or Identification Number	Tablets or Capsules																				Solutions								Initials						
	3TC/d4T(30)/NVP	3TC/d4T(40)/NVP	d4T(30)/3TC	d4T(40)/3TC	ZDV(300)/3TC(150) mg	Abacavir 300mg	Didanosine 25mg	Didanosine 100mg	Didanosine 400mg	Efavirenz 50 mg	Efavirenz 200mg	Efavirenz 600mg	Lamivudine 150mg	Lopinavir/Ritonavir 133.3/33.3	Nelfinavir 250mg	Nevirapine 200 mg	Ritonanvir 100mg	Saquinavir 200mg	Stavudine 15mg	Stavudine 20mg	Stavudine 30mg	Stavudine 40mg	Zidovudine 100mg	Abacavir 20mg/ml	Didanosine 2gm powder	Stavudine 1mg/ml	Lopinavir/Ritonavir 80/20 mg/ml	Nelfinavir 50mg/g powder	Nevirapine l50mg/5ml	Zidovudine 50mg/5ml	Lamivudine 10mg/ml	PROVIDER	PATIENT		

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

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

Name of District: _____

Date Submitted: _____ Reporting Period: Month: _____ Year: _____

MSD Code	Supply 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)
10055008	3TC/d4T(30)/NVP Tab FDC	bottle 60 tablets								
10055006	3TC/d4T(40)/NVP Tab FDC	bottle 60 tablets								
10055014	d4T(30)/3TC Tab FDC	bottle 60 tablets								
10055015	d4T(40)/3TC Tab FDC	bottle 60 tablets								
10055009	ZDV/3TC Tab FDC 300/150mg	bottle 60 tablets								
10055016	Abacavir Tab 300mg	bottle 60 tablets								
10055017	Didanosine Tab 25mg	bottle 60 tablets								
10055018	Didanosine Tab 100mg	bottle 60 tablets								
10055019	Efavirenz Tab 50mg	bottle 30 tablets								
10055002	Efavirenz Tab 200mg	bottle 90 tablets								
10055001	Efavirenz Tab 600mg	bottle 30 tablets								
10055010	Lamivudine Tab 150mg	bottle 60 tablets								
10055020	Lopinavir/Ritonavir Tab FDC 133.3/33.3mg	bottle 180 tablets								
10055021	Nelfinavir Tab 250mg	bottle 270 tablets								

Hospital sends bottom copy to MSD with the order. Keep bottom copy.

MSD Code	Supply 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=(C×3)-E] (F)	Quantity Requested (G)	Approved Quantity (I)
10055004	Nevirapine Tab 200 mg	bottle 60 tablets								
10055022	Ritonanvir Tab 100mg	bottle 84 tablets								
10055023	Saquinavir Tab 200mg	bottle 180 tablets								
10055024	Stavudine Tab 15mg	bottle 60 tablets								
10055025	Stavudine Tab 20mg	bottle 60 tablets								
10055011	Stavudine Tab 30mg	blister pack 60 tablets								
10055005	Stavudine Tab 40mg	blister pack 60 tablets								
10055026	Zidovudine Tab 100mg	bottle 60 tablets								
10055027	Abacavir 20mg/ml	bottle 240 ml								
10055028	Didanosine Pdr for solution, 2gm	4 oz bottle contains 2gm								
10055029	Stavudine 1mg/ml	bottle 200ml								
10055030	Lopinavir/Ritonavir 80/20mg/ml	bottle 160ml								
10055031	Nelfinavir Pdr 50mg/g	bottle 144gm								
10055003	Lamivudine Susp. 10mg/ml	bottle 100ml								
10055013	Nevirapine Susp. 50mg/5ml	bottle 240ml								
10055007	Zidovudine Susp. 50mg/5ml, 100ml	bottle 100ml								

Completed by: _____

Signature: _____

Approved by: _____

Signature: _____

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Supplies in the ILS

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Treatment

United Republic of Tanzania, Ministry of Health, "Standard Treatment Guidelines (STG) and The National Essential Drug List for Tanzania (NEDLIT), April 1997, 2nd edition.

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Syndromic Management of Sexually Transmitted Infections (STIs), Management of the most common STI syndromes, NACP, 2001.

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Others

Manual for Quantification of National Requirements of Equipment and Supplies for
Laboratory, Radiology, Dental and Health Care Technical Services in Tanzania,
Department of Hospital Services, MOH, October 2002

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CTU Manual

KEY TERMS

Kiswahili	Kiingereza	Maana yake kama ilivyotumika kwenye Mwongozo wa ILS
Ainisha	Explain	Kutoa au kupatikana maelezo kamili ya kitu, kufafanua
Ainisho	Explanation	Ufafanuzi
Andamo	Cycle	Mfumo, mzunguko, utaratibu au mchakato ambao hufanya kazi au kuleta matokeo kwa kujirudia
Andamo la Uagizaji	Ordering cycle	Utaratibu wenye mikondo na hatua mahususi wa uagizaji wa dawa/vifaa kutoka MSD
Bainisha	Determine	gundua, ng'amua
Bohari	Store/storage area	Sehemu ambako dawa/vifaa vinahifadhiwa kabla ya kugawiwa/kusambazwa kwa matumizi kwenye vituo au idara mbalimbali kwenye vituo vya huduma ya afya
Boharia	Storekeeper	Mtu mwenye wajibu/mamlaka ya kutunza dawa/vifaa kwenye bohari/stoo kwenye kituo/hospitali
Dawa na vifaa husika	Drugs and related medical supplies	Dawa za tiba na vifaa ambavyo hutumika katika tiba k.m. bandeji, mikasi, vifaa vya maabara, vifaa vya Eksirei, n.k.
Deli	Freezer	Sanduku maalum lenye uwezo wa kuhifadhi vitu vya baridi kwa msaada wa vipande vya barafu
DOTS	DOTS (direct observed therapy short-course)	Hii ni "tiba ya muda mfupi inayoshuhudiwa" kwa kuwa katika miezi miwili ya kwanza ya tiba, inawalazimu wagonjwa kufika kituo cha tiba ili washuhudiwe wakimeza dawa
FDC	FDC (fixed-dose combination)	Tiba inayojumuisha aina kadhaa za dawa kwenye kipimo kimoja cha tiba
Fedha za nyongeza	Supplemental funding	Fedha ambazo zinaingia katika mfumo wa ILS katika vyanzo mbali na bajeti za halmashauri au serikali kuu
FEFO	FEFO – First Expiry, First Out	ambacho muda wake wa matumizi utamalizika mwanzo, kiwe cha mwanzo kutumika
Fomula	Formula	Njia ya kukokota (kufanya) mahesabu fulani
Halijoto	Temperature	Kiasi cha joto (au baridi)
Hati ya ununuzi wa mali au huduma	Local Purchase Order (LPO)	Hati ambayo huandaliwa na idara za serikali kufafanua mali au huduma inayohitajika kutoka kwa muuzaji au mtoa huduma, gharama/bei itakayolipwa na masharti ya ulipaji huo
Ingizo	Entry	Maandishi ambayo yanakuwa yamejazwa kwenye nafasi zilizoachwa wazi kwa ajili ya kujaza kwenye fomu, daftari au karatasi ya maandalizi

Kiswahili	Kiingereza	Maana yake kama ilivyotumika kwenye Mwongozo wa ILS
Jedwali	Table	Mpangilio wa maneno, tarakimu (namba) ambao upo kwa mistari (inayotoka kushoto kwenda kulia) na safu (zinazotoka juu kwenda chini)
Jokofu	Refrigerator	Mtambo ambao uko katika umbo la kasha ambao hutumiwa kupoza vitu kwa kutengeneza barafu. Huweza kuhifadhi vyema chanjo na baadhi ya dawa
Kiambatisho	Annex/annexture/app endix	Waraka wa ILS ambao unafungashwa pamoja na shehena kutoka MSD kama nyenzo, maelezo ya ziada au fomu.
Kiasi cha Kuanzia	Beginning balance	Kiasi cha mali/fedha kilichopomwanzoni mwa kipindi fulani kama mwezi au robo ya mwaka.
Kiasi cha Mwisho	Ending balance	Kiasi cha mali/fedha kilichosalia mwishoni mwa kipindi fulani kama mwezi au robo ya mwaka.
Kifungashio	Packaging	Karatasi, kasha, sandarusi ambayo inatumika kufungashia kitu. Ufungashi ni sura ya kifungashio chenyewe
Kikokotozi	Calculator	Mashine ndogo ya elektroniki ambayo hutumika kupigia mahesabu, "kalkyuleta"
Kimiminika	Liquid	Kitu chenye umbo la majimaji
Kinadi	Catalog	Kitabu ambacho kina orodha ya bidhaa mbalimbali na maelezo ya kila bidhaa k.v. ukubwa, ujazo, bei, n.k.
Kipimo	Dose/dosage	Kiasi cha dawa ambacho kinatumika kwa matibabu. Kipimo ambacho dawa imefungashwa na mtengenezaji au imeelekezwa kwa matumizi k.m. kidonge cha mg 250 kutwa mara tatu
Kipimo cha tiba	Dose	Kiasi cha dawa ya aina moja anachopewa mgonjwa kwa ajili ya tiba
Kipimo cha ugavi	Unit of issue	Kiasi cha aina moja ya dawa/vifaa husika vya tiba kinachofunganishwa pamoja na kugawiwa/kusambazwa kama kitu kimoja k.m. kopo ambalo limefunganishwa vidonge 1,000 husambazwa kama kifurusi kimoja
Kipimo cha VVU	HIV Test	Kifurushi ambacho kina vitu mbalimbali vinavyotumika katika upimaji wa VVU
Kituo	Facility	Hospitali, zahanati au kituo cha afya
Kiwango cha Chini cha Mali	Minimum Stock Quantity	Kiwango cha chini cha mali ambayo ipo katika bohari ya kituo
Kiwango cha Juu cha Mali	Maximum Stock Level	Shehena kwenye bohari ya dawa na vifaa husika vya tiba ambayo inatosha kwa muda wa miezi 7
Kubatilisha	Cancel/ take the place of	Kufanya kitu kuwa batili (hakina uhalali)
Kuhuisha	Up date	Kukifanya kitu kiendane na wakati

Kiswahili	Kiingereza	Maana yake kama ilivyotumika kwenye Mwongozo wa ILS
Kulakirisha	Sealing	Kufunga makasha, vifurushi, mizigo au shehena kwa namna ambayo kama vitafunguliwa kabla ya kufika mwisho wa safari, anayepokea ataweza kugundua
Kunakilisha	Photocopy	Utoaji wa nakala za nyaraka kwa kutumia kinakilishi (photocopy)
Kurajisiwa	Register	Kitendo cha kituo cha tiba kuingizwa na MSD katika mfumo wa ILS.
Kutakasa	Sterilize	Usafishaji wa kuhakikisha hakuna uchafu au vijidudu vinavyoweza kusababisha maradhi.
Kwisha kwa mali	Stockout	Kumalizika kwa mali/dawa/vifaa kwenye bohari
Leja ya Mali	Stores Ledger	Daftari lenye orodha ya mali iliyopo katika bohari
Madeli	Ice packs	Masanduku maalum yenye uwezo wa kuhifadhi vitu vya baridi kwa msaada wa vipande vya barafu
Majiko ya Bansen	Bunsen burner	Majiko maalum madogo madogo ambayo hutumika kuchemshia/kupasha vitu vidogo vidogo kwenye shughuli za maabara
Majina nasaba	Generic names	Jina moja la kisayansi kwa vitu ambavyo kibiashara yana majina tofauti k.m. <i>paracetamol</i> ni jina nasaba la <i>Panadol</i> na <i>Endemol</i>
Makapeni	Marker pen	Kalamu ya wino kubwa yenye nibu kubwa iliyotengenezwa kwa kitambaa ambayo hutumika kuandikia maandishi makubwa kwenye tangazo au vifurushi/bahasha/makasha yanayosafirishwa.
Makundi ya vituo	Facility groups	Vituo ambavyo vinakusanywa katika makundi ili kurahisisha na kuongeza ufanisi wa ugavi na usambazaji wa shehena
Mali	Product	Dawa, vifaa, na vitu vingine ambavyo vinakuwa vimehifadhiwa kwenye bohari ya kituo na kupaswa kuorodheshwa kwenye leja ya maji iliyopo kwenye bohari hiyo.
Masurufu	Allowances (travel, per diem, etc)	Posho ambayo hulipwa kwa mfanyakazi wakati akifanya safari ya kikazi.
Mawewa	Clear	Kupitisha mwanga kikamilifu kama maji masafi, bia, n.k.
Mbadala	Substitute, alternative	Kitu au kitendo kinachowekwa au kitendeka badala ya kitu/kitendo kingine
Mfumo wa ILS	ILS	Mfumo mkuu wa ugavi na usambazaji wa madawa
Mfumo wa ugavi na usambazaji	Logistics system	Mfumo mkuu wa ugavi na usambazaji wa madawa

Kiswahili	Kiingereza	Maana yake kama ilivyotumika kwenye Mwongozo wa ILS
Mizania	Balance	Hali ya vitu kulingana, kuwa katika hali ya usawa
Mjumbe wa HTC	HTC member	Mjumbe wa Kamati ya Tiba ya Hospitali mwenye idhini ya kusaini fomu kwa niaba ya kamati nzima
Mseto	Regimen	Mchanganyiko wa dawa mbalimbali ambazo hutumika kwa pamoja kama tiba moja
Msimamizi (mkuu) wa kituo	Facility in-charge	Mtendaji mkuu wa kituo, Mtu mwenye mamlaka mkuu ya uendeshaji katika zahanati au kituo cha afya
Mstari/mistari	Row(s)	<i>Mistari</i> katika fomu ni ile “mistari” ambayo inatoka kushoto kwenda kulia. <i>Safu</i> ni “mistari” ambayo inatoka juu kwenda chini
Muhtasari wa Salio	Financial statement	Fomu ya ILS ambayo inaelezea kiasi cha fedha za kila kituo ambazo zimesalia kwenye akaunti ya ununuzi wa shehena kutoka MSD
Mwandikaji dawa	Prescriber	Mtu ambaye anaandika dawa kwa ajili ya matumizi ya mgonjwa, anayeruhusu mgonjwa kupewa dawa fulani
n.k.	etc. (et cetera)	na kadhalika. Kama kuna mlolongo wa vitu vimetajwa, n.k. hutumika kuelezea vitu vingine vya ziada ambavyo vinafanana na ambavyo tayari vimetajwa
N/A	N/A (Not Applicable)	Haihusiki
Namba ya utambulisho wa kituo	Facility code	Namba maalum, ya kipekee ambayo inatolewa na MSD kuwa kitambulisho cha kituo
Nembo	Logo	Mchoro wenye kutambulisha kampuni au aina ya kitu. k.m nembo ya MSD ni <i>MSD</i>
Rekebisho hasi	Negative adjustment	Marekebisho yanayofanywa wakati mali iliyo katika bohari ya kituo haiwezi tena kutumika na inahesabiwa kama hasara
Rekebisho yakini	Positive adjustment	Marekebisho yanayofanywa wakati mali imeongezeka katika bohari ya kituo, lakini sio mali iliyotokana na ugavi wa kawaida wa ILS
Robo mwaka	Quarter	Kipindi cha miezi mitatu ambacho hutumika kufania uagizaji na ugavi katika mfumo wa ILS
Safu	Column(s)	Katika fomu, <i>safu</i> ni ile “mistari” ambayo inatokea juu kwenda chini. <i>Mistari</i> hasa ni ile inayotoka kushoto kwenda kulia
Samani	Furniture	Vifaa kama meza, viti, madawati, makabati (wengine husema “fenicha”)
Sharabu	Alcohol	Aina ya mafuta mepesi yatokanayo na petroli ambayo hutumika kutakasa/kusafishia sehemu ya mwili (k.m. kabla ya kuchoma sindano) au vifaa vya tiba kama mikasi, pimajoto, n.k.

Kiswahili	Kiingereza	Maana yake kama ilivyotumika kwenye Mwongozo wa ILS
Shehena	Supplies/shipment	Mzigo wa dawa/vifaa husika vya tiba ambavyo vinasambazwa kwa vituo chini ya mfumo wa ILS
Tabibu	Clinical officer	Mtaalamu wa tiba ambaye ameshika wadhifa wa kiutawala katika zahanati au kituo cha afya
Takwimu	Statistics, figures	Namba zenye kuonyesha idadi maalum ya kitu/vitu
Tarakimu	Figures	Namba
Tiba ya kwanza	First-line treatment	Dawa/matibabu ambayo mgonjwa anapatiwa pale anapoeleza matatizo yake na kuanza kutibiwa kwa mara ya kwanza. Tiba ya kwanza ikishindwa kuponya, mgonjwa <i>anabadilishiwa dawa (second-line treatment)</i>
Tiba ya pili	Second-line treatment	Dawa/matibabu ambayo mgonjwa anapatiwa baada ya dawa/tiba ya kwanza kushindwa kuondoa tatizo.
Ufungashi	Packaging	Jinsi kifungashio kinavyoonekana. (Taz: kifungashio)
Ugavi	Issueing	Kitendo cha kutoa/kutenga/kugawa bidhaa.
Uhuishaji	Updating, bringing up-to-date	Kitendo cha kukifanya kitu kiendane na wakati
Ukokotoaji	Calculating	Upigaji wa mahesabu
Unasibisho	Generic	Kufanana, kuwa na asili moja, kitu ambacho kimsingi ni kimoja tu na kingine hata kama umbo, sura, n.k. ni tofauti
Ununuzi nje ya mfumo wa MSD	Local procurement	Ununuzi wa mali/dawa/vifaa kutoka katika vyanzo ambavyo ni jirani na kituo na sio kituo cha MSD
Upimaji wa VVU	Test for HIV	Vipimo vinavyofanyika maabara kubaini iwapo mtu ameambukizwa VVU
Usambazaji	Distribution	Uchukuzi wa kitu/bidhaa kutoka sehemu moja na kutawanya kwa watumiaji sehemu mbalimbali
Utepe amba	Sticky tape	Utepe wenye gundi (k.m. Sellotape, plasta, n.k)
Uzani	Weight	Kipimo cha uzito/uwepesi
Viambatanisho	Annex/Annexure/Appendends	Nyaraka za ILS ambazo zinafungashwa pamoja na shehena kutoka MSD kama nyenzo, maelezo ya ziada au uhakiki
Vimiminika	Liquids	Kitu chenye umbo la maji maji, kitu kinachoweza kumiminika
Vipimo vya kugawa	Unit of issue	Kiasi cha dawa kinachoelekezwa kugaiwa kwa mgonjwa
Vipimo vya ugavi	Units of issue	Kiasi chini cha dawa kinachofungashwa na MSD kwa ajili ya ugavi
Vituo vya huduma ya afya	Health facility/facility	Zahanati, vituo vya afya au hospitali

Kiswahili	Kiingereza	Maana yake kama ilivyotumika kwenye Mwongozo wa ILS
Viuatilifu	Insecticide	Dawa za kuulia wadudu waharibifu au wa ndani ya majumba k.m. mende na inzi
Viyoyozi	Air conditioners	Mitambo ya kupoza hewa ndani ya chumba/gari. Hufanya kazi kwa kupuliza upepo wa baridi ndani ya chumba/gari
Wagonjwa/wateja	Clients	Watu ambao wanapokea huduma kutoka kwenye zahanati, vituo vya afya au hospitali