

## Unit 23

# CONTRACEPTIVE LOGISTICS

### Learning Objectives

By the end of this unit, learners will be able to:

- ❖ Define contraceptive logistics
- ❖ List the six “rights” of the logistics system
- ❖ List the four major activities of the logistics cycle and explain how they are interdependent
- ❖ Explain the Malawi health commodity logistics management system
- ❖ Describe the logistics responsibilities of clinic-based family planning providers
- ❖ Define the Malawi contraceptive logistics management information system (LMIS)
- ❖ Identify the four primary LMIS forms, the staff person responsible for completing each form, and when each form should be completed
- ❖ Describe guidelines for proper storage of contraceptive supplies.

### Teaching Resources in this Unit

#### Unit Assessment

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## Unit 23: Contraceptive Logistics

### Key Points

- ❖ **Contraceptive logistics is the system for the management of contraceptive supplies in the health care system.**
- ❖ **The logistics system includes six “rights:” ensuring that the *right* goods in the *right* quantities and in the *right* condition are delivered to the *right* place at the *right* time for the *right* cost.**
- ❖ **The four major activities in the logistics cycle are serving customers, selecting products, forecasting and procurement, and managing inventory.**
- ❖ **Family planning providers are an important link in the contraceptive supply chain.**
- ❖ **Logistics management requires accurate and timely reports and orders.**
- ❖ **Proper storage of health commodities helps ensure that products are available, accessible and in good condition.**

### 23.1 Defining Contraceptive Logistics

Logistics is the system through which materials are procured, maintained, distributed, and replaced. Contraceptive logistics, specifically, is the system used for the management and movement of contraceptive supplies and commodities in the health care system.

### 23.2 The Logistics System

The logistics system includes six “rights:” ensuring that the *right* goods in the *right* quantities and in the *right* condition are delivered to the *right* place at the *right* time for the *right* cost. Health systems can suffer when logistics problems affect their ability to fulfil one or more of these rights.

Logistics system activities that support these six rights are depicted in the logistics cycle (see Figure 23.1 below). The four major activities in this cycle are:

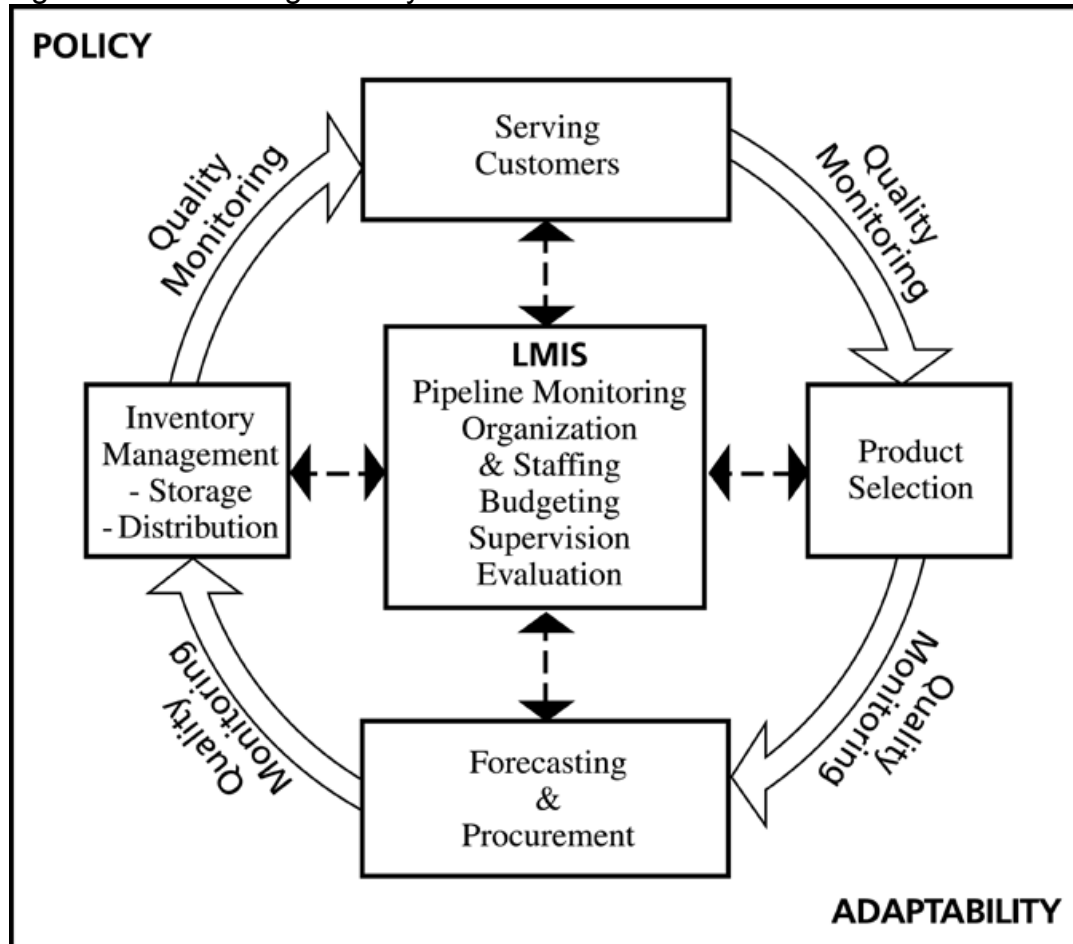
- **Serving customers:** Each person who works in logistics must remember that he or she selects, procures, stores, and distributes products to meet customer needs. All of the activities in the logistics cycle contribute to providing excellent customer service.
- **Selecting products:** In a health logistics system, product selection may be the responsibility of a national formulary and therapeutics committee, pharmaceutical board, board of physicians, or other government-appointed group.
- **Forecasting and procurement:** After the products are selected, the quantity of each product needed must be determined and procured. It is important that the system provide sufficient quantities of commodities without providing so many that a large number are not used (wasting products as well as funds).
- **Managing inventory (storage and distribution):** After an item has been procured and received, it must be stored until the customer needs it. Determining how much stock

should be stored is an important decision and is closely linked with the forecasting of needs.

As can be seen in the illustration, these activities are interdependent. For instance, product selection is based on serving customers since it is important to select and procure products that are acceptable to them. In turn, storage systems depend on the needs of the products that are procured. For example, male condoms need to be stored in a cool, dry place.

(MOH and DELIVER 2009)

Figure 23.1: The Logistics Cycle



### 23.3 The Importance of the Contraceptive Logistics System

Good quality reproductive health care requires a continuous supply of contraceptives and other commodities. Family planning providers are an important link in the contraceptive supply chain that moves contraceptive supplies from the manufacturer to the client.

Contraceptive logistics management requires accurate and timely reports and orders from providers. These documents help supply chain managers determine what products are needed, how much to buy, and where to distribute them.

Clinic staff members do their part when they properly manage contraceptive inventory, accurately record and report what commodities are used, and promptly order new supplies.

Family planning staff members need to be familiar with, and work within, whatever systems are in place at their worksites to make certain that they have the supplies that are needed.

(WHO/RHR and CCP, Knowledge for Health Project 2008)

## 23.4 The Malawi Community-Based Contraceptive Logistics Management System

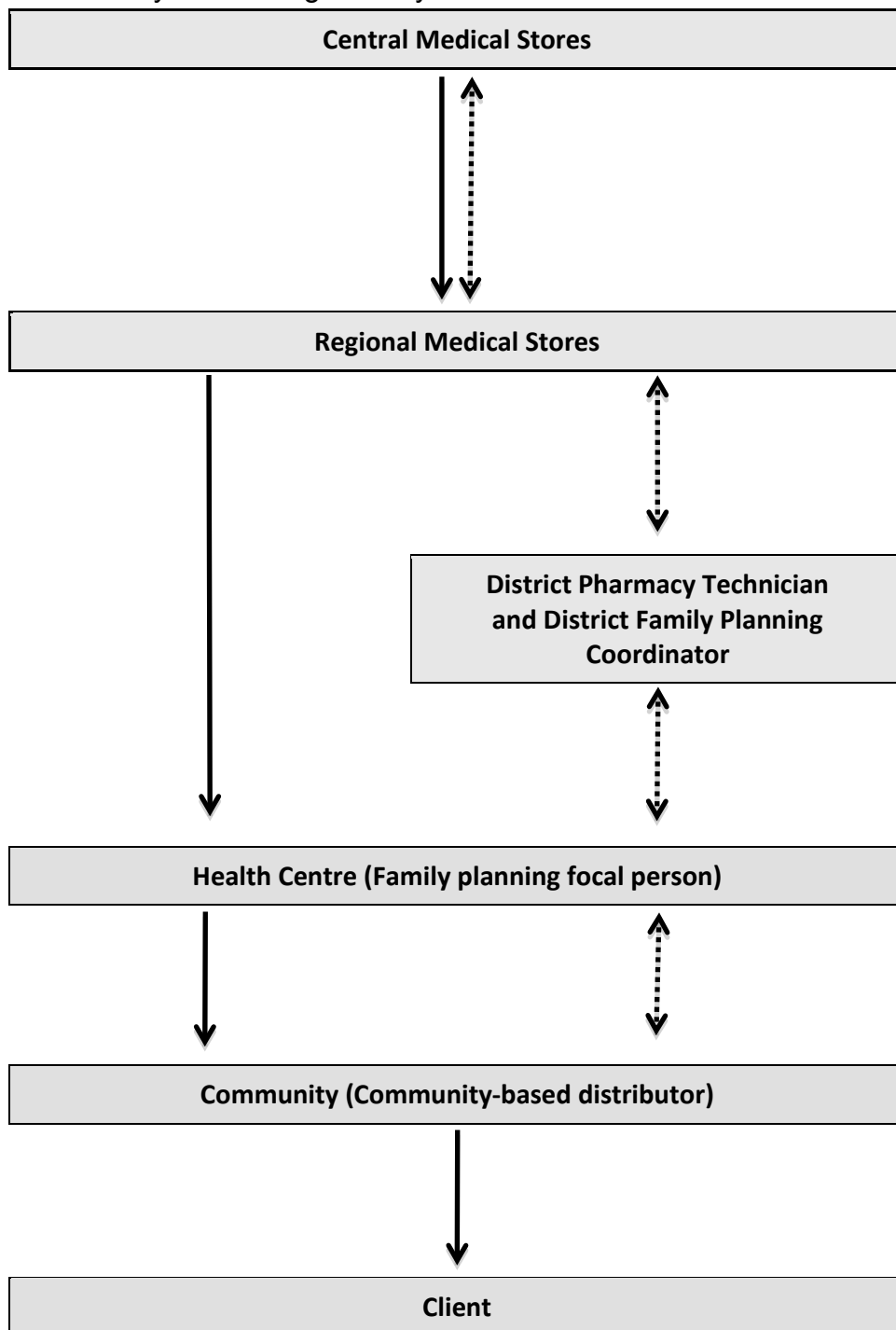
The Malawi health commodities logistics management system is the MOH’s system for managing inventories of drugs, contraceptives, HIV tests, laboratory reagents and consumables and medical supplies. This system helps ensure that all Malawians receive the medical products and services they need and receive quality treatment when they visit a service delivery point, laboratory, HIV testing and counselling centre, or are visited by a community-based distribution agent. This system helps ensure that the six logistics “rights” are fulfilled.

The following table lists some of the key personnel who manage the MOH logistics management system, their activities, and when these activities should take place.

Who	Action	When
Health Center In-Charge/ Lab Assistant	Receives health commodities from Regional Medical Stores and signs off on the delivery note to confirm about quantities received. Dispenses health commodities to clients. Performs tests for clients. (Lab Assistant) Completes the HIV tests Daily Activity Register (DAR) and other laboratory test DARs every time they test a client. (Lab Assistant) Records information about transactions on the stock card (Form LMIS-SC) and in-patient registers. Completes the Health Center Monthly LMIS Report (Form LMIS-01A).	During the month  Monthly
Community Clinics In-charge	Completes the Community Clinic Drugs Requisition Form (Form LMIS-01F). Records daily transactions in the out-patient register (Form HMIS-5).	Weekly Daily
CHAM/NGO In-Charge	Completes the Clinic Monthly LMIS Report (Form LMIS-01C). Records information about transactions on the stock card (Form LMIS-SC).	Monthly
District AIDS Coordinator	While the District AIDS Coordinators do not obtain or hold commodities for HIV/AIDS control, they do coordinate with staff at various levels to ensure that sufficient commodities, including HIV tests, are available.	Daily
Zonal Laboratory Supervisor	Coordinates with staff at district and central laboratories to ensure that the right commodities are available in the right quantity. Supervises laboratory logistics activities throughout the zone.	Daily Monthly

The flow of the commodities and information can be seen in Figure 23.2 below.

Figure 23.2: Flow of Commodities and Information in the Community-Based Logistics System



*Solid arrow* = Contraceptive commodities flow  
*Dotted arrow* = Information flow

## 23.5 Logistics Responsibilities for Family Planning Providers in the Clinic

Workers at all levels of the health system, including those at the central, regional, district, health centre and community levels, play a role in ensuring that the contraceptives logistics system functions effectively. While specific supply chain procedures can vary across settings, clinical officers, medical assistants, nurses and laboratory assistants are typically responsible for the following common activities:

1. Receive and store drugs, contraceptives, HIV tests and other medical supplies in the health centre according to recommended storage guidelines.
2. Record all issues and receipts of health commodities on the stock card (Form LMIS-SC).
3. Issue products to service providers or to the laboratory work bench according to FEFO (first-to-expire, first-out) distribution.
4. Conduct a physical inventory of commodities monthly and update the stock card (Form LMIS-SC).
5. Consolidate data on usage of commodities by all user units affiliated to the health centre.
6. Complete the Health Centre Monthly LMIS Report (Form LMIS-01A) and send to the District Pharmacist/Pharmacy Technician by the 5<sup>th</sup> of every month. (Health Centre Clinical Officer/Medical Assistant/Nurse)
7. Complete the Health Centre Monthly LMIS Report (Form LMIS-01ALab) and send to the District Laboratory Manager by the 5<sup>th</sup> of every month. (Laboratory Assistant)

(MOH and DELIVER 2009)

## 23.6 Contraceptive Logistics Record Keeping

### **The Malawi Logistics Management Information System (LMIS)**

Timely and accurate information is an essential piece of the logistics cycle; without it, the logistics system would not run smoothly. To aid in the collection and analysis of this information, a logistics management information system (LMIS) is used.

The Malawi LMIS consists of records and reports used to collect and transmit information about contraceptives and other related medical supplies dispensed to clients. LMIS forms are used to record information about the three essential logistics data elements:

- Stock on hand (quantity of supplies that are available for use at the facility)
- Consumption rate (rate at which commodities are used)
- Losses and adjustments.

### **LMIS records and reports**

The records and reports used in the Malawi contraceptive LMIS include:

- Community-based distribution (CBD) Client & Contraceptive Tally Sheet
- CBD Monthly DMPA Worksheet
- CBD Supervision Monthly Contraceptive Summary

- Requisition and Issue Voucher.

Samples of these forms can be found in the *Malawi MOH Community-Based Supply Chain Management System for Injectable Contraceptives*. Staff members responsible for completing these forms and the monthly schedule for when they should be completed are listed in Table 23.1.

Table 23.1: Malawi Contraceptive LMIS Records and Reports

Report/Record Name	LMIS Number	Staff Responsible for Completing	When Completed
CBD Client & Contraceptive Tally Sheet	LMIS-01G	Health Surveillance Assistant (HSA)	During the month
CBD Monthly DMPA Worksheet	LMIS-01K	HSA	By the 3 <sup>rd</sup> day of each month
CBD Supervision Monthly Contraceptive Summary	LMIS-01J	Family planning focal person together with HSA	By the 3 <sup>rd</sup> day of each month
Requisition and Issue Voucher	RIV	Family planning focal person	When collecting contraceptives from drug store

## 23.7 Storing Contraceptives and Related Medical Supplies

### Purpose of storage

Proper storage of health commodities helps ensure that products are always available, accessible and in good condition. Appropriate storage:

- Protects the quality of the contraceptives and other supplies
- Preserves the integrity of the packaging and makes supplies available for use.

### Shelf life

- Shelf life is the length of time a product may be stored under ideal conditions without affecting its usability, safety, purity, or potency.
- When the product reaches the end of its shelf life, it has expired and should not be distributed.
- If a product is not stored correctly, the shelf life may be shortened.
- To make sure that health commodities do not expire before they are dispensed, First-to-Expire, First-Out (FEFO) should be followed. With this system, the commodities with the shortest remaining shelf life are used first. First-In, First-Out (FIFO) should not be used because some health commodities may have earlier expiry dates even though they were obtained more recently.

### Contraceptive storage guidelines

- Store contraceptives in containers supplied by the community-based supply chain programme only.
- Clean the storage area regularly. Take precautions to prevent harmful insects and rodents from entering the storage area.

- Store health commodities in a dry area, away from water, direct sunlight, and fire.
- Keep contraceptives locked to ensure that unauthorized people cannot access them.
- Protect storeroom from water penetration.
- Keep fire safety equipment available, accessible, and functional. Train employees to use it.
- Store latex products away from electric motors and fluorescent lights.
- Maintain cold storage, including a cold chain, as required.
- 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.
- Arrange cartons with arrows pointing up with identification labels, expiry dates, and manufacturing dates clearly visible.
- Store health commodities away from insecticides, chemicals, flammable products, hazardous materials, old files, office supplies, and equipment. Always take appropriate safety precautions.

(MOH and DELIVER 2009)



## Contraceptive Logistics Quiz Questions

1. Define contraceptive logistics:
2. The six “rights” of the management system are:
3. The four major interdependent activities of the logistics cycle are:
4. List three contraceptive logistics responsibilities for family planning clinic staff:
5. “LMIS” stands for:

**Questions 6–12:** Indicate whether the following statements are **true** or **false** by writing a “**T**” for true or an “**F**” for false in the space provided before each statement.

- \_\_\_ 6. Workers at the regional level of the health system are solely responsible for ensuring that the contraceptive logistics system functions effectively.
- \_\_\_ 7. Contraceptive commodities should be issued to service providers according to First-In, First-Out (FIFO) distribution.
- \_\_\_ 8. The flow of information in the Malawi community-based contraceptive supply system is one way from the district pharmacy technician to the regional medical stores.
- \_\_\_ 9. Commodities in the Malawi community-based contraceptive supply system move from central medical stores directly to the local health centres.
- \_\_\_ 10. Contraceptives should only be stored in the containers provided by the Malawi community-based supply chain programme.
- \_\_\_ 11. LMIS forms are used to collect information about essential logistics data elements.
- \_\_\_ 12. The HSA is responsible for completing the CBD monthly DMPA worksheet.

## Contraceptive Logistics Quiz Questions Answer Key

1. Define contraceptive logistics:

**The system used for the management and movement of contraceptive supplies in the health care system.**

2. The six “rights” of the management system are:

**Ensuring that the *right* goods in the *right* quantities and in the *right* condition are delivered to the *right* place at the *right* time for the *right* cost.**

3. The four major interdependent activities of the logistics cycle are:

**Serving customers, selecting products, forecasting and procurement, and managing inventory.**

4. List three contraceptive logistics responsibilities for family planning clinic staff:

**Any three of the following:**

- **Receive and store drugs, contraceptives, HIV tests and other medical supplies in the health centre according to recommended storage guidelines.**
- **Record all issues and receipts of health commodities on the stock card (Form LMIS-SC).**
- **Issue products to service providers or to the laboratory work bench according to FEFO (first-to-expire, first-out) distribution.**
- **Conduct a physical inventory of commodities monthly and update the stock card (Form LMIS-SC).**
- **Consolidate data on usage of commodities by all user units affiliated to the health centre.**
- **Complete the Health Centre Monthly LMIS Report (Form LMIS-01A) and send to the District Pharmacist/Pharmacy Technician by the 5<sup>th</sup> of every month. (Health Centre Clinical Officer/Medical Assistant/Nurse)**
- **Complete the Health Centre Monthly LMIS Report (Form LMIS-01ALab) and send to the District Laboratory Manager by the 5<sup>th</sup> of every month. (Laboratory Assistant)**

5. “LMIS” stands for:

**Logistics Management Information System.**

**F\_\_6.** Workers at the regional level of the health system are solely responsible for ensuring that the contraceptive logistics system functions effectively.

**F\_\_7.** Contraceptive commodities should be issued to service providers according to First-In, First-Out (FIFO) distribution.

**F\_\_8.** The flow of information in the Malawi community-based contraceptive supply system is one way from the district pharmacy technician to the regional medical stores.

**F\_\_9.** Commodities in the Malawi community-based contraceptive supply system move from central medical stores directly to the local health centres.

- T\_\_10. Contraceptives should only be stored in the containers provided by the Malawi community-based supply chain programme.
- T\_\_11. LMIS forms are used to collect information about essential logistics data elements.
- T\_\_12. The HSA is responsible for completing the CBD monthly DMPA worksheet.

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