



NURSING LEVEL III

NTQF III

LEARNING GUIDE #49

Unit of Competence : Undertake Routine inventory
Maintenance

Module Title : Undertaking Routine inventory
Maintenance

LG Code : HLT NUR3 M10 LO1-LG47

TTLM Code : HLT NUR3 M10 0219 v1

LO1: Maintain and monitor stock levels



This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Introduction
- Monitoring Quality of stock
- Monitoring storage conditions
- Determining Store requirements
- Replenishing stored and stationary items
- Rotating perishable stocks
- Recording and reporting deviations

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:

- Monitoring Quality of stock and storage conditions including temperature, light, humidity, pest control and stock organization.
- determining Store requirements against the specified stock levels.
- Replenishing Stored and stationary items in the specified area.
- Rotating Perishable stocks according to use by dates.
- Recording and reported Deviations to supervisor in accordance with the organizational procedures

Learning Instructions:

Read the specific objectives of this Learning Guide.

1. Follow the instructions described in number 3 to 6.
2. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
3. Accomplish the “Self-check” in page 4, 10,14,24.32,41,46, .
4. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check).



5. If you earned a satisfactory evaluation proceed to next “Information Sheet ”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activities.
6. Submit your accomplished Self-checks . This will form part of your training portfolio.
 - Reference on page 49

Information Sheet-1	Introduction
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1.1. Introduction

What is Stock?

In a health care facility you will come across plenty of stock, each department has different stock requirements and the levels of stock kept within the departments will also differ.

Your duties in a Health Support Worker’s role may include undertaking routine stock maintenance.

Stock you are responsible for may include but is not limited to:

- Linen.
- Medical gases (oxygen)
- Cleaning agents and chemicals
- General supplies.
- Consumables.
- Sterile stock.
- Stationery.
- Equipment.
- Maintenance requisites.



Self check -1	Short answer
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

- 1,What does it mean stock management (3 points)
- 2 , list at least some components of stock management (3 points)



Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Questions

1, _____

2, _____



1,2. Monitoring Quality of stock

Description

Stock monitoring agreement (SMA) services include a system that can trace and inspect goods throughout the supply chain, minimizing trading and transaction risk . Sometimes, the financing party in a transaction does require strong control over the commodities by a third party. Monitoring stocks involves witnessing the movement, care and condition of the commodities being traded. We can protect your investments by inspection that stock levels.

Certified organizations can promote themselves as certificate holders in their promotional materials and can include the URS inspection logo free of charge.

Briefly

- Checks of warehouses;
- Control of collateral;
- Inspection of quantity and quality of goods;
- Damage Surveys;
- Transparent evaluation of the inventory for financial reports, excise duty and loans;
- Compliance with national and other regulatory requirements;
- Data to help plan and manage your purchasing and stock administration;
- Rapid calculations of inventory, including daily provisional reports;
- Inspection of weight, size, cleanliness and analytical tests;
- Inspection of packaging and marking;
- Ensures that damage or loss is recorded;
- Issue certificate of acts of inventory on the basis of verified and agreed figures;

This kind of inspection is in demand by:

- Banks;
- Credit and leasing organizations;
- Large holdings;
- Audit companies;

Why Stock Monitoring?

- Manage risks, increase profits and fulfill obligations: through individual or integrated solutions for every aspect of the supply chain of product;
- Maintaining of international trading;
- Find out the level of stocks in warehouses;



- Ensures that damage, loss or other issues are identified as quickly as possible and remedial actions.
- issuance of a certificate based on inventory results;
- We provide the independent control and assurance which allows banks and the finance world to provide loans and letters of credit to those who trade, by independently assessing and assuring that the traded goods are indeed what the parties expect them to be, in the specified quantity;

MAINTAIN AND MONITOR STOCK LEVELS

Maintaining Stock levels

Health care facility stock levels must meet the requirements of the patient/client and the demands of each department; this includes the quality of stock and how it will be stored.

Stock levels may include but are not limited to: minimum, maximum, reorder and or trigger point.

But while the health care facility wants to maintain its stock levels it does not want to unnecessarily hold onto excess stock.

Your organization will have policies and procedures regarding the amount of stock kept, for example no more than one week's supply of basic sterile packs at any one time.

The results of monitoring and evaluation should be used to strengthen procurement process, quality assurance and correct problems timely.

Advantages of Holding Excess Stock

There are some *advantages* to holding large quantities of stock:

- The health care facility may receive discounts from suppliers for ordering large quantities of stock.
- There is a buffer for when delivery cannot be exactly matched with daily usage (e.g. sterile linen packs).
- It will reduce the risk of being unable to meet demand if there is a breakdown or interruption to supply.
- The health care facility can cash in on fluctuations in price of the stock – it can be an advantage to have a large quantity of stock if the price is about to rise.



Disadvantages of Holding Excess Stock

For many companies, inventory represents one of the largest assets held by the company. Companies need inventory to sell to customers or to manufacture finished products to sell to customers. The advantages of holding excess inventory include eliminating the risk of stock outs and dissatisfied customers.

One disadvantage of holding excess inventory pertains to the reduced storage capacity available. Any inventory maintained on the warehouse shelves reduces the company's ability to purchase additional inventory or store additional finished products. If a vendor offers a deep discount for an immediate purchase, the company might have to pass on the opportunity due to the limited space available. If the company continues manufacturing finished goods or receiving new inventory shipments, it might have to lease additional storage space in order to warehouse the inventory.

There are several disadvantages for the health care facility if it is holding excess stock and these may include:

- Having money tied up in inventory.
- Operating expenses, rent, rates, repairs, heating, cooling, light, etc.
- Valuable space taken up by extra storage.
- Chance of stock becoming obsolete or expiring e.g. IV solution.
- Deterioration of stock e.g. food.
- Insurance cost of stock.
- Multifaceted Stock checking.
- Recording of stock can be complex.



The reasons for keeping stock:

There are three basic reasons for keeping a stock:

1. **Time** - The time lags present in the supply chain, from supplier to user at every stage, requires that you maintain certain amounts of inventory to use in this [lead time](#). However, in practice, inventory is to be maintained for consumption during 'variations in lead time'. Lead time itself can be addressed by ordering that many days in advance.
2. **Uncertainty** - Inventories are maintained as buffers to meet uncertainties in demand, supply and movements of goods.
3. **Economies of scale** - Ideal condition of "one unit at a time at a place where a user needs it, when he needs it" principle tends to incur lots of costs in terms of logistics. So bulk buying, movement and storing brings in economies of scale, thus inventory



Self check -2	Say true or false & choice
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

1, Why Stock Monitoring is important is Manage risks, increase profits and fulfill obligations

2, Why Stock Monitoring is important ?

- A. For Maintaining of international trading;
- B. Find out the level of stocks in warehouses;
- C. Ensures that damage, loss or other issues are identified as quickly as possible to take action
- D. All of the above

3, Advantages of Holding Excess Stock includes

- A. The health care facility may receive discounts from suppliers for ordering large quantities of stock.
- B. It will reduce the risk of being unable to meet demand if there is a breakdown or interruption to supply.
- C. The health care facility can cash in on fluctuations in price of the stock
- D. All of the above

4, There are several disadvantages for the health care facility if it is holding excess

- A. Having money tied up in inventory.
- B. Valuable space does not taken up by extra storage.
- C. Chance of stock becoming obsolete or expiring e.g. IV solution
- D. All of the above

5, Write the three basic reasons for keeping a stock



Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____
Rating: _____

Name: _____ **Date:** _____

Answer

- 1,
- 2,
- 3,
- 4,
- 5,



1.3, Monitoring storage conditions

○ **Store type and location may include**

- Ward or department
- Clinic or professional rooms
- Aged care facility
- Small store
- A subsidiary store to a main store or external
- supplier's store
- Drug store

Ward or departmental storage may include but is not limited to:

- Specified storage areas e.g. stationary cupboard
- Linen storage or kitchen area
- refrigerator

Stock ordering procedures may include but is not limited to:

- Written
- Verbal
- Electronic

Stock control and record systems may be conducted either or:

- Manual
- computerized

Suppliers may be internal or external

Stakeholders include **staff** (sales, distribution, and outlet management) and **suppliers**. Factors affecting outlet stock include; **stock turnover**, **storage capacity**, **seasonal variations**, and **budget**. So, **change in lead times**, **change in demand**, **supply delays**, and **stock discontinued** affects supply. Action may include use alternative supplier, inform stakeholders, and amend stock levels.

Safety requirements when maintaining stock

Safety requirements when maintaining stock may include:

- ✓ Work place protocols and procedures



- ✓ communications equipment
- ✓ workplace operations manuals
- ✓ relevant regulations, authorities and permits
- ✓ hours of operation
- ✓ relevant record keeping requirements
- ✓ work place quality and customer service standards

Stock Monitoring

Stock management is the function of understanding the [stock mix](#) of a company and the different [demands](#) on that stock. The demands are influenced by both [external](#) and [internal](#) factors and are balanced by the creation of [Purchase order requests](#) to keep supplies at a reasonable or prescribed level. Good inventory control requires careful thought about the dimensions and design of storage space, appropriate conditions for storage of different types of supplies and the importance of stock rotation and systematic arrangement of stock, as well as attention to cleanliness, fire prevention measures, and security within the store.

Stock distribution is monitored against set objectives using some indicators:

- Inspection of time of arrival and storage(Consideration of lead time)
- Availability of suitable and adequate storage facility;
- Use of stock record card (documenting and keeping records of activities);
- Maintenance of different stock levels.
- Adherence to the procurement time table;
- Availability of significant amount of defective item products;
- Whether or not items are stored properly in accordance with the recommended storage conditions;
- Whether or not expired, deteriorated, banned, etc. Whether or not physical inspection is undertaken on the stocked items regularly



Self check-3	Say true or false
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

- 1, Specified storage areas is not needed for storing materials
- 2, Stock ordering procedures may include :Written ,Verbal Electronic and others .
- 3, Stock control and record systems is not conducted Manual or computerized
- 4, Safety requirements is not needed when maintaining stock
- 5, Factors affecting outlet stock include; stock turnover, storage capacity, seasonal variations,



Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ **Date:** _____

Answer

- 1,
- 2,
- 3,
- 4,
- 5,



1.4, Determining Store requirements

How to order supplies based on past consumption .

NOTE: This chapter covers regular ordering when supply needs and consumption are known. For programmes whose patient enrolment is always increasing, such as chronic AIDS care and antiretroviral treatment for HIV and AIDS, How to Start Antiretroviral Treatment Services Successful supply management means that the required items are available for the patients who need them. Supplies are more likely to be available if you order them regularly and in the correct quantities. In general, the amount of supplies to be ordered should be based on the amount that is used or their past consumption.

Why is it important to know what supplies are needed at your health care facility?

It is important in order to:

- Avoid not having enough stock (out of stock items)
- Avoid having too much stock (overstocked items)
- Avoid waste (loss or mismanagement of supply)
- Be able to offer reliable health care services, including medicines, to your community.

1. Calculate the average monthly consumption of each item in your store. The monthly consumption of an item is the number of units that your health care facility uses during a month. Some months you may use more; some months you may use less. Therefore, the average monthly consumption is the quantity that is calculated to be consumed during a month.

- Look at a set of numbers: 1, 5, 6
- Count how many numbers there are in the set: 3 numbers
- Add the numbers in the set: $1 + 5 + 6 = 12$
- The answer (sum) is 12.
- Divide the sum (12) by the numbers in the set (3): $12 \div 3 = 4$



- The answer (4) is the average.

EXERCISE 1: Calculate the average of the following set of numbers: 7, 5, 0, 8 EXERCISE 2: Calculate the average of 5, 4, 5, 3, 3, 2, 1, 1, 2, 2, 3, 5

a. Count the number of units issued during a month. See the sample stock card below. The QUANTITY ISSUED column is circled. The number of units issued is the number of units consumed.

EXAMPLE: STOCK CARD ITEM: CODE NUMBER: UNIT + SIZE: PRICE: REORDER LEVEL: DATE RECEIVED FROM QUANTITY RECEIVED ISSUED TO QUANTITY ISSUED BALANCE IN STOCK REMARKS SIGNATURE

Count the number of units issued for as many months as you have records.

A 12-month count is adequate. After calculating the consumption for a few years, you will notice changes in use, for example, during different seasons of the year and epidemics. Counting for 24 or 36 months (2 or 3 years) gives a better picture of use. The number will vary from month to month due to variations in patient attendance and seasonal differences. Consumption depends on the demand for the item.

b. Add the number of units issued for each month counted. The sum is the amount of the item consumed at your health care facility during the months counted.

c. Divide the sum by the number of months counted. The answer is the average monthly consumption. It is the quantity usually consumed at your health care facility over the time period counted (for example, 3 months, 12 months, 24 months). If an average monthly consumption is any part (1/2, 3/4, etc.) of a whole number (1, 2, 3), round up to the next whole number (1/2, 3/4 becomes 1, and 2 becomes 3). Part of a unit, such as half of a tin of aspirin, cannot be ordered. Therefore, always count to the next whole number.

If you are keeping records for the first time, calculate the average monthly consumption after 3 months. Calculate again after 6 months. Calculate again after 12 months. Calculating the average monthly consumption does not work well if there are months when the item is not available (that is, not available at your health care facility or not available from the medical supplier). If this is your situation, calculate the average monthly consumption only during those months that the item was available.

2. Decide how often your health care facility receives deliveries. The delivery of supplies varies from place to place:



- A medical supplier, such as the district hospital or a central, regional or area medical store, may deliver supplies on a fixed schedule, such as monthly, 3-monthly or 6 monthly. This depends on the agreement with your medical supplier or the policies of specific programmes. Sometimes supplies may be delivered on different schedules from different services.

- Someone from your health care facility may regularly collect supplies from a medical supplier.

- Supplies may be delivered to you irregularly or as conditions allow, for example deliveries may be affected by weather conditions or transportation problems. A monthly or 3-monthly delivery or collection schedule is recommended as it is a reliable way to ensure supplies are available when they are needed. It is not recommended that supplies be delivered weekly, irregularly or only as conditions allow. If this happens at your health care facility, try to change to a monthly delivery schedule.

a. Note how often your health care facility receives supplies. This could be monthly, every 3 months or every 6 months.

b. Note what day your health care facility receives supplies. This could be the first day of every month or the last Monday of every 3 months, for example. Know your health care facility's schedule. This information is useful when you are organizing the work in your store.

3. Decide the reorder factor for your health care facility. The reorder factor is a number that will help you calculate how much of each item you need to order.

The following reorder factors are recommended (supply interval (month) x 2) for most first-level health care facilities. If you use these frequencies for your health care facility, you will reorder less often. You are likely to have the supplies in stock when you need them.

REORDER FACTOR

- The reorder factor is 2 if supplies are delivered once a month. ($1 \times 2 = 2$)
- The reorder factor is 6 if supplies are delivered every 3 months. ($3 \times 2 = 6$)
- The reorder factor is 12 if supplies are delivered every 6 months. ($6 \times 2 = 12$)

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES Decide the reorder factor for your health care facility. Base your number on when and how often your health care facility receives supplies, the number of patients served and amount of supplies that are available in your store.

4. Calculate the REORDER LEVEL for each item in your store. The REORDER LEVEL of an item tells you:

- When to reorder



- How much to reorder
- How much is used at your health care facility over a known period of time.

Use the appropriate reorder factor for your health care facility to calculate the REORDER LEVEL for all of the items in your store. This is important. Maintaining reorder levels guarantees that you will have enough of the items you need even if a scheduled delivery is missed.

EXAMPLE: CALCULATING THE REORDER LEVEL At the Taylor Clinic, supplies are delivered every month.

The reorder factor is 2.

The average monthly consumption of cotrimoxazole (sulfamethoxazole + trimethoprim 100+20 mg) paediatric tablets is 3 tins.

The reorder level of cotrimoxazole is 6 tins. $3 \times 2 = 6$ AVERAGE MONTHLY CONSUMPTION REORDER FACTOR REORDER LEVEL If supplies were delivered every 3 months, the reorder factor would be 6.

The reorder level of cotrimoxazole would be 18 tins. $3 \times 6 = 18$ AVERAGE MONTHLY CONSUMPTION REORDER FACTOR REORDER LEVEL a. Calculate the average monthly consumption of an item. b. Know the reorder factor for the delivery schedule at your facility. c. Multiply the item's average monthly consumption by the reorder factor. The answer is the REORDER LEVEL.

See the sample stock card below. The REORDER LEVEL is circled. Use a pencil to record the reorder number in this space. The level may change due to changes in demand or to the reorder factor of deliveries.

REMARKS SIGNATURE

If there is a change in average monthly consumption of an item, erase the REORDER LEVEL noted on the stock card. Calculate the new reorder level. Use a pencil to record the new number on the card. Make a note of the change in the REMARKS column. Remember to use the new number when determining how much to order.

5. Decide when and how much to order. It is important that you place an order based on the difference between the item's REORDER LEVEL and the amount of stock remaining in the store.

On the day of the month that your health care facility orders supplies, check the BALANCE IN STOCK of each item in your store against that item's REORDER LEVEL. Order any items with a BALANCE IN STOCK that is less than the REORDER LEVEL.

For regular ordering when supply needs are steady, ALWAYS order the number of units you



need to bring your stock up to the REORDER LEVEL. Use the following calculation:

REORDER LEVEL - (minus) BALANCE IN STOCK = amount to order.

a. Check the BALANCE IN STOCK recorded on the stock card for each item. Look at the stock card. Read how many units of the item you have in stock in the

BALANCE IN STOCK column. Check that it is the same as the number of units on the shelf.

b. Compare the BALANCE IN STOCK to the REORDER LEVEL. c. Decide if it is time to reorder. Decide how much to order.

- If the balance is less than the REORDER LEVEL, it is time to order the item. Place an

order for the difference between the REORDER LEVEL and the BALANCE IN STOCK amount of the item.

• If the balance is more than or equal to the REORDER LEVEL, it is NOT time to reorder that item. Do NOT order the item. This should not be common, as every order should bring the BALANCE IN STOCK back up to the REORDER LEVEL.

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES EXAMPLE:

DETERMINING WHEN AND HOW MUCH TO ORDER The REORDER

LEVEL of cotrimoxazole (sulfamethoxazole + trimethoprim, 100 mg + 20 mg) paediatric tablets is 20 tins.

WHEN TO ORDER: If there are 20 tins of cotrimoxazole in stock:

- Do NOT order at this time.
- The BALANCE IN STOCK is equal to the REORDER LEVEL. If there are 19 or less tins of cotrimoxazole in stock:

- Place an order at this time.

• The BALANCE IN STOCK is less than the REORDER LEVEL. If there are 21 or more tins of cotrimoxazole in stock:

- Do NOT order at this time. The BALANCE IN STOCK is more than the REORDER LEVEL. HOW MUCH

TO ORDER: For example: If there are 17 tins of cotrimoxazole in stock:

- The REORDER LEVEL of cotrimoxazole is 20.
 - The BALANCE IN STOCK is 17 tins. • Calculate $20 - 17 = 3$.
 - Place an order for 3 tins to bring the stock up to the REORDER LEVEL of 20.
6. Pay for supplies (if your health care facility pays for supplies). Know the price of each item in your store. Calculate the value of a unit's stock in the store and



the cost of the units to be ordered. This will show you the approximate differences in prices of similar items. For example, tablets may cost less than similar liquid preparations.

a. How to calculate the value of the stock in the store: Multiply the **BALANCE IN STOCK** by the current **PRICE** per unit.

EXAMPLE: CALCULATING THE VALUE The balance in stock of amoxicillin 250 mg tablets is 12 tins. The current price per tin is US\$25.55. The value of amoxicillin 250 mg stock is US\$306.60. $12 \text{ tins} \times \text{US\$}25.55 = \text{US\$}306.60$

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES b. How to calculate the cost of units to be ordered: Multiply the number of units to be ordered by the current **PRICE** per unit.

EXAMPLE: CALCULATING THE COST The health worker orders 10 tins of amoxicillin 250 mg tablets from the supplier. The current price per tin is US\$25.55. The cost of the order is US\$255.50. $10 \text{ tins} \times \text{US\$}25.55 = \text{US\$}255.50$ Check on the delivery note. When the price of an item changes, erase the old price and record

the new price on the stock card. Use a pencil as the price may change again. Follow the financial instructions provided by your supervisor or district coordinator on how to pay for supplies.

How to receive payment is summarized in Chapter 9.

IMPORTANT NOTE ABOUT ORDERING SUPPLIES FOR EMERGENCY SITUATIONS

If there is an epidemic, an emergency or seasonal disease, do **NOT** follow the procedures to order supplies based on past consumption. Plan for the emergency or new situation. Follow the instructions from your supervisor or district coordinator.

- For an epidemic or emergency, inform your supervisor or district coordinator. Determine your emergency needs based on anticipated monthly consumption. Estimate what emergency supplies you will need and place an urgent order. Make sure that you know where and how to get these supplies as quickly as possible.
- For a seasonal disease (such as malaria or diarrhoea), order enough of the appropriate supplies well in advance of when you think the disease season will begin. Determine the amount you order based on how much you used during the previous season, such as last year or last rainy season or drought.



In case of poor weather conditions, avoid delivery delays. Plan ahead. If the rainy season is approaching and roads will be flooded, the supplies will need to reach the health care facility before the rains begin. Order extra supplies or place an order earlier than planned. Determine the quantity to be ordered based on the estimated number of months to be covered.

7. Place an order for the supplies needed at your health care facility. Know your health care facility's system for ordering supplies. Your facility may have a fixed schedule (e.g. every Monday, the last Monday of each month) for ordering supplies. You may order irregularly, such as when an item falls below its reorder level. Whatever your system, follow the procedures below to place an order.

a. Make a written request for supplies. Ideally, your health care facility already has a requisition form. Your facility's form may be similar to the Monthly Report and Requisition Form in Annex 8, the Requisition and Issue Voucher in Annex 9, or the Requisition for Pharmaceutical Supplies Form in Annex 10. If your facility does not already have a requisition form, modify one of these examples to meet the needs of your health care facility.

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES A

requisition form is an easy way to list and request the supplies that your facility needs. It should be used by the person who orders the supplies AND by the supplier from the central, district or regional medical store who fills the order. It records the location of the health service; type of health care facility; monthly reporting period; and the movement of each item in the store. Every request should have a serial requisition number. The requisition number is for tracking orders with your supplier. Sometimes separate requisition forms are used for different programmes, such as special donor programmes. Often donors have their own administrative procedures. Be sure to complete all of the necessary forms for such services in order to receive the needed supplies for your health care facility.

b. Complete your health care facility's order information accurately. However you place your order, print clearly so that anyone can read it. Note the date of the order. Include the name and address of your supplier. Specify each item by name, including its strength and form, and unit size. Record the CODE NUMBER if the number is available in a medical supplier's catalogue or list. Request the amount needed. Determine the amount based on past consumption or, if ordering for a new or expanded service, on scale up conditions . Sign the form.

c. Send or deliver your order to your supplier. Answers to CALCULATING AN AVERAGE .



Count the numbers in the set: 4 numbers Add the numbers in the set: $7 + 5 + 0 + 8 = 20$ Divide the sum by the numbers in the set: $20 \div 4 = 5$ The answer is the average: 5 2.

Count the numbers in the set: 12 numbers Add: $5 + 4 + 5 + 3 + 3 + 2 + 1 + 1 + 2 + 2 + 3 + 5 = 36$ Divide the sum (36) by the numbers in the set (12): $36 \div 12 = 3$ The average is 3.

Self check- 4	Say true or false
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

- 1, Why is it important to know what supplies are needed at your health care facility is to Avoid not having enough stock (out of stock items)
- 2, Decide when and how much to order is necessary to monitor your stock
- 3, Determine your emergency needs based on anticipated monthly consumption
- 4, Consumption is not depends on the demand for the item.

Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____
Rating: _____

Name: _____ **Date:** _____

Answer

- 1,
- 2,
- 3,



4,

Information sheet 5	Replenishing stored and stationary items
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How to keep records of supplies It is important to keep good records of all of the medicines and related supplies you have in stock. This helps you to understand the flow of supplies into and out of your health care facility.

You will also know:

- What items are available in stock
- How much is available of each item in stock
- How much stock is used on a regular basis
- When and how much of an item should be reordered.

Keeping records serves as the basis for the information needed when ordering new stocks of medicines and other supplies. This is especially important for chronic care programme that will continue to enrol new patients, such as chronic HIV care and ART for HIV and AIDS patients. Keeping records saves you time and protects you. If you are accused of theft or misuse of



supplies, you will be able to refer to your records. Your records will document the movement of supplies. They can show that you are not responsible for the problem. There are different ways of keeping records. The procedures recommended in this chapter are based on the use of a standard stock card format. Your health care facility or programme may have its own stock card format. Stock cards can be made or modified to fit any type of recordkeeping system.

SPECIAL DONOR REQUIREMENTS

Donors may have special donor requirements for medicines and related supplies that they give to health facilities. Know the requirements before you accept such donations. Some examples of special donor requirements may include:

- Restricting those to whom the donated treatment can be supplied (e.g. nevirapine donation for Preventing Mother to Child Transmission only).
- Limiting which health care facility staff can prescribe the donated items to patients (e.g. only physicians allowed to write prescriptions for antiretroviral medicines).

If your facility accepts such donations, make sure your team knows if there are special donor requirements, what they are and how they apply to the management of medicines and related supplies in your store.

KEEPING RECORDS

For special recording and reporting requirements, it is likely that you will keep the donor's items separate from the same items that your facility received from the central store or other regular suppliers. In such cases:

- You will also have to keep separate stock records.
- Be sure you know how to do this and have the required forms available as soon as the donor's shipment of supplies arrives. For a quick reference on record and the Stock

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES

The stock card
There should be a stock card for each item in your store. Keep the stock card with the item on the shelf. Use the stock card to track the movement of the item. Record when and how the item is used. This includes all movements, such as when a new shipment of an item arrives at the store, when an item is moved out of the store room to the dispensary, or when an item is dispensed directly to a patient. If your



health care facility receives supplies from donors, there may be special requirements. Follow the instructions you have received from your supervisor or district coordinator.

See the example of a stock card below. The top of the stock card lists:

- Item, name of product including its form and strength
- Code number, number that identifies the item, if there is one
- Unit + size, type of container: tin, bottle, tube, blister package, etc. + amount of item in the container
- Price, per unit cost, if this information is collected at your health care facility
- Reorder level, number of units needed in stock, below which an order should be placed to reach this level once again (threshold level for re-ordering).
- Name and address of your facility, if needed.

There may be an item in your store that has different forms, strengths or unit sizes.

Examples of differences are:

- Forms: a medicine can be in tablet, liquid or ointment form
- Strengths: e.g. amoxicillin can be in 250 mg tablets or 500 mg tablets
- Unit sizes: a tin of tablets can contain 50, 100, 500 or more tablets.

If you have an item in your store with more than one form, strength or unit size, use a separate stock card for each one. Do NOT use the same card for different forms, strengths or unit sizes of an item.

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES The stock card also has columns for information about movement of the item:

- DATE, when item is received into the store or issued out of the store
- RECEIVED FROM, name of supplier
- QUANTITY RECEIVED, number of units received at the store
- ISSUED TO, name of dispensing area where item will be dispensed to patients
- QUANTITY ISSUED, number of units issued out of the store
- BALANCE IN STOCK, number of units remaining in the store
- REMARKS, important information about the movement of the item, batch numbers, expiry dates, borrowed from or returned to other health facility etc.
- SIGNATURE, person who records the movement of the item.

When you record information on stock card:



- Use a pen to record ITEM, CODE NUMBER, and UNIT + SIZE and all information about the movement of the item. This information does not change.
- Use a pencil for the PRICE and REORDER LEVEL. This information may change. (REORDER LEVEL is discussed in the next chapter, How to Order Supplies).
- Use a different coloured pen (e.g. red) only for inventory control.

The information that you collect in the issued to and quantity issued columns records how much of the item is used on a bulk level. If you also use the stock card in the dispensary, the information that you collect records how many single units of the item, such as tablets, are given to patients over a given amount of time, such as daily, weekly, monthly, etc.

The information that you collect in the balance in stock column helps you to determine when it is time to order more and how much to order.

In the REMARKS column, record information about the stock:

- In the first line, record the words "balance brought forward" if this is a replacement stock card or "new stock" if this is the first time you are keeping this item in your store.
- For new or reordered stock, record the order requisition number, expiry date and price, if necessary.
- For expired, poor quality or overstocked items, record information about the removal of the items.
- Record any other information that is important to the management of medicines and related supplies at your health care facility.

Record every time you receive or issue an item. Record only one movement (that is, one receipt or one issue) per line. Record at the time of movement. See the examples on the stock card below.

To keep accurate stock records Follow the procedures below to record the movement of items in and out of your health care facility's store.

A. Make a stock card for each item in your store. This includes medicines, vaccines, diagnostic kits and related supplies. Remember that there may be more than one card needed for the same item. Donors may require that you keep their items separate from the stock received from central stores or other suppliers. You will need a separate stock card. This practice helps you to report back to donors on the exact use of the



medicines they donated, if needed.

B.. Keep the stock card with the item on the shelf. Attach the card to the front of the shelf near the label of the item or place the card with the containers of the item on the shelf.

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES 3. Record on the stock card every time you receive or issue

an item. Use a pen. This information does not change. Record at the time of movement, NOT at the end of the clinic session, the day, the week or the month.

a. Record all items when you receive them. When you receive an item, put it in its place on the shelves. Record its movement on its stock card.

1. Record the DATE of receipt.
2. Record where the item was RECEIVED FROM.
3. Record the QUANTITY RECEIVED in units.
4. Add the QUANTITY RECEIVED to the previous BALANCE IN STOCK.

EXAMPLE: On 6 December, there is 1 tin of amoxicillin 250 mg tablets in stock. The health worker receives 12 tins. The new BALANCE IN STOCK is 13 tins of amoxicillin 250 mg tablets. $1 \text{ tin} + 12 \text{ tins} = 13 \text{ tins}$

- Record the new BALANCE IN STOCK.
- Record the requisition number of the order and the expiry date of the item in the
- REMARKS column.

b. Record an item when it is issued out of the store. When an item goes out of the store, it should be a whole unit. Do NOT issue partial units.

1. Record the DATE of issue.
2. Record where the item was ISSUED TO.
3. Record the QUANTITY ISSUED in units.
4. Subtract the QUANTITY ISSUED from the previous BALANCE IN STOCK.

EXAMPLE: On 20 December, there are 13 tins of amoxicillin 250 mg tablets in stock. The health worker finds 1 tin of amoxicillin that has expired. She sends (issues) the tin back to the medical supplier. The new BALANCE IN STOCK is 12 tins of amoxicillin 250 mg tablets. $13 \text{ tins} - 1 \text{ tin}$

$= 12 \text{ tins}$



Record the new BALANCE IN STOCK.

6. Record any significant information about the movement of the item in the REMARKS column.

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES 4. Always keep an accurate running tally of the number of units in the BALANCE IN STOCK column. You may have partial units remaining at the end of the clinic session. If so, do NOT put them back into the store. Lock them in the dispensary until the next session. Make sure that the balance in stock number on the stock card is the same as the number of containers of the item in the store. Count your stock at regular intervals, such as once a month. Count the number of containers of each item in your pharmacy store regularly. This is called a physical count or physical inventory. A physical count checks that the amount actually in the store equals the BALANCE IN STOCK number on the stock card. When checking your inventory, make sure that each item you are counting has the same generic name, form, strength and unit size. Physical counts are particularly important for expensive medicines, like ARVs, antibiotics and other medicines at high risk of theft, such as narcotics. Make a physical count of each item at least once a month.

- a. Review the information on the top of the stock card. Check that the information is current and correct.
- b. Make a physical count of an item.
 1. Draw a double line after the last entry on the card. You may use a different colour (red) for this and the following entries on the card.
 2. Record the DATE of the count. Write the words "physical count" across the columns.
 3. Count the actual number of units (e.g., tins) of the item. The number of units that you count is the physical count.
 4. Record the physical count number in the BALANCE IN STOCK column. If the physical count and the previous balance are not the same, write "discrepancy" and note how many are missing in the REMARKS column.
 5. Draw double lines before and after the physical count information. The double lines highlight the physical count information as shown in the example below.



Physical Count 5 PG

Investigate any discrepancies in the information on the stock card. If the physical count and the previous balance are not the same, INVESTIGATE. There may be more items or fewer items on the shelf than noted on the stock card. Someone may have forgotten to record a movement on the stock card. Check who was on duty. Check who had access to keys. Watch for any unusual or suspicious activity over the next few days. If a stock card is missing, INVESTIGATE. Make a new stock card. Note that it is a replacement card in the REMARKS column. If you find the old stock card, copy the information from the replacement card to the old one. Then, destroy the replacement card. Keep completed stock cards for two to five years or as instructed by your supervisor or district coordinator. Stock cards contain useful information about the medicines and related supplies used at your health care facility. They give you an idea of how to prepare for changes in stock that may be due to seasonal factors, epidemics or other such causes.

HANDBOOK OF SUPPLY MANAGEMENT AT FIRSTLEVEL HEALTH CARE FACILITIES Stock cards are essential to manage supplies correctly. You will refer to the information recorded on the cards as you manage medicines and related supplies in your health care facility. Display the stock card checklist in your store to inform staff members how to keep records. Encourage staff to follow the procedures or follow the instructions of your supervisor or district



Self check- 5	Multiple choice
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

- 1, Which one of the following is not correct about supplies into and out of your health care facility.
 - A. What items are available in stock
 - B. How much is available of each item in stock
 - C. How much stock is used on a regular basis
 - D. When and how much of an item should be reordered.
 - E. Non of the above

- 2, Which one of the following is correct about Keeping Records
 - A. You will also have to keep separate stock records.
 - B. Be sure you know how to do this and have the required forms available as soon as the donor's shipment of supplies arrives.



- C. A& B are correct
- D. None of the above

3, What should be included during Record an item when it is issued out of the store.

- A. Record the DATE of issue.
- B. Record where the item was ISSUED TO.
- C. Record the QUANTITY ISSUED in units.
- D. All of the above

Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ **Date:** _____

Answer

- 1,
- 2,
- 3,



Information sheet -6	Rotating perishable stocks
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1.6. Rotating perishable stocks

What Is Stock Rotation?

Stock rotation is the process of organizing inventory to mitigate stock loss caused by expiration or obsolescence. Basic stock rotation entails moving products with impending sell-by dates to the front of the shelf and moving products with later expiration dates to the back.

FUN FACT: Infamous mobster Al Capone's brother, Ralph Capone, has been [credited](#) with inventing expiration date labels for milk back in the 1930's.

Depending on the size of the store, the job of stock rotation can fall on anyone from inventory managers and hired stock associates to managers and sales associates. Brand reps should also always check their product when they make site visits and rotate any stock if need be. Stock loss is part of working with perishable goods, but if it happens too often, it could be because of poor stock rotation or improper ordering.



If you're a retailer, your stock rotation policies are a very important component to how you stock your shelves, organize your store, and reduce losses. If you're a merchandiser or brand, you need to know the standard policies of your retailers and educate them on the stock rotation policy that best fits your product(s).

The Methods

FIFO



First in, first out (FIFO) is the preferred method of stock control for most retailers, especially in the food and beverage space. When new stock comes in, it gets put in the back, pushing the older stock forward to be sold first. While this may seem like a no-brainer and saves retailers thousands of dollars in lost product, not every store takes the time to do it.

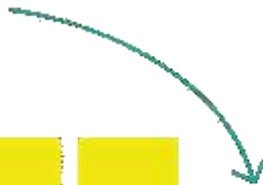


FEFO



First expired, first out (FEFO) takes into account that what retailers receive from the warehouse may not necessarily be the freshest product. Instead of defaulting to putting the newest incoming stock in the back, the expiration dates are checked. The freshest product goes in back and the oldest product goes in front. This technique takes more time to execute, but is worth it for perishable products with short-term shelf lives. If any accidental mixing has occurred, either by an associate or a customer, FEFO also helps catch

LIFO





Last in, first out (LIFO) is not used as commonly in stores, but is still worth noting. LIFO is more often used with heavier, fast-moving, non-perishable or homogeneous goods in warehouses, when rotating items is not essential, practical or time-efficient.

The benefits of LIFO are mostly associated with accounting because retailers end up matching the most recent cost against their revenue. If your costs are rising, this process makes for more accurate forecasting than using older pricing, and better forecasting = better reporting = less taxes.

Stock Dating Standards

Stock dating is an important factor in stock rotation. The FDA [doesn't actually require](#) expiration dates on food, except baby formula. The USDA has non-binding guidelines that [suggest](#) the use of “Best if Used By” language.

Due to the lack of uniform regulations, most states have implemented their own laws for dating with varying strictness. There is no broadly accepted industry standard for labeling among perishable foods, which leads to a lot of waste, mislabeling and consumer miseducation. Because of this, a lot of the language and usage for date labeling are added on the discretion of manufacturers and retailers.

Check out the interactive infographic below, which includes a sample from the 41 states that currently require some foods and perishables to have labels. A few have standards for all perishable goods, but most only cover goods such as milk, shellfish and eggs. Some are more clear, others are more ambiguous (*cough* Alabama).

State Labeling Law

[The Grocery Manufacturers Association](#) and the [Food Marketing Institute](#) are trying to change this. These two grocery industry leaders are spearheading an initiative to streamline product date labels in an effort to reduce waste and consumer confusion. [They're proposing](#) the use of just two standard phrases: “BEST If Used By” and “USE By”, which follows the USDA’s suggested language.

“BEST If Used By” describes product quality, where the product may not taste or perform as expected but is safe to use or to consume.



“USE By” applies to the few products that are highly perishable and/or have a food safety concern over time; these products should be consumed by the date listed on the package-- and disposed of after that date.

BRAND TIP: if you’re going to change a product’s dating guidelines, you might as well run through the whole [essential checklist](#) for product labels to make sure there isn’t anything else you want to update.



Source

Stock Loss Mitigation

Even if a retailer has done the best it can to rotate stock and manage incoming product, sometimes expiration dates creep up anyway. Selling the product with a lower profit margin is better than a full loss



plus the cost of disposal. In order to prevent the product from going bad on the shelf, retailers can put the product on sale and implement the following tactics to get it moving:

- Include the product in a printed daily or e-daily
- Sample the product to get more customers interested
- List the product on chalkboard easels and boards in front of and/or throughout the store
- Move the product to an end cap to get more traffic and eyes on the product
- Place the product on an attractive POP display

Stock rotation is a crucial component of stock management. Even if it isn't directly under your job description, it is still important to be educated on what else goes on in product's life from manufacturer to shopping cart. You're ahead of the curve by taking the time to go through this stock rotation refresher. Keep it up. Now, go forth and rock your retail goals this week!



Self check- 6	Short Answer
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

- 1, Explain FIFO ,FEFO and LIFO
- 2, What does it mean Stock Loss Mitigation



Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____
Rating: _____

Name: _____ **Date:** _____

Answer

- 1,
- 2,



Information sheet -7	Recording and reporting deviations
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1.7. Recording and reporting deviations

Notes and information about reporting

All complaints or reports concerning posted content should **not** be sent as a ticket to the DeviantArt customer service area. Our moderation system is specifically designed to review and address problem content in the most efficient manner possible.

The one exception to this procedure, detailed below, concerns photographic submissions where you are featured as a subject but you have not previously authorized the publication of the photograph.

With the exception of copyright infringement (DMCA) takedown notices, your report will be kept completely anonymous. Only members of our staff will have access to the full details of your report and the person that you report will not receive your name or any information which could be used to identify you.

All reports which you file, with the exception of DMCA takedown notices, which enter a special high-priority area, enter a general queue within the Moderation System, where they will be reviewed in a particular order of priority by a member of the DeviantArt administration.

Due to volume and complexity of reports, combined with a prioritization system, we cannot provide any estimate regarding how long your report may wait before it is reviewed.

To learn more about DMCA takedown notices, please consult the [DeviantArt Copyright Policy](#).

Model Releases

If you are a model whose likeness has been posted without a proper release:

We will gladly assist you in addressing the unauthorized posting of your image or likeness. In order to take action, staff will need you, as the person whose name or likeness was posted or used without permission, to provide some specific information and statements. This should be done by contacting us directly at our [customer service area](#).

Please bear in mind that, since this is essentially a privacy-based complaint, staff can only take action on content in which you personally are recognizably featured.

Once staff have all of the required information and statements, the content will be removed from public view and set a thirty (30) day deadline for the member to provide a valid model release form signed by you.

If such a form is not provided within the time frame allowed, the content will be deleted from the profile and then deleted entirely from our servers thirty (30) days afterward.



DEFINITIONS Deviation Any change, divergence, or departure from the approved study design or procedures of a research protocol that is under the investigator's control and that has not been approved by the IRB, and does not affect the participant's safety, rights, or welfare and/or the completeness, accuracy and integrity of the study data. This term, though sometimes used interchangeably with the term "violation," is (i) most often used when the variance is intended for the safety of one or more research participants or is an unintended change that is not considered as serious as a violation, (ii) is considered minor or administrative, and (iii) may involve no more than minimal risk to participants or others. Non compliance : Failure to comply with federal regulations, state laws, institutional policies, requirements or determinations of the IRB, and/ or provisions of the approved research study. It is not considered noncompliance when there is a need to deviate from the approved protocol in order to protect the welfare of research participants. Protocol Violation: Any deviation that may affect the subject's rights, safety, or welfare, and/or the completeness, accuracy and integrity of the study data. This term though sometimes used interchangeably with "deviation" is often considered a major, more serious, variance from an approved protocol than a deviation. Serious Noncompliance: Failure to comply with federal regulations, state laws, institutional policies, requirements or determinations of the IRB, and/ or provisions of the approved research study, where the occurrence involves substantive potential or actual increased risk to the safety, rights and welfare of each subjects.

CONCEPTUALIZING SERIOUS OR CONTINUING NONCOMPLIANCE

Non Compliance Continuing Noncompliance is repeated occurrences of noncompliance by the same investigator or by the Institution. Repetition may be of the same occurrence or different occurrences . This repetition may be in the same or in different protocols by a single investigator. Such repetition if unaddressed may affect the protection of human research subjects. For the institution, repetition may be of the same or different policies, procedures, regulations and/or laws.

Serious Noncompliance occurs when instances pose an actual or potential increased risk to the safety, rights and welfare of human research subjects because investigators fail to comply with federal regulations, state laws, SJH policies related to the protection of human subjects, and/or the requirements or determinations of the IRB; or because there is a systemic failure of the

institution to follow or implement practices described in the SJH policies and/or federal regulations or state laws related to the protection of human subjects in research. The diagrams below provide a schematic of how to conceptualize Serious or Continuing Non-Compliance:

PROCEDURES

The Principal Investigator (PI) must report Protocol Violations and Deviations to the IRB as outlined below. Protocol Violations A Protocol Violation is a deviation that may affect the subject's rights, safety, or welfare, and/or the completeness, accuracy and integrity of the study data. This term though sometimes used interchangeably with "deviation" is often considered a major , more serious, variance from an approved protocol than a deviation. Protocol Violations may be considered serious noncompliance and are to be reported to the IRB within 5 business days on the Protocol Violation Report. The investigator must develop a corrective action plan to present to the IRB for review and approval. This corrective action plan will outline what steps the investigator has taken or will take to resolve the event and to prevent such events from occurring in the future. Examples of violations include, but are not limited to the following:



- Intentional deviation from the protocol or regulations in a non-emergency setting
 - any unintended or intended deviation from the IRB approved protocol that involves potential risks or has the potential to recur;
 - enrollment of subjects not meeting the inclusion/exclusion criteria of an IRB approved protocol;
 - failure to withdraw a subject meeting withdrawal criteria;
 - inadvertent loss of samples or data;
 - failure to obtain informed consent prior to initiation of study-related procedures;
 - improper consent procedure;
 - failure to follow federal and/or local regulations and policies;
 - working under an expired professional license / certification debarred or disqualified status
 - frequent minor deviations;
 - any medication error involving dosing, administration and/or preparation of the study drugs;
 - any lapse in study approval where there is a continuation of research activities (i.e. recruitment, enrollment, procedures, data analysis);
 - failure to report unanticipated problems to the IRB and/or the sponsor; or
 - any event that requires prompt reporting according to the protocol or the study sponsor.
- Deviations A Deviation is considered a minor administrative divergence from approved design and procedures when the deviation does not affect the subject's rights, safety, or welfare, and/or the completeness, accuracy and integrity of the study data. If a deviation occurs and meets this definition, then the deviation should be reported to the IRB on the Deviation Summary Log and submitted at the time of continuing review. At the time of continuing review, the Deviation Log will be reviewed to determine if continuing noncompliance has occurred. Examples of deviations include, but are not limited to the following:
- any emergent deviation from the IRB protocol made without prior IRB review to eliminate apparent immediate hazard to a research subject;
 - implementation of unapproved recruitment procedures
 - ;
 - use of an incorrect informed consent version
 - ;
 - Missing original signed and dated consent form or missing pages from executed consent form;
 - Inappropriate documentation of consent, including: Missing signatures of Individual obtaining consent not listed on IRB approved application;
 - Subject visit/procedure falls outside of the window of time indicated by the protocol, or is not done per protocol, and there is no increased potential for risk to the subject or any damage to the integrity or completeness of the data.
- NOTE: Deviations that are not under the investigator's control (i.e. deviations under patient's control), are not reportable on the Deviation Summary Log



Self check- 7	Say true or false
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

1, All complaints or reports concerning posted content should **not** be sent as a ticket to the DeviantArt customer service area

2, Due to volume and complexity of reports, combined with a prioritization system, we cannot provide any estimate regarding how long your report may wait before it is reviewed



Note: Satisfactory rating - 3 points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____
Rating: _____

Name: _____ **Date:** _____

Answer

- 1,
- 2,



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Management of drugs at health center level: training manual. Brazzaville, WHO AFRO.



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