

Module 10: Inventory – Managing Stocks at the HIV Rapid Testing Site

Purpose	To equip the participants with necessary knowledge so they can properly manage the stocks at the rapid testing sites.
Pre-requisite Modules	<ul style="list-style-type: none"> Module 5: Assuring the Quality of HIV Rapid Testing
Module Time	1 hour
Learning Objectives	<p>At the end of this module, participants will be able to:</p> <ul style="list-style-type: none"> Maintain proper records Maintain proper level of consumables Use first-expiry-first-out concept when managing stocks Inspect delivery of supplies before acceptance Identify lot numbers and expiry dates Keep kits and supplies in proper storage



Module Overview

Step	Time	Activity/ Method	Content	Resources Needed
1	5 min	Presentation	Module introduction	Slides 1-4 Prepared flipchart – content outline
2	10 min	Presentation Discussion	Overview of stock management	Slides 5-10 Flipchart
3	10 min	Presentation	Inventory records	Slides 11-15 Sample stock card & stock book (in participant manual)
4	20 min	Presentation Exercises	Re-ordering	Slides 16-22
5	8 min	Presentation Activity	Receiving and storage	Slides 23-25 Sets of test kits
6	7 min	Q&A	Summary & key messages	Slides 26-27


Material/Equipment Checklists:

- PowerPoint slides or transparencies
- Overhead projector or computer w/LCD projector
- Flipchart for content outline
- Multiple sets of the three in-country test kits (used in exercise for participants to examine lot numbers and expiry dates)
- Handouts:
 - Sample stock card
 - Sample stock book

Teaching Guide

Slide Number	Teaching Points
1	<p><u>Module 10: Inventory Management</u></p> <p>DISPLAY this slide before you begin the module. Make sure participants are aware of the transition into a new module.</p>
2	<p><u>The Lab Quality System</u></p> <p>REMIND participants that inventory is a component of the Lab Quality System.</p>
3	<p><u>Learning Objectives</u></p> <p>STATE the objectives on the slide.</p>
4	<p><u>Content Overview</u></p> <p>EXPLAIN the topics that will be covered in this module.</p>
<p>Flipchart</p> 	<p>WRITE the content outline on a flipchart prior to training.</p> <p>REFER to it frequently to orient participants to where they are in the module.</p>
5	<p><u>Stock Management Means...</u></p> <p>STATE the definition on the slide.</p>
 <p>Customization Notes</p> <p>6</p>	<p>Insert photo of local stockroom</p>
6	<p><u>Stock at a Rapid Test Site Includes...</u></p> <p>EXPLAIN the two types of inventory kept at a HIV rapid test site.</p> <p>ASK participants to name all kits and supplies.</p>



Slide Number	Teaching Points
7	<p><u>Stock Management Leads to High Quality Testing</u></p> <p>EXPLAIN the importance of stock management at a rapid testing site.</p> <ul style="list-style-type: none"> • The provision of a smooth and continuous rapid HIV testing service to clients at PMTCT and VCT sites largely depends on the availability of the kits and other consumables at all times. • Sufficient kits and supplies must be ordered and present at the site well in advance before a new site starts testing. • It is important not to over-stock or under-stock supplies at a rapid testing site. <p>EMPHASIZE the potential loss of service to client if no kits are available at site</p>
	<p>EXPLAIN the negative effects associated with under-stocking.</p> <ul style="list-style-type: none"> • When testing clients, all supplies need to be on hand immediately. Poor planning in the ordering system will result in insufficient supplies mid-flow of testing clients. This in turn will result in a stopping of testing. • The entire testing system at the site could be seriously compromised until further supplies are present at the site. Sites that are severely lacking in supplies could result in closure of that site until supplies arrive.
	<p>EXPLAIN the negative effects associated with over-stocking.</p> <ul style="list-style-type: none"> • Properly managing your stocks will allow for only having an adequate number of supplies on hand. • Overstocking can lead to waste and potential for kits expiring before use, leading to compromised test results. • A reminder: NEVER USE EXPIRED KITS!
	<p>SHARE personal examples or stories:</p> <ul style="list-style-type: none"> • Consequences of running out of supplies (e.g. if there are no lancets at the site, then the patients finger cannot be pricked, and so no testing can take place.) • Consequences of over-stocking supplies (waste, expired kits used by mistake, etc.)


Slide Number	Teaching Points
 <p>Customization Notes 8</p>	<p>If the scenario presented on the slide is not familiar to the participants, modify the scenario (e.g., a different type of business or shop) that they can relate to better.</p>
<p>8</p>	<p><u>How Do You Manage Stock?</u></p> <p>PRESENT the scenario to participants.</p> <p>FACILITATE a discussion by asking, “As a store owner, what must you do to maintain adequate stocks?”</p> <p>NOTE participants’ responses on a flipchart.</p> <p>HIGHLIGHT the point that shop owners must always know the following:</p> <ul style="list-style-type: none"> • What and how much stock they have • When they need to replenish their stocks • The amount of merchandise to order • When, what, and how much stock has been ordered • Where everything is stored • When and how much fresh stock has been received, and by whom
<p>9</p>	<p><u>Stock Management Involves Knowing...</u></p> <p>DEFINE stock management in the context of HIV rapid testing, drawing analogy from the sundry shop scenario.</p> <p>EXPLAIN that proper stock management means that a site supervisor will always know:</p> <ul style="list-style-type: none"> • What stocks and how much is present at the site at any given time • When to order fresh supplies – and know approximately how long it takes to deliver • How much has been ordered and when was it ordered. • When fresh supplies were received at the site – who received the supplies, what date and how much. • Where all individual supplies are stored <p>STATE To know everything mentioned above, one must have a stock management plan.</p>

Slide Number	Teaching Points
10	<p><u>Stock Management Involves...</u></p> <ul style="list-style-type: none"> • Performing regular stock counts • Maintaining proper inventory records • Determining when to re-order • Re-ordering proper amount of supplies • Placing orders promptly • Inspecting and logging in new stock when received • Ensuring proper storage of inventory <p>INFORM participants that each of the above will be explained in the rest of the module.</p>
11	<p><u>Perform a “Stock Count”</u></p> <p>STATE in order to know exactly what and how much stock you have, the best way is to perform a stock count.</p> <p>EXPLAIN the key points on the slide.</p> <p>FACILITATE a discussion by asking the following questions:</p> <ul style="list-style-type: none"> • Why it is important to account for each and every item in the inventory? • What do you need to do in order to account for every item in the inventory? <p>DISCUSS the risk of theft – its impact on the site and individual.</p>

Slide Number	Teaching Points
12	<p data-bbox="553 275 1013 306"><u>Maintain Proper Inventory Records</u></p> <p data-bbox="553 323 1289 386">EXPLAIN that an efficient stock management depends upon accurate record keeping. Keeping records will:</p> <ul style="list-style-type: none"> <li data-bbox="599 407 1330 533">▪ Save you time – you should know the quantity in stock without counting. Allows easy handover of the “store” to your colleague if you are not at work. Allows you to observe the pattern of consumption <li data-bbox="599 554 1330 638">▪ Protects you – You are protected against accusations of theft. You can also keep track of deliveries when they arrive, in case of disputes. <li data-bbox="599 659 1167 690">▪ Prevents over-stocking and under-stocking <li data-bbox="599 711 1330 774">▪ Allows for estimation of supplies for a year for budgeting purposes <p data-bbox="553 842 1312 905">EXPLAIN all of the above points are accomplished by keeping two types of records for inventory control.</p> <ul style="list-style-type: none"> <li data-bbox="599 926 1330 1199">• Stock card <ul style="list-style-type: none"> <li data-bbox="690 978 1308 1010">○ Each item in stock must be recorded on a card. <li data-bbox="690 1031 1281 1083">○ This card can simply be a heavyweight index card. <li data-bbox="690 1104 1330 1199">○ For ease of use and access, the cards should be stored in alphabetical order according to the item name. <li data-bbox="599 1220 1330 1671">• Stock book <ul style="list-style-type: none"> <li data-bbox="690 1272 1300 1325">○ The stock book contains a listing of all items in the “store”. <li data-bbox="690 1346 1281 1409">○ It must be routinely updated when orders are placed and received. <li data-bbox="690 1430 1308 1493">○ It also serves as a source of reference to track orders that have been placed and not received. <li data-bbox="690 1514 1330 1671">○ The information recorded in the stock book may help a site adjust the lead times based on history of deliveries. Using an accurate lead time will better ensure that a site has on hand the materials needed to conduct HIV rapid testing.

Slide Number	Teaching Points
13	<p><u>Stock Card: An Example</u></p> <p>REITERATE that each item used in the laboratory should be recorded on a stock card.</p> <p>EXPLAIN how to complete a sample stock card using Determine as an example.</p> <ul style="list-style-type: none"> • Item Name – “Determine” • Unit – The number per box or container, e.g., 100 tests per kit • Minimum Stock is calculated based on the usage rates (to be explained later) • Received from and issued to – <i>This is country specific</i> • Balance – must be recorded each time a stock item is received or issued. <p>EMPHASIZE that a physical stock count should be performed monthly, with this total indicated on the form. Any discrepancies should be noted and investigated</p> <p>REFER participants to their manual for examples of completed stock cards. Answer any questions they may have about the stock card examples.</p>
14	<p><u>Stock Book: An Example</u></p> <p>EXPLAIN how to complete a sample stock book.</p> <p>REFER participants to their manual for examples of a completed form in a stock book. Answer any questions they may have about the examples.</p>
15	<p><u>Reconciling Stock with Records</u></p> <p>EMPHASIZE the importance of establishing an accounting system that tracks items that come in, items that are used, and items that are remaining in the stock.</p> <ul style="list-style-type: none"> ▪ Ideally, the number of a certain item remaining in the stock should equal the number of the item that came in minus the number used. ▪ But in reality, there is usually a discrepancy due to loss. <p>DISCUSS possible causes for the loss and ways to minimize loss.</p>
16	<p><u>Determine When to Re-order</u></p> <p>REVIEW the definition of the terms on the slide.</p>

Slide Number	Teaching Points
 TIPS	Refer participants back to their earlier discussion of the sundry shop owner (slide #8). It is likely that they have discussed these concepts without using the exact terminology. It helps them understand these terms if they have real examples to relate to.
 Customization Notes 17-18	If an in-country maximum lead time has been established, replace the number on the slides (12 weeks) with the in-country time.
17	<u>Calculating Minimum Stock Level</u> EXPLAIN the formula and example on the slide.
18 Exercise 3 minutes	<u>Exercise: Calculating Minimum Stock Level</u> ASK participants to work out the answer (1 minute). ASK a volunteer to provide the answer. WRITE the solutions on the flipchart to ensure understanding from all participants. (Answer: 60)
19	<u>Determine How Much to Re-order</u> EXPLAIN the points on the slide. INFORM participants that the next two slides provide an example and practice.
20	<u>Determine Full Stock Level</u> EXPLAIN the concept of “full stock level.” PROVIDE analogies or examples that participants can relate to (such as the sundry shop, amount of maize meal at home). DISCUSS the consequences of a stock level that is too high (too much in stock) and too low (too little in the stock). EXPLAIN the example on the slide.

Slide Number	Teaching Points
21 Exercise 5 minutes	<p><u>Exercise: Determine Full Stock Level</u></p> <p>ASK participants to work out the answers (3 minutes).</p> <p>ASK volunteers to provide the answers.</p> <p>WRITE the solutions on the flipchart to ensure understanding from all participants.</p> <p>(ANSWER:</p> <p><i>Maximum Usage = 320 tests/month</i></p> <p><i>320/15= 21.3 kits → rounded up to 22 kits/month</i></p> <p><i>Minimum stock level = 22X3 = 66 kits</i></p> <p><i>Full stock level = 66 + 22 = 88 kits)</i></p>
 Customization Notes 22	<p>If the in-country requisition (re-order) process has been established, provide that information here.</p> <p>If sites are responsible for direct purchasing, specifications should be clearly outlined.</p>
22	<p><u>Place Orders Properly</u></p> <p>REMIND participants of the importance of not to either over-stock or under-stock.</p>

Slide Number	Teaching Points
23	<p><u>Inspect Delivery of New Orders</u></p> <p>EXPLAIN the points on the slides.</p> <ul style="list-style-type: none"> • Check to ensure what has been ordered was delivered. For example, if 100 Uni-Gold kits have been ordered, check to make sure 100 kits have been delivered. • Inspect condition of supplies. Check that supplies received are in good order. Never accept kits that are either short-dated or that have already expired. Short-dated means items that will expire before they can be used. • Not only do you date each item when received, but date each item, particularly the buffers, when opened or put to use. <p>DISCUSS :</p> <ul style="list-style-type: none"> • What to do if your order doesn't arrive • What to do if you receive a partial order • What to do if a box has been opened or is damaged • What paperwork must be completed to report discrepancies in what you ordered and what you received • What to do if central stores is out of stock
24	<p><u>Examine Lot Number & Expiry Date</u></p> <p>STATE that it is important to note the expiry dates of the kits received.</p> <ul style="list-style-type: none"> • Properly managing your stocks will prevent storage of kits that will be outdated before they can be used. • DO NOT mix lot numbers. Keep devices and corresponding buffers together. <p>DISCUSS:</p> <ul style="list-style-type: none"> • What to do with if you receive and accept short-dated stock. • The mechanism for transfer of stock from site-to-site

Slide Number	Teaching Points
Activity 5 minutes	DISTRIBUTE the test kits for participants to examine their lot numbers and expiry dates. ANSWER any questions participants may have.
25	<p><u>Ensure Proper Storage of Inventory</u></p> <p>EXPLAIN the points on the slide:</p> <ul style="list-style-type: none"> • Kits and supplies should be kept in locked storeroom or cupboard. Theft of kits is common, and following strict inventory procedures will immediately identify problem areas. • Store according to manufacturer's instructions. Adhere to the storage temps required by the manufacturer. Some kits can be stored at room temperature, while others require refrigerated temps of 2-8 degrees centigrade. • Place in well ventilated clean and tidy room • Store away from direct sunlight • Place items on shelves – Where possible, items should be stored in an orderly fashion on shelves, keeping like items together. • Always place new shipments of supplies and kits behind existing ones. This will re-enforce the principle of first expiry, first out. General supplies without expiration date should be stored according to first in, first out principle.
	<p>DISCUSS the "First-Expiry-First-out" rule.</p> <p>ASK participants for examples of how that rule applies to daily life. Examples may include: eat day-old food before food purchased today.</p>
26	<p><u>Summary</u></p> <p>ASK participants to answer the questions on the slide.</p>
27	<p><u>Key Messages</u></p> <p>STATE the key messages on the slide.</p> <p>ANSWER any questions participants may have.</p>