MODULE 3

Inventory Management

SLMTA Participant's Manual

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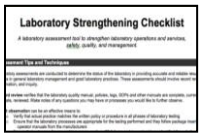
NOTE: Print this document single-sided and in color if possible.

ACTIVITY SUMMARY SHEET

ACTIVITY	Creating a List of Supplies for a Test	Module 3

PURPOSE:

To create a comprehensive inventory list, the laboratory must first identify which essential supplies are needed to support the total testing process. In this activity, participants create a supply list for a specific test. Essential supplies, commonly overlooked, will become more apparent for the participant during this activity.

This activity supports the following laboratory management tasks and accreditation preparedness checklist items	
Management Tasks 	2.5 Ensure that safety equipment is accessible and readily available (e.g., place safety equipment such as sharp box and PPE close to work station to encourage use) 3.1 Review inventory log of all equipment and parts 3.2 Review inventory log of all supplies and reagents
Checklist Items 	1.1 Laboratory Quality Manual Is there a current laboratory quality manual, composed of the quality management system's policies and procedures, and has the manual content been communicated to and understood and implemented by all staff? 2.3 Annual Review of Quality Management Systems Does the laboratory management annually perform a review of all quality systems at a management review meeting? 2.5 Communications System on Laboratory Operations Does the laboratory communicate with upper management regularly regarding personnel, facility, and operational needs? 5.9 Equipment Parts for Repair Are parts available to perform minor repairs as per manufacturer's instructions? 5.15 Laboratory Testing Services Has the laboratory provided uninterrupted testing services, with no disruptions due to equipment failure in the last year (or since the last assessment)? 7.2 Service Supplier Performance Review Are supply & reagent specifications periodically reviewed and are approved suppliers identified? 7.15 Laboratory Testing Services Has the laboratory provided uninterrupted testing services, with no disruptions due to stock outs in the last year or since last assessment?

KEY MESSAGES

- An essential supply is one that is capable of affecting the quality of the laboratory's services.
- Essential supplies can be identified by reviewing the pre-analytical, analytical, and post analytical phases of the total testing process.
- An essential supply item must first be identified before it can be incorporated into the laboratory's inventory process.

SELF-ASSESSMENT

Can you:

- Create a list of essential supplies for a specific test?
- Recognize the essential supplies needed for a test at each phase of the total testing process?

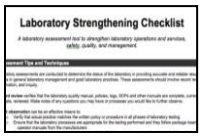
ACTIVITY SUMMARY SHEET

ACTIVITY	What's Wrong with this Storeroom?	Module 3

PURPOSE:

An important component of inventory management is the storage oversight and handling of reagents and supplies needed for laboratory testing. In this activity, participants assess the deficiencies of a simulated storeroom.

This activity supports the following laboratory management tasks and accreditation preparedness checklist items

Management Tasks 	2.7 Ensure reagents & chemicals are stored properly 3.4 Enforce good stock management practices (proper storage, stock cycling, inspection of incoming orders, etc.) 3.5 Inspect quality of existing inventory and dispose of expired test kits, reagents, supplies and equipment according to policy 6.4 Validate new equipment, reagents, and supplies
Checklist Items 	2.2 Review of Quality and Technical Records Does the laboratory supervisor routinely perform a documented review of all quality and technical records? 2.5 Communications System on Laboratory Operations Does the laboratory communicate with upper management regularly regarding personnel, facility, and operational needs? 7.6 Order Tracking, Inspection, and Documentation Are all orders tracked until delivery and inspected, receipted, and labeled with date of receipt when the orders are checked in? 7.7 Inventory Control System Is an inventory control system in place? 7.11 Storage Area Are storage areas set up and monitored appropriately? 7.12 Inventory Organization and Wastage Minimization Is First-Expiration-First-Out (FEFO) practiced? 7.13 Disposal of Expired Products Are expired products labeled and disposed properly? 8.11 Are environmental conditions checked and reviewed accurately? 8.12 Have acceptable ranges been defined for all temperature- dependent equipment with procedures and documentation of action taken in response to out of range temperatures? 12.6 Is laboratory-dedicated cold and room temperature storage free of staff food items, and are patient samples stored separately from reagents and blood products in the laboratory refrigerators and freezers? 12.9 Is a laboratory safety manual available, accessible, and up-to-date? 12.11 Are hazardous chemicals / materials properly handled?

KEY MESSAGES

- An organized and clean stockroom is essential for inventory management.
- An organized storeroom facilitates proper storage and cycling, physical stock-counts, and accurate inventory records.
- Proper storage and handling of reagents and supplies is essential to the testing process.

Can you:

- Recognize the important role an organized stockroom has in inventory management?
- Assess a storage area and identify issues?
- Provide solutions to address storeroom organizational issues?

SELF-ASSESSMENT

For this activity, you will need:

- ❑ Job Aid: Proper Inventory Storage Guidelines (301)

Proper Inventory Storage Guidelines[301]

Identify a secure and adequate storage site

- ❑ Locked
- ❑ Accessible only to authorized personnel
- ❑ Free from extreme temperature and humidity
- ❑ Free from direct sunlight exposure
- ❑ Free of pests
- ❑ Free from excess moisture (water leaks and drips)
- ❑ Free of clutter and trash
- ❑ Adequate ventilation
- ❑ Sufficient lighting

Assess storage requirement

as indicated by manufacturer for each reagent and supply

- ❑ Keep ambient supplies in designated well maintained and monitored room (record temperature daily)
- ❑ Keep refrigerated supplies in designated well maintained and monitored refrigerators (record temperature daily)
- ❑ Keep frozen supplies in designated well maintained and monitored freezer (record temperature daily)

Ensure safety of storage area

- ❑ Appropriate storage of hazardous chemicals according to MSDS
- ❑ Glass or breakable items are stored on lower shelves
- ❑ All items are properly identified and labeled

Organize the supplies carefully

- ❑ Use shelves and bins to organize supplies
- ❑ Store according to temperature requirements
- ❑ Store similar items together (controls with controls, calibrators with calibrators)
- ❑ Group identical items in smaller groups that are easy to count
- ❑ Arrange items within each group by alphabetical order
- ❑ Store all items on shelves (not on the floor)
- ❑ Label the shelves with the name of each item in that area of the shelf
- ❑ Perform inventory management of supplies and reagents
  - Store all items on shelves with shorter expiry dates at the front (FEFO)
  - Rotate stock (FIFO)
  - Check for any expired reagents/supplies
  - Designate, where appropriate, an area or on the items themselves:
    - Received, not yet evaluated
    - Evaluated, ready for use
    - Not acceptable for use, to be returned or disposed

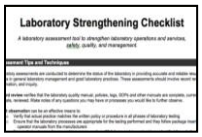
ACTIVITY SUMMARY SHEET

ACTIVITY	Did You Receive What You Ordered?	Module 3

PURPOSE:

A laboratory must have a process developed to inspect the quality and quantity of reagents and supplies before they are placed into storage or use. In this activity, participants compare the purchasing document with the shipping invoice and the items received. In addition to the receipt inspection, participants learn to place and submit orders properly, maintain proper inventory records, track orders placed, and resolve discrepancies.

This activity supports the following laboratory management tasks and accreditation preparedness checklist items

Management Tasks 	1.13 Communicate to upper management regarding personnel, facility, and operational needs 3.4 Enforce good stock management practices (proper storage, stock cycling, inspection of incoming orders, etc.) 4.3 Monitor procurement orders 4.4 Appropriately document and maintain accurate records of all purchase orders and requisitions
Checklist Items 	1.4 Laboratory Policies and Standard Operating Procedures Are policies and standard operating procedures (SOPs) for laboratory functions current, available and approved by authorized personnel? (Review of Contracts (Supplier and Customer), Purchasing and Inventory Control, Resolution of Complaints) 1.5 Policy and SOPs Accessibility Are policies and SOPs easily accessible/ available to all staff and written in a language commonly understood by respective staff? 2.2 Review of Quality and Technical Records Does the laboratory supervisor routinely perform a documented review of all quality and technical records? 2.3 Annual Review of Quality Management Systems Does the laboratory management annually perform a review of all quality systems at a management review meeting? 2.4 Quality Management System Improvement Measures Does the laboratory identify and undertake quality improvement projects? 2.5 Communications System on Laboratory Operations Does the laboratory communicate with upper management regularly regarding personnel, facility, and operational needs? 7.3 Manufacturer/Supplier List Is an up-to-date list of approved manufacturers/suppliers available and includes their complete contact information? 7.5 Management Review of Supply Requests Does management review the finalized supply requests? 7.6 Order Tracking, Inspection, and Documentation Are all orders tracked until delivery and inspected, receipted, and labeled with date of receipt when the orders are checked in?

	7.7 Inventory Control System Is an inventory control system in place? 7.8 Laboratory Inventory System Are inventory records complete and accurate, with minimum and maximum stock levels denoted? 7.11 Storage Area Are storage areas set up and monitored appropriately? 7.12 Inventory Organization and Wastage Minimization Is First-Expiration-First-Out (FEFO) practiced? 7.13 Disposal of Expired Products Are expired products labeled and disposed properly? 10.1 Are all laboratory-documented occurrence reports indicating the root cause of the problem(s) and corrective & preventive actions taken to prevent recurrence? 10.2 Is non-conforming work reviewed and submitted for troubleshooting and cause analysis? 11.2 Are quality indicators (TAT, rejected specimens, stock outs, etc.) selected, tracked, and reviewed regularly to monitor laboratory performance and identify potential quality improvement activities?

KEY MESSAGES

- The laboratory must have a process to inspect the quality and quantity of reagents and supplies before they are placed into storage or use.
- The order request must be compared and reconciled with the shipping invoice and the items received.
- Any discrepancies or issues encountered during the receipt of inventory inspection must be addressed and documented.

Can you:

- Compare the order request with the shipping invoice and the items received?
- Identify discrepancies and issues during the receipt of inventory inspection?
- Suggest follow-through actions to resolve discrepancies and issues?
- Update inventory records?

SELF-ASSESSMENT

For this activity, you will need:

- ❑ Job Aid 1: Making a Phone Call (304)
- ❑ Job Aid 2: Receipt Checklist (305)

304

Making A Phone Call

When Making A Service Call

Make sure you have the following information:

- Instrument model
- Instrument serial number
- Description of the problem
- Actions already taken
- Appropriate contact information
  - –Direct service contact number
  - –Laboratory number for service technician to return calls

At the end of the call, you should know:

- Date/time of the call
- Person with whom you spoke
- Next steps to be taken
- When (timeframe) they will be taken
- Note date for follow-up on management calendar

TIPS

Make sure you have the correct number
Speak clearly and courteously
Gather all the information before the call
Have a pen ready to write down information
Always document the call afterwards

When Calling About An Order

Be ready to describe the problem with the order:

- Missing item?
- Wrong item?
- Wrong amount?
- Expiry date too close?
- Damaged product?
- Unacceptable condition?

After the call, document:

- Reason for the call
- Date/time of the call
- Person with whom you spoke
- Corrective action (what was promised, when will it take place, etc.)

Receiving Inspection Checklist[305]

Receipt Inspection Performed By: _____

Receipt Inspection Date: _____ Invoice Number _____

Shipment Arrival Date: _____

- ❑ The order is complete and acceptable
- ❑ All discrepancies are documented

Discrepancy	Item's Name
Wrong Item	
Wrong Quantity	
Damaged Item	
Defective Item	
Back-ordered Item	
Missing Item	
Item Not Requested by Laboratory	

Attach a copy of the invoice and order request with checklist.

- ❑ The correct items were shipped
- ❑ No items are missing
- ❑ Quantity of items received matches quantity indicated on invoice
- ❑ Quantity of items received matches quantity requested by laboratory
- ❑ Manufacturer's expiry date is acceptable
- ❑ Items transported at the correct shipping temperature
- ❑ Cold packs are cold (refrigerated items) or frozen or partially thawed (frozen items).
- ❑ Items are not crushed, broken or leaking.
- ❑ Any broken or leaking item has been handled safely and disposed of properly
- ❑ Any manufacturer's alerts or changes to the package insert are noted
- ❑ Inventory records are updated
- ❑ A copy of the invoice and order request is retained in the laboratory.
- ❑ Shipment is unpacked and properly integrated with existing inventory
    - Each item is labeled with the receipt date and the receiving person's initials before placed into storage or use.
    - Each item is stored behind existing items in the correct bin or area. (FIFO)
    - Items are rotated following FEFO
    - Items to be evaluated or returned to vendor are clearly marked and segregated from items ready for use.