

INVENTORY MANAGEMENT FOR MEDICINES USED IN ABORTION- RELATED CARE

Facility Job Aid

First edition: May 2012

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1.0 INTRODUCTION

1.1 What is the purpose of this job aid?

This job aid supports efficient inventory management of misoprostol (and mifepristone, depending on your setting), as well as other maternal-health medicines. Use of the job aid will help reduce stock-outs and oversupply situations and improve efficiency of your operations.

1.2 Who uses this job aid?

This job aid can be used by staff in public health facilities, nongovernmental organizations (civil society organizations) and private for-profit clinics and hospitals.

It supports staff members who have one or more of the following duties:

- Forecasting and/or ordering medicines
- Receiving medicines
- Storing medicines
- Issuing medicines from storeroom to the ward

It also is useful for:

- Managers and supervisors who provide supportive supervision and training
- Health workers who dispense medicines on an inpatient basis, outpatient basis, or through community outreach activities
- Community health workers and community-based distributors

1.3 What is in this job aid?

This job aid provides guidelines and templates for ordering, receiving, storing and issuing the medicines used in abortion-related care. It defines sound inventory management practices that can be adapted to a variety of work environments, including:

- Public health infrastructure with fixed supply chain design
- Parallel inventory management system
- Integrated inventory management system
- New service delivery program

The templates can be used to create worksheets for use in your facility.

1.4 How is this job aid structured?

This job aid is divided into four sections, including:

- How and when to order the medicines
- How to receive the medicines
- How to store the medicines
- How to issue the medicines

2.0 HOW AND WHEN TO ORDER THE MEDICINES

Your facility may operate under a push or pull inventory control system or a maximum-minimum (max-min) control system. In a push system, decisions on the timing and quantity of shipments are made by the shipper (e.g., Medical Stores). In a pull system, those decisions are made by those who will receive the medicines (e.g., health-care facility). A max-min inventory control system is designed to ensure that the quantities of stock in a facility remain within an established range.

2.1 Push or pull inventory control system

To determine the quantity of medicine to order/request in a pull system or the quantity to be sent in a push system, use the template below.

| Push/Pull Inventory Control Worksheet – Template | | | | | | | | |
|--|------------|-----------------------|-----------------------|------------------------|-------------------------|--------------------|--|---|
| Item | Basic unit | Beginning balance (A) | Quantity received (B) | Quantity dispensed (C) | Losses/ Adjustments (D) | Ending balance (E) | Quantity needed per month $F=(C+/-D)-E$ | Total Quantity required to reach desired stock levels $G=(C \times \text{No. of months}) +/-D-E$ |
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| Push/Pull Inventory Control Worksheet – Instructions | |
|--|---|
| Term | Definition |
| Beginning balance (A) | Quantity of medicine in the facility storeroom at the beginning of the review period |
| Quantity received (B) | Quantity of medicine received within the review period |
| Quantity dispensed (C) | Actual number of tablets dispensed to patients |
| Losses and adjustments (D) | Obtained from the stock card/bin card/ledger book. Losses are the quantity of tablets that are damaged or identified as missing or expired. Adjustments usually refer to transfers of commodities into or out of the facility. |
| Ending balance (E) | Stock on hand at the end of the review period. Determined in the following ways: 1. Calculated ending balance – obtained from the stock card/bin card/ledger book 2. Physical count – typically a more reliable measure of ending balance. Involves counting all quantities in the storeroom and any other location |
| Quantity required (F, G) | Dependent on consumption, losses/adjustments, and ending balance (stock on hand) |

2.2 Maximum-Minimum inventory control system

Ipas MA supply guidance

To determine the order quantity in a max-min supply system, we recommend using the Ipas Medical Abortion (MA) Supply Guidance. This tool will compute your facility's average monthly consumption and recommended minimum and maximum inventory levels. It is available at www.masupplyguidance.org. A CD-ROM and other versions that do not require internet access are also available. Email MASupply@ipas.org for information.

Utilization of max-min system

Average monthly consumption (AMC) is a key measure in any max-min system. AMC is calculated by totaling the quantity of medicine dispensed over the last three or four months and dividing this total by the number of months of data used.

To determine the order quantity, multiply AMC by the maximum number of months of stock desired (e.g., 3). Then, subtract the stock on hand from this.

$$\text{Order quantity} = (\text{Average Monthly Consumption} \times \text{Maximum months of stock}) - \text{Stock on hand}$$

You may use the template below to record and monitor your facility's consumption of medicines, as needed.

| Monitoring Consumption of Medicines Worksheet – Template | | | | | |
|--|------|--------------|-----|---------------------------------|--|
| Number | Date | Patient name | Age | Quantity of medicines dispensed | |
| | | | | Misoprostol | Mifepristone (include this depending on your setting) |
| | | | | | |
| | | | | | |
| End of month total consumption => | | | | | |

Consumption data is crucial for two reasons:

1. Calculation of the average monthly consumption to understand facility's consumption patterns and to determine order quantities
2. For accountability purposes

Note: If your facility has experienced a stock-out of these medicines during the last few months, use data on dispensed quantities from the most recent months when there was no stock-out to calculate the average monthly consumption.

3.0 HOW TO RECEIVE THE MEDICINES

| Step | Description |
|------|---|
| 1 | When a shipment arrives, refer to a copy of the original order. |
| 2 | Examine the delivery note and compare with the copy of the original order. If the two documents list the same type and quantity of supplies, then proceed to verify quantity delivered. |
| 3 | Count the actual quantity, paying attention to the product packaging. Look for physical damage, batch numbers, expiration dates and product description. |
| 4 | When satisfied with the physical condition of the packaging, product description, batch numbers and expiration dates, you may then accept the shipment and sign the delivery note. |

4.0 HOW TO STORE THE MEDICINES

After receiving the medicines, the next step is to enter them into your inventory. This is done by starting a new stock card/bin card/ledger book or updating the old stock card/bin card/ledger book.

Below is a standard template for a stock card.

| Stock Card – Template | | | | | | | |
|-----------------------------------|----------------|-----------------------------|-------------------|--------------------------------|------------------------|---------------|----------|
| Program: | | | | Facility name and location: | | | |
| Item description (and item code): | | | | Unit of issue: | | | |
| Minimum stock level in months: | | | | Maximum stock level in months: | | | |
| Date | Voucher number | Received from/ Issued to | Quantity received | Quantity issued | Losses/ Adjustments | Stock balance | Initials |
| | | | | | | | |
| | | | | | | | |

Stock Card – Instructions
Note: One program and medicine category per stock card

| Step | Description |
|--|---|
| 1 | Program: Name of the program (e.g., safe motherhood program) |
| 2 | Facility name: Name of the facility |
| 3 | Location: Location within the facility (e.g., where the product is kept in the facility) |
| 4 | Item description: Name, strength, and description of the medicine |
| 5 | Item code: Item code for the medicine |
| 6 | Unit of issue: Individual basic dispensing unit for the medicine (e.g., blister strip, tablet) |
| 7 | Minimum stock level and Maximum stock level: These fields are optional (e.g., you may enter the stock levels recommended by the Ipas MA Supply Guidance tool, or you may enter the minimum and maximum number of months for which inventory is to be stored in these spaces) |
| Recording Stock Transactions – Instructions Note: One transaction is recorded per row | |
| 8 | Select stock card: Select the Stock Card for the medicine for which a transaction is to be recorded. |
| 9 | Date: Date of the transaction |
| 10 | Voucher number: Requisition and issue voucher number if a voucher is being used |
| 11 | Received from/Issued to: Location where the product is coming from or is being sent |
| 12 | Quantity received: Quantity of medicine that is received. Record in basic units of issue. If the product was not received, leave space blank. |
| 13 | Quantity issued: Quantity of medicine that is being issued. Record in basic units of issue. If the product was not issued, leave space blank. |
| 14 | Losses/Adjustments: The loss or adjustment for this medicine. If the product was not lost or adjusted, leave the space blank. |

| | |
|-----------|--|
| 15 | <p>Stock Balance: Calculate the stock balance on hand</p> <p>A. If medicines were received, add received quantity to the previous stock balance.</p> <p>B. If medicines were issued, subtract issued quantity from the previous stock balance.</p> <p>C. If medicines were lost or adjusted, add or subtract that quantity from the previous stock balance.</p> |
| 16 | <p>Initials: The person completing the transaction writes in his or her initials</p> |

After you have completed a new stock card or updated the existing stock card, the medicines then must be stored according to standard storage guidelines, as noted below.

| Guidelines for proper storage of medicines | |
|---|---|
| 1. | Clean and disinfect storeroom regularly. |
| 2. | Store medicines in a dry, well-lit and well-ventilated storeroom, at or below 25 degrees C (77 degrees F) and out of direct sunlight. |
| 3. | Secure storeroom from water penetration. |
| 4. | Make fire-safety equipment available and accessible. |
| 5. | Store boxes of medicines away from electric motors and fluorescent lights. |
| 6. | Stack boxes containing medicines at least 10 centimeters (4 inches) from the floor, 30 centimeters (1 foot) away from the wall and other stacks, and no more than 2.5 meters (8 feet) high. |
| 7. | Arrange the boxes so that identification labels, expiry dates and manufacturing dates are visible. |
| 8. | Store medicines in a manner that facilitates first-to-expire, first-out (FEFO) counting and general management. |
| 9. | Store medicines away from insecticides, chemicals, old files, office supplies and other materials. |
| 10. | Separate and dispose of damaged or expired medicines without delay, in accordance with relevant regulations. |

5.0 HOW TO ISSUE THE MEDICINES FROM THE STOREROOM

To effectively maintain records for the transfer of medicines from a storeroom to other locations (e.g., patient ward), it is advisable that you use a Requisition and Issue Voucher. A template is shown below for your adaptation.

| Requisition and Issue Voucher - Template | | | | | |
|--|---------------|----------------------------------|-----------------|-------------------------------|----------|
| Requisition and Issue voucher number: | | Requisition date: Issue date: | | Request from: Deliver to: | |
| Commodity description | Stock on hand | Quantity required | Quantity issued | Quantity received | Comments |
| | | | | | |
| | | | | | |
| Requested by: Authorized by: | | Issued by: Authorized by: | | Received by: Receipt date: | |

Requisition and Issue Voucher – Instructions

| Step | Description |
|------|---|
| 1 | <p>Voucher header information:</p> <p>Requisition and Issue Voucher number – Voucher number which follows the preceding voucher (serial) number. Voucher number starts at “1” with each new year</p> <p>Requisition date – Date when the requisition was created for this voucher</p> <p>Request from – Name of the unit/department to receive the supplies</p> |
| 2 | <p>Quantity data:</p> <p>Commodity description – Full description of the item being ordered/requested</p> <p>Stock on hand – Quantity of this item currently in stock</p> <p>Quantity required – Quantity of the item being ordered/requested</p> |
| 3 | <p>Authorization:</p> <p>Requested by – Name of person making the request, the person’s Function, and Signature</p> <p>Authorized by – Name of a higher authorizing person, the person’s Function, and Signature</p> <p>This portion of the voucher is completed when regulations require authorization by a higher-level person.</p> |
| 4 | <p>Supplies issued (to be completed by the storeroom manager at the issuing facility):</p> <p>Quantity issued – Quantity of the item issued</p> <p>Issued by – Name of the person who has issued the supplies from where they are stored</p> <p>Issue date – Date of the transaction</p> <p>Authorized by – Signature of the issuing officer (this may be the higher-level storeroom manager)</p> |
| 5 | <p>Supplies received (to be completed at the facility/location receiving the supplies):</p> <p>Quantity received – Quantity of the item received</p> <p>Received by – Name, Function, and Signature of the person receiving the supplies</p> <p>Receipt date – Date when the supplies are received</p> |
| 6 | <p>Updating the stock card (to be performed by the person receiving or storing the supplies):</p> <p>Update the stock card as appropriate – Enter requisition and issue voucher number, transaction date, quantity received, updated stock on hand, and the name, function and signature of the person conducting this transaction.</p> |

6.0 KEY INVENTORY CONTROL TERMS

| Term | Definition |
|--|--|
| Maximum-Minimum inventory control system | System designed to ensure that the quantities in stock remain within an established range |
| Max stock level/ max quantity | Level of stock above which inventory levels should not rise, under normal conditions |
| Min stock level/ min quantity | Level of stock below which inventory levels should not fall, under normal conditions |
| Review period/ review period stock | Typical interval of time between assessments of stock levels, to determine if additional stock is required. May be called the order interval or resupply interval |
| Safety stock level | Buffer, cushion or reserve stock kept on hand to protect against stock-outs due to delayed deliveries, increased demand or other unexpected events |
| Lead time stock level | Level of stock expected to be consumed between the time an order is entered and when the ordered quantity is received and available for use |
| Emergency order point (EOP) | Level of stock that triggers an emergency order; can be reached at any time during the review period |
| First-to-Expire First-Out (FEFO) | Store all commodities such that the commodities that will expire first are picked first. This requires that you store commodities received according to the expiry dates. Enter the expiry dates on the stock card for reference. |
| Stock status report | Vital report that reminds the storeroom manager of the number of months that the current stock will last. The number of months must be at or below the desired maximum stock level. Stock status is calculated by dividing the stock balance by the average monthly consumption. |