

**FACULTY OF PHARMACEUTICAL SCIENCES,
RAMAUNIVERSITY, KANPUR**



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DRUG STORE AND BUSINESS MANAGEMENT

DP205T

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CHECKLIST FOR DRUG WAREHOUSE MANAGEMENT

1. Daily/Weekly
 - a. Monitor storage conditions
 - b. Clean receiving, storage, packing, and dispensing areas
 - c. Sweep or scrub floors
 - d. Remove garbage
 - e. Clean bins, shelves, and cupboards, if needed.
 - f. Ensure that passages are clean.
 - g. Ensure adequate ventilation and cooling
 - h. Ensure that products are protected from direct sunlight.
 - i. Monitor store security and safety.
 - j. Check the store roof for leaks, especially during rains.
 - k. Monitor product quality (visually inspect commodities and check expiration dates)
 - l. Ensure that products are stacked correctly.
 - m. Update stock records

- n. Conduct physical inventory and update stock keeping records
- o. Monitor stock levels, stock quantities, and safety stocks.
- p. Submit emergency order (as needed, using local guidelines)
- q. Update bin cards
- r. Separate expired stocks and move to secure area

2. Monthly

- a. Conduct physical inventory or cycle count, and update stock keeping records
- b. Check for signs of rodents, insect or roof leaks.
- c. Inspect the storage structure for damage, including the walls, floors, roof, windows, and doors.

3. Every 3 months (quarterly)

- a. Conduct physical inventory or cycle count, and update stock keeping records
- b. Use established procedures to dispose of expired or damaged products.
- c. Visually inspect fire extinguishers to ensure that pressures are maintained and extinguishers are ready for use.

4. Every 6 months

- a. Conduct fire drills and review fire safety procedures

5. Every 12 months

- a. Service fire extinguishers and smoke detectors
- b. Conduct complete physical inventory and update stock keeping records.
- c. Reassess maximum/minimum stock levels, and adjust if needed.

E. INVENTORY MANAGEMENT

Inventory Management Inventory Management is the scientific process by which an organization is supplied with the goods and services which needs to achieve its objectives at optimum cost. Inventory control can be viewed as the attainment of a cost balance between shortage and excess of stock. It is one of the modern management techniques of operations research. Without proper control over the inventory, serious problems can precipitate, related to manufacturing, marketing, revenue generation and customer satisfaction. Likewise, availability of life saving drugs and other hospital supplies can be crucial to good hospital care and patient satisfaction. Hence, it helps in attaining goal of a good hospital supply system to ensure adequate stock of required items for uninterrupted supply of all essential items.

Aims and Objectives

Inventory control deals with physical control of inventories. It is the process of deciding as to when, what and how much of each item is to be kept in stock, minimizing the ineffective stock and optimizing the various causes associated with the inventories.

Objectives:

1. Utilize the available resources most efficiently and effectively.
2. Maintain availabilities of materials whenever and wherever required in optimal quantity
3. Minimize the in-effective stock
4. Optimize the various cost associated with the inventories.

Scope of Inventory Control

An efficient inventory control system can:

1. Reduce costs
2. Improve service delivery

3. Increase return on investment
4. Improve liquidity
5. Improve service conditions
6. Increase efficiency of man and machine
7. And hence improve patients satisfaction

Inventory Control Methods

1. **Purchase cost** – It is the actual cost of materials. It is an apparent type of cost which is easily understood. The effort should be to reduce this as much as possible by following the simple techniques like bulk buying, under generic names and at negotiated rates.
2. **Carrying cost** – This is hidden cost and not amenable to easy calculations. It includes the cost incurred on storage space, capital borrowing, additional manpower, obsolescence, deterioration and pilferage.
3. **Ordering cost** – It is the cost of placing an order like the cost involved in stationery, postage, telephone, fax, manpower etc.
4. **Shortage cost** – It deals with the cost of not having a particular material. The direct cost is the higher price we pay for procuring a substitute from an alternate source.

Techniques of inventory control

The types of Inventory control analysis, which are carried out for classifying materials so that materials and processes can be treated differently, are mentioned here as follows:

1. A-B-C ANALYSIS

A-B-C analysis is a basic analytical management tool. It is also known as “Always Better Control.” It is based on value of consumption of item per year.

A – (Highest annual usage) around 10 – 20% of the drugs would cost for 70 - 80 % of the resources.

B - (Moderate annual usage) 10 - 20 % of the drugs generally consume 15 - 20% of the resources.

C – (Low annual usage) remaining 60 - 80% of drugs would consume just about 5 - 10% of the resources.

Steps to perform ABC Analysis

1. List all items purchased or consumed and enter the unit cost.
2. Enter consumption quantities (over a defined period of time e.g. one year).
3. Calculate the value of consumption.
4. Calculate the percentage of total value represented by each item.
5. Rearrange the list, rank items in descending order by value starting at the top with higher value.
6. Calculate the cumulative percentage of the total for each item beginning with the first item at the top; add the percentage to that of the item below it in the list.
7. Choose cut-off points or boundaries for A, B, and C drugs

2. V-E-D Analysis:

V-E-D Analysis is based on critical values and shortage costs of the items based on their critically, the

items could be classified into three categories: Vital, Essential and Desirable.

a. Vital Items: There are several vital items in the inventory of a hospital which could make the difference between life and death. There can be serious functional dislocation of patient care when such items are not available even for short period adversely affecting the image of the hospital. Such items should always be stocked in sufficient quantity to ensure their constant availability. This group of items should be controlled by top management.

b. Essential Items: The shortage of such items can be tolerated for a short period. If these items are

not available for a few days or a week, functioning of the hospital can be adversely affected.

These items should preferably be controlled by top/middle level management.

c. Desirable Items: The shortage of these items will not adversely affect the patient care or hospital functioning even if the shortage is prolonged items like Vitamins. Desirable items should be controlled by middle/ lower level management.

Steps to perform VED Analysis

1. Classify all drugs on the list as V, E, and D.
2. Analyze D items, where possible, reduce quantities to be purchased or eliminate purchases entirely.
3. Identify and limit therapeutic duplication.
4. Reconsider proposed purchased quantities.
5. Find additional funds if needed.

Application of VED Analysis

1. VED classification should be done at regular basis as list is updated regularly and public health priorities also change.
2. Drugs ordering and stock monitoring should be directed at vital and essential drugs.
3. Safety stock should be higher for vital and essential drugs.
4. Enough quantities of vital and essential drugs should be bought first.
5. Procuring and storing of VED drugs ensures all time availability of very essential drugs in health facilities.

Once VED analysis is done, a comparison should be made between the ABC and VED analyses in order to identify whether there is relatively high expenditure on low priority drugs. In particular, effort should be made to delete “D” drug that are in the high cost/high consumption category of the ABC analysis.

ROLES AND RESPONSIBILITIES OF PHARMACISTS

Pharmacists are often the first point-of-contact for patients with health inquiries. This means that pharmacists have large roles in the assessing medication management in patients, and in referring patients to physicians.

These roles may include, but are not limited to:

- a) Prepare list of need based medicines.
- b) Proper drug quantification to maintain continuous supply of drugs and medical items.
- c) Proper arrangement and storage of drugs to maintain the potency and quality of drugs.
- d) Drug dispensing and distribution.
- e) Keeping accurate inventory record to provide stock movement information for forecasting the needs.
- f) Separate inventory record for controlled substances.
- g) Develop monthly consumption record.
- h) Preparation of indenting and with higher canters for procurement of drugs as and when required and placing of orders timely.
- i) Cleanliness and sanitation of hospital pharmacy.
- j) Management of hospital pharmacy infrastructure.
- k) Display of available medicines and prices outside the pharmacy.
- l) Computerized Drug management information system.
- m) Assessment of patients with undiagnosed or diagnosed conditions and for decisions about the

clinical medication management required.

n) Reviewing medication regimens

o) General health monitoring

p) Providing general and specific education to patients about disease states, medications and route of administration & side effects.

q) Provision of non-prescription medicines

r) Counseling and advice on optimal use of medicines and referral to health professionals if necessary

s) Advice and treatment of common ailments

t) Limited prescribing of medications only in collaboration with other health care professionals