

# **INVENTORY MANAGEMENT**

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# Inventory Management



**Closed Shelving**

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## **OBJECTIVES**

Following training, the employee will be able to:

1. Identify the importance of inventory management.
2. Define IFCAP, GIP, and their functions.
3. List and define inventory systems.
4. List and define stock levels.
5. Explain the function of the Commodity Standardization Committee.
6. Define: picking ticket, primary, secondary.
7. List some of the most commonly used GIP-generated reports.
8. Explain available alternate distribution systems.
9. Discuss overstocking and understocking.
10. Describe the storage design in SPD.

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## INVENTORY MANAGEMENT

1. Inventory management is the responsibility of each employee. It is essential to the overall cost control within a medical center. Emphasis on cost containment, reducing waste (time and money), standardization of products, and streamlining efforts has grown tremendously. Controlling the cost of medical supplies and equipment through competitive procurement sourcing, waste reduction, and elimination of unofficial and stagnant inventories has a tremendous effect on cost containment.
2. The inventory management process consists of IFCAP (Integrated Funds Distribution, Control Point Activity, Accounting, and Procurement) and GIP (General Inventory Package). These computer systems require considerable time and effort to initiate and maintain, and are only as reliable as the information put into it. However, the advantage over manual systems is the rapid availability of a multitude of information.
3. The IFCAP inventory system is used to manage the receipt, distribution, and stock maintenance of items received from the supply warehouse and/or outside vendors. IFCAP provides information on supplies, equipment, vendors, procurement history, and control point activity. SPD's control point is the budget used to requisition medical/surgical supplies and some equipment.
4. Effective inventory management is essential to overall cost control within a medical center. In past years, the emphasis on cost containment, reducing waste (time and money), and streamlining efforts has grown tremendously. Controlling expendable supplies, disposables, and "unofficial" inventories may have a major impact on cost containment.
5. One purpose of inventory management is to ensure the availability of the items that the user needs in the quantity in which they need them. Another purpose is cost containment. The aim is to purchase in quantities to receive premium pricing from the vendor without tying up funds in overstocked shelves.
6. A variety of inventory systems are in place to accomplish this control:
  - a. **par-level** - levels are established in conjunction with the users of specific items to be stocked in the using area. On regular intervals, the user's inventory on hand is evaluated against their level, and the amount needed to bring the items back to that level is pulled from SPD and added to the user's inventory.
  - b. **demand** - the user maintains supply levels and, as supplies are needed, they request the supplies from SPD. SPD fills the requisition and delivers to the user who stores the items.

c. **exchange cart** - two identical carts are created with the items requested by the user at the levels required. A fully-stocked cart is kept in SPD and the other is in the using area. At regular intervals (usually daily), the carts are exchanged and the used cart goes back to SPD to be restocked.

d. **case cart** - used for total supply support to the O.R. Case cart sheets are devised by procedure with all supplies and instruments required for the particular procedure. By following the daily surgery schedule, the items are pulled, placed on the case cart, and delivered to the O.R.

e. **specialty cart** - disaster carts, crash carts, etc.; carts created for specific uses, continually available, and used as necessary.

7. There are a variety of delivery systems that can be utilized by SPD to deliver supplies to the users. They include:

a. **manual carts** - used to physically transport supplies throughout the medical center. May also be used with automated transport systems.

b. **dumbwaiters** - small, dedicated lifts for transport of supplies to using areas.

c. **pneumatic tubes** - transport small items able to withstand negative pressure.

d. **automated transport systems** - augments manual delivery through a system of programmed routes and schedules.

e. **call window** - allows users to obtain items directly from SPD.

8. The tools of the inventory management process include IFCAP (Integrated Funds Distribution, Control Point Activity, Accounting, and Procurement) and GIP (General Inventory Package). These computer systems require considerable time and effort to initiate and maintain, and are only as reliable as the information put into them. The advantage over manual systems is the rapid availability of a multitude of information.

9. GIP is a portion of IFCAP used to manage inventory within SPD using areas. GIP consists of primary inventories and secondary inventories. The primary inventory is the SPD inventory and the secondary inventories are the points of distribution. Other primary inventories within the medical center include Pharmacy and Warehouse. They also have their own secondaries.

10. Within GIP, the SPD inventory (primary inventory) consists of all items stocked and/or procured by SPD. Stock levels are established to maintain constant availability of items. These stock levels are:

a. **normal stock level** - represents the largest amount of an item to be maintained in the primary (on SPD shelves).

b. **standard reorder point level** - represents the level at which the item is to be reordered.

c. **optional reorder point level** - alerts you that the level of an item has fallen below the normal stock level but has not yet reached the standard reorder point level. This allows you to include items very near their reorder point in upcoming purchases with the same vendor, thereby reducing separate purchases to the same vendor within short periods of time.

d. **emergency stock level** - represents the smallest amount of an item to be maintained in the primary. This level alerts you that an emergency purchase is required.

11. Standardization of medical supplies and equipment at the medical center is very important to deter the rapidly rising cost and duplication of medical supplies. The Commodity Standardization Committee and related subcommittees review and evaluate products for use in the medical center in order to maintain a state-of-the-art and quality medical service, as well as reduce the number, sizes, kinds, and grades of items.

12. GIP contains the ability to "autogenerate" orders. This is where the computer automatically reviews preset inventory levels against current amounts on hand and identifies those items below the preset levels in order that they may be requisitioned.

13. Computerized labels identify each item within the inventory. The medical supply technician uses a bar code reader to scan the label to identify the item and then enter the actual amount present. After scanning a secondary inventory, the information is uploaded into GIP and a picking ticket is generated. The picking ticket identifies the items and amounts required to be restocked in that secondary to return to preset levels.

14. All inventories maintained in user areas are called secondary inventories. Within GIP, secondary inventories are also maintained with stock levels and reorder points. Secondaries may be maintained by SPD or the user.

15. Primary and secondary inventories are reviewed on a regular basis utilizing GIP - generated reports, including:

a. **History of Distribution Report** - shows the total dollar amount of supplies distributed to each secondary. This information is useful in computing quarterly and annual budget reports.

b. **Inactive Item Report** - gives a list of items for a specific period of time that have been inactive.

c. **Cold/Hot Usage Report** - used to evaluate item usage. "Cold" items show a decrease in usage and may need to have their stock level decreased. "Hot" items show an increase in usage, and their levels may need to be increased.

e. **Emergency Stock Level Report** - gives a list of items with levels at or below the emergency stock level, and also shows whether or not there is an outstanding order for the item.

16. Alternative distribution systems are becoming available for use by medical centers to drastically reduce the amount of stock they must keep on hand and/or to reduce expenditures. A few of these systems are:

a. **Consignment** - a vendor maintains a portion of the primary inventory on the shelves and bills the medical center once a month for items used during that period. Consignment is considered a "no cost" inventory program because the medical center pays nothing until items are used. In addition, the vendor many times will purchase the inventory on hand of the items delineated as consignment items, thereby producing a substantial influx of funds.

b. **Prime Vendor** - a single vendor serves as distributor for a portion of the SPD primary inventory, regardless of brand or manufacturer. They provide next-day delivery which allows SPD to greatly reduce the amount of stock on hand.

c. **Just-in-Time (JIT)** - a concept where the costly inventories are reduced by eliminating the primary inventory. JIT allows secondary inventories to be stocked on a regular basis by providing medical supplies just-in-time. This system works best when needs can be easily and accurately forecasted.

d. **Stockless** - a system where there is no primary inventory. Stock is delivered by vendors on an as-needed basis, prepackaged, 2-3 times per day, 7 days a week.

17. It is important to avoid overstocking and understocking in both the primary and secondaries. Overstocking ties up a considerable amount of money in stock, and increases the risk of damage, outdating, contamination, or obsolescence of the item. Understocking creates the risk of unavailability of supplies which affects the quality of patient care. It also creates additional purchase costs (overnight shipping) and adversely affects the trust users have in SPD.

18. Every effort is made to have all items available at all times, a 100 percent fill rate. However, the realistic goal is to make sure critical items are available at all times, while less critical items may be on "back-order." Hospitals that are in close proximity may borrow items in terms of emergency.

19. The storage in SPD should be designed to promote cleanliness, visibility, safety, and efficiency of distribution. The inventory should be verified on a regular basis for outdated items and damaged or obsolete items. With a minimum of handling, the risk of damage or contamination is greatly reduced. The rotation of stock is vital to prevent unnecessary outdates and additional costs.

20. Everyone involved with stocking, distribution, record keeping, or any other aspect of inventory management must strive to keep errors to a minimum. One mistake in distribution allowed to remain over days or weeks will render value, quantity, or other information erroneous and unusable. Regular counts should be done to verify and update the accuracy of the inventory. Accurate inventory management saves money, saves storage space, and promotes trust and confidence by users and patients.

ORDERING FROM VENDOR: VA SUPPLY  
 REPETITIVE ITEM LIST NUMBER: 564-95 1-041 822100-0014

MI# DESCRIPTION PRIMARY VENDOR ISSUE ISSUE  
 UNIT/ISS UNIT/ISS MINIM MULT

GROUP CATEGORY: GEN: GENERAL (6277)

586 SLIPPERS-BEIGE-LARGE-ADULT 1/PR 1/PR 48  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 103 0 10 96 125\* 125 160 1 192 0.790

588 SLIPPERS-NAVY-BLUE-X-LARGE-ADULT 1/PR 1/PR 48  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 19 0 37 18 25\* 25 100 1 144 0.680

7026 SOAP-BAR-INDIVIDUAL-1000 -PK 1/EA 1000/PK  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 495 0 0 495 500\* 500 1000 1000 1 49.560

GROUP CATEGORY: V/B: ISSUEBOOK (6480)

5960 ACCESS PIN-AP-3100-100- CS 1/EA 100/CS  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 0 0 0 0 50\* 50 100 100 2 144.647

620 CATHETERIZATION SET-URETHRAL-SUR-01 1/EA 10/EX  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 11 0 2 9 10\* 10 20 10 2 77.450

4912 CUP-STYROFOAM-6 1/2-LI-PK 25/PK 1000/PK  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 43 0 30 13 20\* 20 40 40 1 8.750

343 ELECTRODE-ELECTROCARDIOGRAPH DISP-P 1/EA 1/EA 240  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 240 0 0 240 120 240\* 360 1 240 0.433

4070 GLOVE-EXAM-LATEX-LRG-SMALL 100/PG 100/PG  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 20 0 5 15 15\* 15 30 1 15 5.292

4390 GLOVE-SURGEONS-STERILE-8-50 -PG 1/PR 50/PG  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 97 0 0 97 100\* 100 100 50 3 23.102

1760 NEEDLE-CONTAINERS-W/0-MOUNTED-303 1/EA 30/CS 1 1  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 13 0 4 2 15\* 15 30 30 1 63.841

4004 SPONGE-LAPAROTOMY-STERILE 5/PG 1/PG 40  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 11 0 0 11 20\* 20 40 1 40 1.440

5931 SHAPSTICK POVIDONE-IODINE-10X 3/PG 250/CS  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 60 0 0 60 75\* 75 150 125 1 39.600

5106 TAFE-PAPER-2-IN-1 1/RI 1/PG  
 ON HAND IN QUEIN -DUEOUT =AVAIL STAND (PTN) LEVEL CONV ORDER UNIT#  
 3 0 0 3 12\* 12 24 1 3 4.350

FROM: SFO TO: PRIMARY CASE  
 ORDER NO: 14850 DATE: OCT 19, 1994 TYPE: REGULAR STATUS: RELEASED TO FILL  
 NSN DESCRIPTION (AMLI) QTY ON-HND PICKED

STORAGE LOCATION: STERILE

ISS MULT	QTY ORD	UNIT per ISS	UNIT COST	TOT COST	QTY TO PICK
1	3	1 per EA	2.563	7.689	3
ANALYSER-MIC-CONTAINER-SPECIMEN COL (#5373)					
1	100	1 per EA	0.009	0.900	100
6510-00-690-6940 PAM-INDROPYL-ALDOL-IMPREGNATED (#3950)					
1	1	1 per KT	1.125	1.125	1
6530-00-895-1950 IRRIGATION-KIT (#4593)					
1	2	1 per EA	1.400	2.800	2
6530-01-103-0093 BAG-URINE-DRAINAGE-FRO-REFI 200 (#5339)					

STORAGE LOCATION: (UN)STERILE

ISS MULT	QTY ORD	UNIT per ISS	UNIT COST	TOT COST	QTY TO PICK
1	2	1 per EA	0.214	0.428	2
STOOL-SPECIMEN CLIP (#5060)					
1	1	1 per EA	0.243	0.243	1
6550-00-494-8124 URINARY-SCALE PATIENT (#4542)					
1	2	50 per PG	21.500	43.000	2
6550-01-293-5555 STRIP-TEST-ONE-TOUCH (#7184)					

TOTAL DOLLAR AMOUNT OF ORDER: 56,180

SIGNATURE: \_\_\_\_\_ FULLLED BY: \_\_\_\_\_  
 TITLE: \_\_\_\_\_ VERIFIED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_ DATE TO DELIVER ON: \_\_\_\_\_

END OF REPORT

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## IMPORTANT TERMS – INVENTORY MANAGEMENT

Autogenerate  
Automatic Transport System  
Bar Code Reader  
Call Window  
Case Cart  
Cold/Hot Usage Report  
Commodity Standardization Committee  
Control Point  
Consignment  
Demand  
Dumbwaiter  
Emergency Stock Level  
Emergency Stock Level Report  
Exchange Cart  
GIP  
History of Distribution Report  
IFCAP  
Inactive Item Report  
Just-in-Time  
Manual Cart  
Normal Stock Level  
Optional Reorder Point Level  
Overstocking  
Par Level  
Picking Ticket  
Pneumatic Tube  
Primary  
Prime Vendor  
Secondary  
Specialty Cart  
Standard Reorder Point Level  
Stockless  
Under stocking

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## QUESTIONS

1. It is important to reduce and/or eliminate \_\_\_\_\_ inventories in the medical center.
2. Inventory control ensures \_\_\_\_\_ of items.
3. Supplies and instruments required for surgical procedures are provided in/on \_\_\_\_\_.
4. A \_\_\_\_\_ cart is stocked and kept available for emergencies.
5. A \_\_\_\_\_ cart is often used by SPD technicians to physically transport supplies throughout the medical center.
6. User's obtain supplies directly from SPD using a \_\_\_\_\_.
7. SPD utilizes the \_\_\_\_\_, or GIP, for inventory management.
8. The inventory within SPD is called the \_\_\_\_\_ inventory.
9. The vendor providing a portion of the SPD inventory on a next-day basis is the \_\_\_\_\_.
10. The \_\_\_\_\_ Report is used to evaluate item usage.
11. Levels are established and items replenished to maintain that level is
  - a. demand
  - b. par level
  - c. call window
  - d. exchange cart
12. Small dedicated lifts for transport of supplies are
  - a. elevators
  - b. dumbwaiters
  - c. supply lifts
  - d. case carts
13. The level representing the largest amount of an item to be maintained is
  - a. optional
  - b. standard
  - c. normal
  - d. emergency

14. Used for total supply support to the O.R:
- a. specialty cart
  - b. call window
  - c. exchange cart
  - d. case cart
15. The advantage of computerized inventory systems is
- a. less writing
  - b. more correct information
  - c. rapid availability of information
  - d. all of the above
16. Inventories maintained in using areas are
- a. secondary inventories
  - b. customer inventories
  - c. user inventories
  - d. patient inventories
17. Overstocking
- a. ties up money in inventory
  - b. crowds shelves
  - c. increases risk of damage
  - d. all of the above
18. Storage in SPD should promote
- a. safety
  - b. visibility
  - c. cleanliness
  - d. all of the above
19. Everyone in inventory management must strive to
- a. keep a positive attitude
  - b. keep errors to a minimum
  - c. keep stock outages from public knowledge
  - d. keep shelves full at all times

20. Accurate inventory management

- a. saves space
- b. promotes trust
- c. keeps patients happy
- d. a & b