

Inventory Control

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The last segment in the series that Richard presented is on Inventory Control. There is an old saying that I will take out of context “No job is complete until the paperwork is done”. With that thought in mind, at the completion of this in-service the reader will be able to:

1. Name the four types of inventory control systems
2. Compare advantages and disadvantages of each system
3. Name two measures of inventory performance
4. Describe work processes of good inventory control

The goal of inventory control is to meet the customer’s needs for supplies while minimizing cost of procurement, handling, and storage. This includes minimizing total cost and space requirements; maximizing return on investment and customer service. CS plays a very important role in inventory management.

Inventory performance metrics

There are two measures of inventory performance, 1. Inventory turnover and 2. Line-item fill rate.

Inventory turnover can be described as the “annual dollar value of the items issued from the storeroom, divided by the total dollar value of the supplies stored in inventory” An Example: $\$12,000,000$ (total \$\$\$’s issued) \div $\$500,000$ (ending period inventory value) = 24 (inventory turnover). With that in mind turnover is a measure of inventory efficiency. The goal would be to have a high number of inventory turns.

Line-item fill rate is a measure of inventory performance calculated as the percentage of ordered supplies that are filled from

stock on hand. An example would be 90 line-items filled \div 100 line-items ordered = 90% fill rate. The Line-item fill rate indicates how well you’re serving your customer’s needs.

Managing inventory

To successfully manage inventory there are two critical functions: 1. Reordering or replenishment when supplies are depleted, in other words managing on hand quantity and 2. Removing obsolete or slow moving stock. How well you perform these functions determines the efficiency (high inventory turnover) and effectiveness (high line-item fill rate) of your inventory. It’s a balancing act!

Identifying obsolete items that are in our storerooms is important in saving money. Stock will become worthless as technology changes if these items are not used up prior to conversion to newer products. How do we deal with obsolete items? We can use it up, return it to vendor for credit or exchange or sell it to another health care facility that is still using the product.

Reordering stock requires two decisions. 1. Need to determine the reorder point and 2. Need to determine the reorder amount. The reorder point must be set to ensure product availability and avert stock-outs (high fill rate). The reorder point ensures that the department will not run out of stock before the next delivery is received. The reorder quantity must be set to ensure appropriate quantity on hand is maintained without overstocking (inventory turnover)

Order-processing systems identifies when an item is at the designated reorder point and places an order to replenish the item. Order processing systems can be manual or computerized. Types of order-processing or inventory control systems are the:

- Two-bin system
- Periodic-review system
- Traveling-requisition system
- Perpetual-inventory system
- Computerized perpetual-inventory system

Two-bin system

In a two-bin system, each item has a quantity equal to the item’s reorder quantity in

another bin. Once the first bin is depleted, then the item needs to be reordered. There must be sufficient quantity in the back-up stock (2nd bin) until order arrives. The advantage is that the two-bin system is simple but it is disadvantageous for managing bulky items.

Periodic-review system

Periodic review systems require that we perform a periodic inventory count of items. Items at or below reorder point are ordered. This can be performed quickly by an experienced technician. A disadvantage is what happens when that experienced person is out sick or on vacation.

Traveling-requisition system Is a process for placing orders for items that requires each item to have a card (traveling requisition) with it’s necessary information for Purchasing to place order, and returned to CS with expected delivery date and other pertinent information.

Perpetual-inventory system

A record is kept for all receipts and issues from CS or the supply inventory location. Based upon the transaction, receipt or issue, reordering can be initiated if the quantity on-hand reaches or falls below the reorder point. This system can be managed manually, each item has a card, and each transaction is recorded and the card serves a similar function as the traveling requisition.

Computerized perpetual-inventory systems

A computer enables the electronic management of item receipts, issues and reorder processing in the same manner as above in the manual perpetual inventory system. Use of a computerized system can improve department efficiency; improve inventory management; provide activity reports by item or expense accounting for departments; reports about reorder points and quantities; inventory turnover; line-item fill rates, etc. Information can enable a healthcare institution to improve customer service; negotiate better supply contracts; identify high-use departments; identify lower-cost alternatives to high-cost items. Computerized

