

Inventory Control Best Practices

Objectives

- At the end of this presentation, you will be able to:
 - Define inventory control
 - Identify different cost types and methods used to decrease them
 - Define inventory turns
 - Identify why inventory control is a high priority
 - Establish Min/Max on-hand levels.

Inventory Control

- Inventory control is the supervision of the supply, storage, and accessibility of items in order to ensure an adequate supply without excessive oversupply.

(source : wordnetweb.princeton.edu/perl/webwn?s=inventory%20control retrieved: 9/8/2010)

Inventory Control

- Effective inventory control can dramatically minimize total inventory costs.
- Pharmacy purchasing staff and management need to work together to establish guidelines for their pharmacy.
- All pharmacy staff members should have at least a basic understanding of the processes to help ensure success.

Why a High Priority?

- Reduces overall pharmacy costs
- Reduces expired medication
- Reduces excess inventory
- Increases inventory turns

Inventory Costs

- There are more cost to maintaining inventory than just the cost of purchasing the products.
- They can be broken down into four categories:
 - Acquisition Cost
 - Procurement Cost
 - Stock-out Cost
 - Carrying Cost

Acquisition Cost

- This is the price paid for the product (i.e. the invoice cost).
- The acquisition cost can vary depending on several factors
 - Vendor contracts
 - GPO contracts
 - Non-contract pricing
 - Wholesaler fees or markups
- Purchasing Contracts are the best way to reduce Acquisition Cost

Procurement Cost

- Procurement cost includes the cost of ordering and receiving products including
 - Labor costs
 - Delivery costs
- These are usually an average dollar amount per purchase order.
- Procurement costs are set by the supplier and are generally not negotiable.

Stock-out Cost

- The cost associated with running out of product when a patient needs it, such as
 - overnight delivery charges
 - courier fees
 - drop-ship fees
 - labor involved in locating the product
- Stock-Out Costs can be reduced by closely monitoring inventory levels.
- Some Stock-Out costs can't be avoided

Carrying Costs

- The cost of maintaining the inventory in the pharmacy.
- Includes
 - Expiration
 - Deterioration / Damage / Waste
 - Diversion
- Stock rotation and monitoring of on hand stock will help reduce carrying costs.

Inventory Turns

- The amount of inventory on hand versus purchase history. (Annual Cost of Sales / Current Inventory Value)
- Goal
 - Varies by institution size
- Financial Impact
 - Reduced Inventory Value

Inventory Turns

- Past 12 months usage is what got you the turns you are at.
- To increase Inventory turns, you need to decrease inventory on hand.
- Setting Min/Max on Hand levels can help you achieve these goals

Min / Max on hand

- Calculated from 12 month Purchase History Report
- Minimum
 - Re-order when count falls below this level
- Maximum
 - Do not order more than this level
 - Hint: Must be at least min + full package qty

Min / Max on Hand

- Determining factors
 - Delivery schedule
 - Order turn around time
 - Suppliers ability to supply
 - Inventory locations
 - Product stability

Min / Max on Hand

- Derived from 12 month purchase history
 - If using shorter time period, the number of days in the time period will need to be determined.
- Best practice for days on hand stock
 - 5 day minimum
 - 7 day maximum

Min / Max on hand

➤ Formulas

➤ Max = ((Utilization Qty X Pkg Qty) / Days in time period) X 7
> ((1165 X 10) / 365) X 7 = 224 or 22 full packages

➤ Min = ((Utilization Qty X Pkg Qty) / Days in time period) X 5
> ((1165 X 10) / 365) X 5 = 159 or 16 full packages

Generic Name	NDC	Strength	Form	Size	Units
ENOXAPARIN SODIUM	00075-0620-40	40MG/0.4ML	SYRN	10 X 0.4ML	1165

Min / Max A B C Ranking

➤ A – High Cost – Fast Mover

- > 80% Volume
- > 20% Value

➤ B – High Volume – Fast Mover

- > 10% Volume
- > 15% Value

➤ C – Low Volume – Slow Mover

- > 10% Volume
- > 65% Value

Identifying A List Products

➤ From Purchase History Report

➤ Sort in Descending order by Dollar Amount

➤ Select top 20% of items

Min / Max on Hand A List

Generic Name	NDC	Strength	Form	Size	Units	Dollars	Max	Min	-5% Max	-5% Min
ENOXAPARIN SODIUM	00075062040	40MG/0.4ML	SYRN	10X.4ML	1274	\$248,510.66	244	175	232	166
DESFLURANE	10019064124	NOT AVAILABLE	LIQD	240 ML	1557	\$194,473.65	30	21	28	20
PIPERACILLIN/TAZOACTAM	00206885416	3.375GM	PWVL	10X1EA	1060	\$171,522.14	203	145	193	138
TIROFIBAN/0.9% NACL	25208000202	50MCG/ML	IVSL	250 ML	361	\$141,679.56	7	5	7	5
DAPTOMYCIN	67919001101	500MG	PWVL	10X1EA	60	\$126,713.40	12	1	11	1
REGADENOSON	00469650189	0.08MG/ML	ANSY	5 ML	660	\$122,067.00	13	9	12	9
ABCIXIMAB	00002714001	2MG/ML	SDV	5 ML	244	\$115,091.31	5	3	4	3
PIPERACILLIN/TAZOACTAM	00206885516	4.5GM	PWVL	10X1EA	415	\$84,380.37	80	57	76	54

Identifying B List Products

- From remaining Purchase History data
- Re-sort in Descending order by purchase quantity
- Select top 50 line items

Min / Max on Hand B List

Generic Name	NDC	Strength	Form	Size	Units	Dollars	Max	Min	-5% Max	-5% Min
ISOPROPYLALCOHOL	00574006716	70%	SOLN	16 OZ	288	\$541.56	6	4	5	4
SEVOFLURANE	10019065164	N/A	LIQD	250 ML	252	\$36,985.20	5	3	5	3
TUBERCULIN PURIF PROT DERIV	49281075221	5TU/0.1ML	MDV	1 ML	105	\$2,713.20	2	1	2	1
HEPARIN SOD PORCINE/0.9% NACL	00338043103	2UNITS/ML	IVSL	18X500ML	89	\$2,576.68	31	22	29	21
BACITRACIN	63323032930	50MU	PWVL	1 EA	80	\$558.40	2	1	1	1
SODIUM CHLORIDE 0.9% IRRIG	00338004804	0.90%	SOLN	12X1000	65	\$911.40	15	11	14	10
ISOPROPYLALCOHOL	00574006716	70%	SOLN	16 OZ	60	\$113.40	1	1	1	1
CETACAIN	10223020101	14-2-2%	SPIN	56 ML	40	\$1,616.40	1	1	1	1

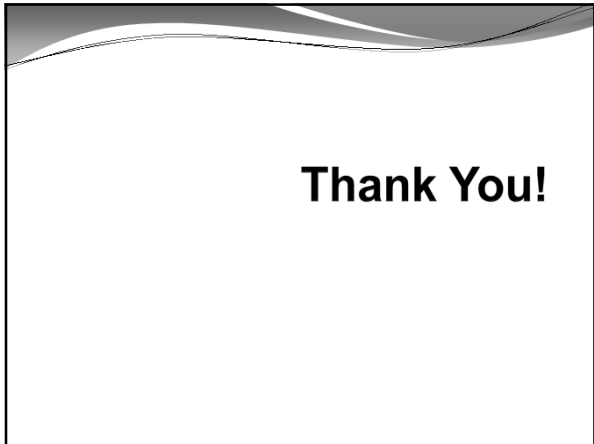
Identifying C List Products

- All remaining items on Purchase History Report
- May want to try to eliminate as many of the lowest use items as possible

Min / Max on Hand

- Key points
 - Include all account numbers / suppliers
 - Convert package purchases to individual units
 - Combine multiple source items to get full utilization history.
- Start slowly
 - 20-25 drugs
 - Monitor
 - Repeat

Questions?



Inventory Control Best Practices
Post Test

- Inventory Control is the supervision of the supply, storage, and accessibility of items in order to ensure an adequate supply without excessive oversupply.
 True
 False
- The four types of inventory cost are
A. Procurement, Supply, Stock-out, Delivery
B. Acquisition, Procurement, Stock-out, Carrying
C. Inventory, Supply, Delivery, Contract
D. None of the above
- Inventory Turns are
A. Stock rotation on the shelf
B. How quickly orders are delivered
C. The amount of inventory on hand versus purchase history.
D. All of the above
- Why is Inventory Control a High Priority? (Select all that apply)
 Reduces overall pharmacy costs
 Reduces expired medication
 Reduces excess inventory
 Increases inventory turns
- The formula for establishing Max on hand levels is ((Utilization Qty X Pkg Qty) / Days in time period) X 14.
 True
 False

Inventory Control Best Practices
Post Test (Key)

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 Acquisition, Procurement, Stock-out, Carrying
C. Inventory, Supply, Delivery, Contract
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A. Stock rotation on the shelf
B. How quickly orders are delivered
 The amount of inventory on hand versus purchase history.
D. All of the above
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