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Merchandise management and the pharmacy technician

By Valerie Connors

Statement of objectives

Upon successful completion of this lesson, the technician should be able to:

1. Understand the basics of a perpetual inventory system.
2. Recognize the role of the pharmacy technician in merchandise management and expand their role accordingly.
3. Understand the key elements of ordering, receiving, storage and returns.

Introduction

Inventory is the "entire stock of products on hand at any given time in an institution or business."¹ In a pharmacy dispensary, inventory is the second largest dollar investment at any given point in time, second only to wages and benefits.² Management of this important asset is the responsibility of the entire pharmacy staff, however its technical nature lends itself to an expanded role for the technician. A motivated, experienced pharmacy technician may assume ultimate responsibility for setting up and/or monitoring an optimal merchandise management system.

In this lesson, the basics of merchandise management will be covered with a focus on the community pharmacy dispensary.

Merchandise management

The balance between sales and inventory levels must be carefully managed in order to achieve the pharmacy's desired level of profitability.³ Controlling inventory involves accounting for both the items and the dollar

value of inventory and includes receiving, storage, handling returns and taking physical counts. In order to ensure the desired profit, this control must be linked to purchasing. Merchandise management is the term used to describe the activities of inventory control and purchasing.³

The goal of any merchandise management system should be to maximize customer service and profitability while minimizing investment. A well-managed system provides: excellent customer service, rare stock outs, few returns, minimal number of orders placed, low procurement and carrying costs, positive cash flow, and an acceptable profit. Poor management of inventory obviously results in the opposite.

Legislation

All pharmacies must follow provincial and federal legislation. The National Association of Pharmacy Regulatory Authorities (NAPRA) has harmonized standards across Canada, simplifying much of the provincial variation in leg-

islation. However, the Food and Drugs Act, Narcotic Controlled Act and specific provincial legislation must also be adhered to. The pharmacy technician should be familiar with this legislation and understand how it relates to their role in inventory control and purchasing. Pharmacists must be involved in the inventory process, especially in relation to narcotics and controlled substances. Any merchandise management system must be set up within this legislative framework. Copies of the legislation are available in the pharmacy and/or online from the relevant organization.

Inventory systems

There are many different inventory systems available, from simply writing a missing item in a "want book" to sophisticated computer systems. Each system has its pros and cons; anyone interested can find a thorough discussion in *Pharmacy Management in Canada*.³ The majority of pharmacies use a perpetual inventory system.^{2,3}

Perpetual inventory system

As the name implies, this system continually monitors all inventory items. Before the advent of computers this system was extremely time consuming and only as accurate as the information collected. Computers have turned this system into the most accurate and effective inventory system.³ All pharmacy software has the capability of running a perpetual inventory control system. Until recently, this required a large amount of work to set up and maintain, as each item in the inventory had to be entered into the system and then each invoice entered as received (including prices, on-hand quantities and reorder points). Bar code scanning and online ordering have greatly simplified these steps as products can be scanned into the system using the UPC code or invoice, and pricing information can be updated online by the supplier or software vendor. The on-hand quantity must be verified with a physical count to ensure accuracy. The entire inventory is normally counted at least yearly, but most pharmacies will do a physical check of high-cost or fast-moving items more frequently.

A perpetual inventory system is, however, only as good as the information it is fed. One of the critical pieces of information in this type of system is the reorder point (a set level of inventory that triggers the need to reorder

the product). For each product and size, the pharmacy must establish an inventory level, based on demand, that should be maintained for each product. This level fluctuates and depends on many factors, such as generic brands coming onto the market, new trends in health maintenance and recalls, to name a few. In more sophisticated computer systems, reorder points are automatically adjusted according to sales. Whether manual or automatic, it is essential to constantly review and/or adjust the reorder point.

Purchasing

Wise purchasing is a key component in maintaining an appropriate investment in inventory. It requires knowledge, experience and policies created by pharmacists/owners/managers. With adequate education, training and experience, however, technicians can assume this responsibility, allowing pharmacists to concentrate on patient care.

There are three critical decisions in purchasing: what, where and how much.

What to purchase is critical, and an informed decision can be based on information such as:

- Type of pharmacy. For example, does the pharmacy specialize in natural products or diabetic supplies?
- Type of clientele. Does the pharmacy want to attract seniors or young families?
- Historical data. Available

on most computer programs, historical data can provide information on what and how much was sold in the past and may be able to predict future requirements.

- Monitoring trends, such as new research or changing attitudes towards health maintenance. Pharmacists, sales representatives and suppliers can be valuable sources of this type of information, as are print and electronic media. Continuing education can also help the technician keep up to date with trends.
- Customers' requests and purchasing habits of other pharmacies in the area.

However, even the best information and research cannot predict outbreaks such as SARS and other unpredictable increases and decreases in sales or disruption in the distribution chain. For example, a recall of a product is unpredictable, yet it is essential to have an excellent inventory system to handle the recall process, along with some knowledge of what products will be substituted for the recalled product. Back orders from suppliers create another challenge and alternate sources of supply are necessary.

In order to maximize customer service, which includes maximizing health outcomes of the pharmacy's clientele, a pharmacy may need to stock slow-moving items. However, an attempt to carry all products needed by patients can result in excessive inventory.

Patients can be encouraged to order unique products in advance. As technicians know, some medications are needed immediately or very quickly while others may not require such urgency. Working with the pharmacist, technicians may be able to identify these medications and determine stock levels. A system to obtain medications quickly and efficiently when out of stock or demanded unexpectedly must be in place.

Where to purchase is a key decision and should not be based solely on the cost of the product. Medications can be purchased from wholesalers or the manufacturer (direct or through the sales representative). Chain stores may purchase from their own warehouses. According to *Trends 2002*², 75 per cent of pharmacy's medication orders are supplied by wholesalers (excluding franchises). This reflects the increasing trend of manufacturers to discontinue direct orders completely or to increase the dollar amount for a minimum order to such a high level that many pharmacies cannot realistically meet it.

The main advantage of ordering from the manufacturer is the lower price. Manufacturers also offer other services (which may not require a purchase), such as drug information, continuing education, patient education services and automatic shipments of new products. Sales representatives for a specific manufacturer can also offer many benefits, often taking over the entire responsibility for ordering and returning their products. A good sales representative can be a valuable ally. The cost of ordering from many different suppliers must be balanced against the savings of the lower price.

Wholesalers may be slightly more expensive but

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offer one-stop shopping (greatly decreasing bookkeeping, receiving, etc.), usually same or next day delivery, on-line ordering, emergency customer pick up, convenient payment terms, customer-service representatives, store planning, inventory control services and incentive programs.³

Other issues to consider when deciding where to purchase are return policies, credit terms and the time required to place and process an order.

How much to purchase is closely connected to what to purchase, and much of the same information can be used.

A complete understanding of inventory, its movement, financial and shipping terms, as well as the pharmacy's cash flow position, are needed in order to make the ideal purchase decision. For further information, interested technicians should refer to *Pharmacy Management in Canada*,³ pharmacists and accountants.

Ordering

Ordering—depending on the technological capabilities and time available in the pharmacy—may be done by telephone, fax, online, mail, email, handheld device or sales representative. A key to efficient ordering (assuming the purchase decision is ideal) is knowing when the item is needed and matching it to the suppliers cut-off times so that the product is delivered when required.

Many pharmacies now order on-line, which is quick and simple once the initial set up is complete. A daily report should be checked to ensure that it actually lists what is required, paying close attention to anything that seems excessive, insufficient or is missing. Corrections are made and the order is forwarded to the supplier, where

the computer system determines if it can fill the order and automatically returns a message of confirmation or exceptions. The pharmacy then accepts the order into its system so that the ordering process is updated and a new report can be run the next day. Despite the simplicity of this system, the technician still needs to be vigilant in managing the system to avoid errors.

Receiving

Receiving medications from a supplier is a simple but vital step. It is important that the technician be alert for drugs that are outdated, short dated, damaged during shipment, require special storage, missing or chosen incorrectly. Some steps to follow in receiving include:

- Be certain to immediately mark and place into inventory products requiring special storage. These items are normally shipped separately for easy identification. It is essential not to break the cold chain for items such as vaccines (see the National Guidelines for Vaccine Storage and Transportation⁴ for an excellent summary).
- Purchase orders, invoices from suppliers and the drug products sent must be verified item by item against the original order.
- Product stickers should be carefully placed to avoid covering drug names, DINs or UPC codes. The sticker should contain essential information such as purchase date, invoice number and supplier so that if the need to return the item arises, it is unnecessary to find the invoice.
- The supplier should be notified as soon as any discrepancies are noted.
- Narcotic and controlled substances are shipped separately, and their documentation must be verified by a pharmacist and then filed

according to legislation and store policy.

Storage

A pharmacy may arrange to store medications by manufacturer, alpha-generically or by therapeutic class. No matter how products are organized, basic systems should be established to:

- Decrease the chance of medication errors (e.g., look-alike packages and products with look-alike names should not be placed together).
- Rotate stock, ensuring the oldest drug products are dispensed first. Expiry dates should be checked as products are placed on the shelves, as new orders sometimes actually have products with shorter expiry dates.
- Check the inventory on a rotational basis to identify and remove expired products, ensuring that all inventory is checked monthly. This task may be combined with physical counts of the section as desired.
- Identify and tag soon-to-be-expired products.
- Return expired products on a regular basis.

Also, shelving units should be sturdy and provide enough space for each medication in order to minimize breakage and the incorrect selection of drug products.

Returns

Returns will be minimized if purchasing is well done, re-order points monitored and stock properly rotated. Even with the best system, however, products will be ordered in error or will expire before they can be dispensed. Each supplier/manufacturer has a policy and procedure for returns and credits that must be followed, and the technician should be familiar with these. Some general policies are:

- There is often a restocking charge for items ordered in error.
- In general, there is a six to

nine-month window after the expiry date in which a return may be accepted for credit.

- Prior authorization is often required.
- The cost of shipping returns is often the responsibility of the pharmacy.
- Part bottles are often not accepted.
- Returns of narcotics and controlled drugs have legislative constraints that the technician must be familiar with.

Timely handling of returns is essential to the pharmacy's profit. When one bottle of medication can cost hundreds of dollars, it takes very few missed returns to deplete the profit. Credit can be slow in arriving so a system should be in place to ensure its receipt.

Any medications that are not successfully returned for credit or are brought to the pharmacy for disposal by patients must be destroyed. Pharmacy organizations recommend the use of a registered medical waste disposal company for this purpose.⁵ The cost of this disposal is high and technicians should do their part to ensure such disposal is kept to a minimum.

Assessing the effectiveness of inventory management

Computer systems have the ability to generate a great deal of information that is seldom used to its maximum advantage. A survey of pharmacists indicates that although they have pharmacy software that is capable of performing many functions beyond basic "bill and fill," only 37 per cent feel they are making maximum use of the system.² Some examples of available reports are:

- all drug usage;
- single drug usage;
- sales totals; and,
- gross profit.

The technician should become familiar with which reports are useful and use

them regularly, always remembering that the reports are only as accurate as the information in the computer.

An indicator of how inventory is being managed is the inventory turnover rate. This rate is the “cost of goods sold” divided by the “average inventory cost.” A turnover rate of 5 indicates that inventory turns over an average of five times a year. That is, inventory has been sold and replaced at cost five times during the year. For further clarification, “days of inventory on hand” can be calculated by dividing 365 days by the turnover rate. A turnover rate of 5 would mean that the inventory remained unsold on

the shelf for an average of 73 days. An inventory rate that is too high results in stock-outs, while one that is too low results in money being tied up in excessive stock. Each pharmacy must determine an ideal turnover rate for their business.

Summary

Every technician can play a vital role in all aspects of merchandise management. The more knowledge and experience they gain, the more valuable they become in this critical part of pharmacy practice.

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Missed something?

Previous issues of *Tech Talk CE* are available at:

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QUESTIONS

1. All of the following may decrease the need for returns except:

- Choosing a biohazard waste disposal service.
- Rotating stock.
- Carefully checking an order before it is sent to the supplier.
- Making wise purchasing decisions.

2. A technician can assume full responsibility for inventory without the input of a pharmacist.

- True.
- False.

3. The key elements in the purchasing process include all the following except:

- What to purchase.
- Where to purchase.
- How to purchase.
- How much to purchase.

4. The perpetual inventory system:

- Is the most accurate and efficient whether performed manually or by computer.
- Is the most accurate and efficient when done by computer.
- Requires very little input and monitoring.
- Is seldom used in pharmacy.

5. When receiving shipments of medications, all of the following are important except:

- Being certain to immediately deal with any medications that require special storage.
- Checking the invoice against what is received.
- Having the pharmacist check all paperwork.
- Separating narcotic and

controlled drugs and the appropriate paperwork for the pharmacist.

6. Most pharmacies make full use of all features of their pharmacy software programs.

- True.
- False.

7. An inventory turnover rate that is too high will result in:

- Excessive inventory.
- Poor cash flow.
- Frequent stock-outs.
- Increased profit.

8. If a pharmacy has an inventory turnover rate of 4 that means that the “days of inventory on hand” is:

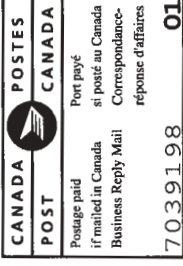
- 73.
- 102.
- 24.
- 91.

9. Which of the following information may be helpful in determining what to purchase?

- Historical data.
- Knowing the type of clientele the pharmacy wishes to attract.
- Keeping up to date with trends.
- All of the above.
- None of the above.

10. How stored medications are arranged or organized may help to prevent medication errors.

- True.
- False.



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TECH TALK • CE**Merchandise management and
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NOVEMBER/DECEMBER 2003

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| <input type="checkbox"/> Retail (chain) | <input type="checkbox"/> Full-time technician |
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Are you a certified technician? Yes No

Please help ensure this program continues to be useful to you by answering these questions.

- Do you now feel more informed about merchandise management? Yes No
- Was the information in this lesson relevant to you as a technician? Yes No
- Will you be able to incorporate the information from
this lesson into your job as a technician? Yes No N/A
- Was the information in this lesson... Too basic Appropriate Too difficult
- How satisfied overall are you with this lesson? Very Somewhat Not at all
- What topic would you like to see covered in a future issue? _____

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