Chapter 7: Dispensing, Billing, and Inventory Management
Dispensing, Billing, & Inventory Management

This chapter provides an overview of inventory management and procedures.
Community (Retail) Pharmacy Operations

A. Work Environment

1. Community Pharmacies sell both OTCs (Over-the Counter) Drugs and legend drugs (prescription only).
2. The Rx area of the pharmacy can only be accessed by authorized employees and is off limits to customers.
3. 70% of Techs work in a Community Pharmacy.
Community (Retail) Pharmacy Operations

B. Technician Duties Related to OTCs

1. **Tech duties include stocking, inventorying, removing expired drugs, ordering and helping customers locate various OTCs.**
   
   a. Techs do not counsel customers about OTCs unless directed by the pharmacist to do so.

2. As more people turn to herbal alternatives for their medication needs, and more medications are reclassified from legend to OTC, Pharmacists spend more and more time recommending OTCs and counseling patients on their use.

3. Over-the-counter drug sales have become a growing market.
Community (Retail) Pharmacy Operations

C. Tech Duties Related to Dispensing Rx Drugs

1. Technicians may greet customers,
2. receive written prescriptions from customers,
3. answer telephones and refer calls to RPh/ Pharm D, and
4. bring up patient’s profile on computer.
5. They are also responsible for getting products from shelf or storage area, as well as restocking shelves and bottles.
6. Techs assist with compounding,
7. prepare Rx labels, and
Community (Retail) Pharmacy Operations

8. package products.
9. Techs also enter billing info, and
10. review auxiliary labels with patients.
11. They count tablets, and
12. verify accuracy.
   a. Duties must be carried out with 100% accuracy.
   b. If you are 99% accurate and fill 200 Rx’s per day (two wrong each day) for a month you have made 60 errors.
A. The Critical Path of a Prescription

1. Prescriptions may be physically presented to a pharmacy by a patient, called in by doctors, or faxed by doctors. Patients may not fax or phone in prescriptions.

2. Techs may accept Rx from customers, but not from doctors writing their own Rx for personal use.

3. Techs may accept phone calls for refills.
Receiving & Reviewing Prescriptions and the Patient Profile

B. The Patient Profile
1. These can be either hard copy (paper) or computerized;
2. it is a record that lists patient’s prescriptions, allergies, personal health information and their insurance (if applicable), as well as other relevant info.
3. Techs may enter profile info into computer.
4. **Techs may interview patients for missing info.** However, the tech would NOT ask a patient about their addiction history. The patient may not be comfortable talking and it is not required for updating a profile by a technician.

5. When a new Rx is filled or refilled, the patient’s profile should be immediately updated.
Receiving & Reviewing Prescriptions and the Patient Profile

6. Examples of items needing to be recorded include the patient’s signature, refusal to provide info to other people, and counseling given or refused.

   a. The patient’s date of birth (DOB) is an important piece of information and it is appropriate to use in third-party billing, distinguishing between patients with the same name, and evaluating the appropriateness of therapy.
Receiving & Reviewing Prescriptions and the Patient Profile

i. **It is NOT appropriate to disclose personal health information (PHI), birth date, to anyone, e.g. marketing company, without written permission from the patient. This is a privacy violation under the Health Insurance Portability and Accountability Act (HIPAA).**
Pharmacy Computer Systems

A. Advantages & Functions

1. **An advantage to using technology in the pharmacy is increased efficiency.**
2. The backup of all patient and prescription data is required.
Pharmacy Computer Systems

3. **Part of the online adjudication process includes checking formulary status.** To determine the co-pay of a prescription, the online adjudication is checking the drug dispensed against a formulary to determine payment.

   a. **A formulary is the name of the document with approved agents to be used in an institution (e.g. hospital) or reimbursable by an insurance plan.**
Pharmacy Computer Systems

4. Computers are used to print labels, and adverse drug interaction and allergy warnings.
   a. Pharmacists are still responsible and potentially liable for identifying possible adverse drug interactions, allergies, and drug/drug interactions even if computer fails to warn them.
   b. Pharm Techs should NOT override computer warnings.
Pharmacy Computer Systems

B. Tracking/Inventory

1. Computers may be used to track inventory and orders.  
   a. Drugs may be identified in a computer database by 
      NDC #, product name, brand name or well known 
      abbreviation.

2. Computerized inventory control subtracts one unit of a 
   product when a prescription is filled, and if the inventory 
   goes below a preset amount, an order is automatically 
   generated to return the supply to the maximum level. 
   a. The order is confirmed with a purchase order, therefore 
      a record of merchandise that is coming in is available. 
      i. Computerized inventory control systems 
         automatically generate a purchase order.
Billing (Third-Party Administration)

A. Billing (Procedures vary from pharmacy to pharmacy)
   1. The part the patient pays the pharmacy is called the co-payment, and the amount reimbursed to the pharmacy for the balance of the payment is called the third-party payment.
Billing (Third-Party Administration)

B. Third-Party Administration

1. This type of billing involves the pharmacy billing the third party, usually the patient’s insurance provider.

2. Valid prescription cards should have the name of the insured person, the insurance carrier, a group number, cardholder identification number, expiration date, amount of co-payment.

3. Information is entered into a computer or, into a manual file system and onto a universal claim form.

   a. Universal claim forms are used to process third party claims.
Billing (Third-Party Administration)

4. Billing to insurance companies may be done electronically (called adjudication), directly to the insurance company, or to a Prescription Benefits Manager (PBM).

5. With adjudication, the pharmacy is notified immediately whether the drug is covered and what portion, if any, should be billed to the patient.

6. **PBM administers prescription benefits for covered individuals from many different insurance companies.**
Billing (Third-Party Administration)

C. Payments

1. A deductible is an amount the patient must pay before an insurance company will begin paying its portion.

2. **A third-party payment is reimbursement to the pharmacy for prescription services.**

3. Co-pay is how much the patient pays for each Rx.
   a. Co-pays may be higher for brand and lower for generic or be lower for formulary drugs. SIV-28 Rev 06/12

4. The cost of medications is usually based on AWP- Average Wholesale Price.
Billing (Third-Party Administration)

D. Types of Insurance

1. Health Maintenance Organization (HMO) ... patient sees a primary care physician that contracts with the insurance company, patient pays co-pay and doctor bills insurance at a lesser rate; may require prior authorization before filling certain meds.

2. Preferred Provider Organization (PPO) ... patient can choose a doctor from a list of preferred doctors, patient pays co-pay to doctor; insurance may pay a percentage of the cost of medications and patient pays the rest.
Billing (Third-Party Administration)

3. Medicare ... government insurance for seniors, disabled, dialysis patients; works like a PPO (Medicare Part D- Rx program for Medicare).
   a. June 1, 2004 Medicare began paying for some medications through discount cards.
   b. Medicare pays for some medical devices such as walkers, breathing machines, some diabetic supplies, and bedside commodes.

4. Medicaid- state government insurance for the low income.
   a. Patient may not pay any portion or may have a shared-cost Medicaid (deductible).
   b. Medicaid may or may not include prescription benefits.
Billing (Third-Party Administration)

5. Workers’ Compensation- paid by employers to cover employees injured on the job.
   a. Injury must be work related.
   b. Patient pays nothing.
   c. Claims filed electronically to a Work Comp Carrier.
   d. Medications usually require pre-authorization before they will pay for them.

6. Capitation is an amount of money paid per policy holder to a healthcare provider to provide all the needs that the patient has. If the patient does not need anything, then the provider made money; if the patient needs many services, then the fee may barely cover the cost or not at all.
Purchasing, Receiving and Inventory Control

A. Purchasing

1. Independent Purchasing - inventory technician tracks and orders according to set values; purchase is done for only one facility.

2. Group Purchasing - several institutions or pharmacies work together to negotiate better prices and volume discounts.

3. Direct Purchasing - fill out purchase order with product name, amount and price; order sent to manufacturer; no add-on fees; takes lots of time and staff.
4. **Wholesaler Purchasing** – it is a purchasing method that enables a pharmacy to use a single source to purchase numerous products from numerous manufacturers (e.g. Cardinal, McKesson, Morris-Dickson); reduced turnaround time, lower inventory levels, less time; higher purchase cost, supply difficulties, unavailability of meds.

5. **Prime Vendor Purchasing** - pharmacy agrees to purchase a certain percentage or dollar amount from a specified vendor or manufacturer.
6. **JIT (just-in-time) Purchasing** - is done frequently in quantities to meet demand until the next ordering time is called.

   i. It keeps inventory at a minimum but have sufficient stock available for the immediate needs,
   ii. reduces amount of money tied up in inventory;
   iii. supplies must be readily available and inventory needs must be accurately predicted.
Purchasing, Receiving and Inventory Control

B. Receiving is the term that means an order has been delivered and accepted.

1. The person ordering should not be the same person verifying the delivery of the order when it comes in; this is a check system put in place to keep the possibility of theft low, and to keep an employee from over ordering.
Purchasing, Receiving and Inventory Control

2. The arriving order from a wholesaler should be checked against the purchase order.
   a. Checking the order against an invoice is not as effective since this document helps identify if the pharmacy was charged appropriately for items in the order but may differ from the items actually ordered if they are out of stock.

3. Upon delivery, check the name of product, strength, quantity, size and possible damage to the products (cost is not a factor).

4. In case of damage, notify manufacturer or wholesaler immediately; secure authorization to return the shipment.
Purchasing, Receiving and Inventory Control

5. Check expiration dates of drugs; most pharmacies require that they have at least 6 months from the date received (no short dating).

6. After the order is checked in, it should be placed on the shelf or in a designated storage area.

7. **Units with shortest expiration date go in front of the other stock.**
Purchasing, Receiving and Inventory Control

8. Check label three times: when it’s pulled; when it’s prepared (counted); when it’s returned to the shelf.

9. When a product is out of stock, the pharmacy will need to get it from another source or borrow from another pharmacy.

10. Techs should give special consideration to ordering controlled substances and investigational drugs.
Inventory Control

A. Inventory is the entire stock of products on hand at a given time.

1. **An advantage of monitoring inventory is the decrease in capital that is tied up;** it is a way to contain costs and keep health care expenses down.

2. **Inventory is the list of all the items available for sale.**

3. **Inventory value is the value of merchandise in stock.**
Inventory Control

4. When you have more receipts than expenses it means that more was taken in (income) than was paid out (expenses), also known as profit.

5. It is important to have a record of drugs sold so that you can restock supply.
   a. A record of drugs purchased for sale...although you may have purchased an item once, it may not still be in stock; therefore it is not part of the inventory.

6. The pharmacist should determine how much inventory should be kept on hand.
Inventory Control

Example 1:
The maximum inventory level for ampicillin capsules is 1000. At the end of the day, the computer prints a list of items to be reordered; the list indicates an inventory level of 75 ampicillin capsules. How many capsules should be ordered to restock the inventory to the maximum? If the drug wholesaler supplies ampicillin in bottles of 25, 100, 250, and 500 capsules, how many of each bottle size will fill the order (assuming that you begin with one 500-capsule bottle)?
Inventory Control

To replenish the ampicillin inventory to the maximum level (1000 capsules), first determine how much the present level differs.

1000 capsules - 75 capsules = 925 capsules

According to this calculation, 925 capsules need to be purchased. The drug can be purchased in bottles of 500, 250, 100, and 25 capsules. It is good business practice to purchase the smallest possible number of bottles because large quantity containers are usually a more economical purchase.
Inventory Control

1 bottle of 500 capsules + 1 bottle of 250 capsules + 1 bottle of 100 capsules + 3 bottles of 25 capsules = 925 capsules

Note: Although this example is important to illustrate the calculation, realistically, in this situation, a single package of 1000 would most likely be ordered.
7. An ordering technique that requires the staff of a pharmacy to write down items they used so they will be reordered, is to write it down in an order book, a.k.a. A Want Book.
Inventory Control

B. PAR (Periodic Automatic Replenishment) level- where minimum levels and maximum levels are set in advance.

C. Inventory and purchasing may be computerized, with the computer generating the orders.
Inventory Control

D. Physical inventory should be taken to determine average inventory and turnover rate.

1. A physical inventory of controlled substances in schedule II must be done biennially, or every 2 years.

2. The average inventory allows a pharmacy to determine the number of times that pharmaceuticals are repurchased in a specific period of time, usually annually. The following equation is used to calculate average inventory:

\[
\text{average inventory} = \frac{\text{beginning inventory} + \text{ending inventory}}{2}
\]
Inventory Control

E. **Turnover rate** is the number of times the entire stock is used and replaced each year and calculated with the following formula:

\[
\text{turnover rate} = \frac{\text{annual dollar purchases}}{\text{average inventory}}
\]

Formula: **annual purchases divided by the average inventory = turnover rate**

1. Annual Purchases $550,000.00.
2. Average Inventory $68,750.
3. Turnover Rate = 8 Times.
Inventory Control

Example 2: Tom’s Pharmacy has a total inventory value of $103,699.00. It had sales last week of $37,546.00 and the cost to the pharmacy of the products sold was $28,837.00. What should Tom’s days’ supply be to keep its inventory value stable?

Tom’s average daily product costs were the following: $28,837.00 divided by 7 days = $412.00 (rounded)
Inventory Control

Now according to the previous formula, dividing the value of the inventory by the average daily product costs approximately equals the number of days’ supply.

\[
\text{number of days’ supply} = \frac{\$103,699.00}{\$412.00} = 25
\]

So in 25 days, Tom’s Pharmacy will have sold products approximately equal to the value of its inventory.
F. Floor stock items in an institution tend to be items where usage is high, such as OTC products, e.g. Maalox, Tylenol.

1. When meds are stocked “on the floor” (i.e. floor stock items), in a patient unit for easy access, the risk of medication errors is increased because the checks and balance among physician order, nursing, and pharmacy is not adhered to.