

INTRODUCTION

- Retail pharmacy (medical shop, chemist shop) called as community pharmacy.
- Community Pharmacy Management refers to the practice of overseeing and coordinating the daily operations of a community pharmacy, including financial management, inventory control, staff management, and customer service.
- Community pharmacy managers are responsible for ensuring that their pharmacy is run efficiently and effectively, and that it meets the needs of its patients and the community it serves.

Legal requirements to set up a community pharmacy

- Community pharmacy requires compliance with legal requirements and regulations set by regulatory bodies such as the Pharmacy Council of India (PCI). The following are some of the legal requirements to set up a community pharmacy in India:
- 1. Registration: Before setting up a community pharmacy, the owner must register the pharmacy with the PCI. The registration process involves filling out an application form and providing documents such as proof of ownership, pharmacy layout plan, and educational qualifications of the pharmacist.

2. Location: The pharmacy must be located in an easily accessible area with adequate space for storage, dispensing, and patient counseling. The pharmacy must also be located at least 200 meters away from another registered pharmacy.

3. **Infrastructure:** The pharmacy must have proper infrastructure and equipment such as air conditioning, refrigeration, computer, and software to manage inventory and patient records.

4. Pharmacist: A qualified registered pharmacist must be present in the pharmacy at all times during working hours. The pharmacist must have a D.Pharm or B.Pharm degree from a recognized institution and a license to practice.

5. Drug Storage: The pharmacy must have proper storage facilities for drugs and other products. The storage area should be clean, well-lit(lighted), and well-ventilated.

6. Dispensing: Drugs should be dispensed only on the prescription of a registered medical practitioner. The pharmacist must ensure that the drugs dispensed are of the correct dosage and formulation.

7. Record Keeping: The pharmacy must maintain accurate and up-to-date records of drugs dispensed, drugs received, and inventory management.

8. Adherence to Regulations: The pharmacy must comply with all regulatory requirements set by the PCI and other regulatory bodies, such as the Drugs and Cosmetics Act



Site selection requirements:

The site selection is one of the most important success parts of any business. Numbers of factors are required to consider during the site selection. Following factors are considered for the selection of proper site for drug store.

1. Hospital/Nursing Homes:

• Near by hospital, drug store location is quite good because maximum patients are moving toward the hospital for treatment and also multi-facilities are available near to the hospitals.

2. Drug Store market:

- It was found that in good cities one is the common place known as 'Bazar'. This is one of the most suitable location for drug store if potential is very high and dedication for business.
- It is true if more retail drug stores at one place, people always stop to purchase drugs because they think availability of all types medicines are only in this place.

3. Flow of Traffic:

- The best way is to select left hand side or right hand side of road where suitable parking place is available. Identify the purchasing power of particular side and select the location accordingly.
- In the way of people's office site is good location for drug store. One way traffic should be avoided, location near traffic signals have to face the parking problems.

4. Near by Amenities:

- Enough parking, toilets, small play ground etc., are always advisable particularly when you are selecting the location in the market.
- 5. Near by Common Requirements (Hotel, School, Cinema, Play Ground etc.):
- Near all these point from morning to evening all people are going because of any reason. These points are found most suitable for drug store business.
- 6. Business Locality:
- Number of people coming to such locality is very high and if the shop is made with modern and high-tech, many people can purchase the drugs simultaneously but required more investment for establishment of the business.

Pharmacy designs and interiors:

- The general design and construction of a hospital pharmacy should consider its functionality. The location and size should have enough space for personnel and inventory movement, work processes, and activities.
- Built-in storage and fixed equipment should be provided for storing documents, bulk supplies, dangerous drugs, psychotropic substances, portable medical gas cylinders, and refrigerated and cold-chain items. Drainage systems should be present outside the premises.

Structural Design

- 1) Wall: The walls should be of non-porous material and plastered on both sides. The indoor wall finishing should be of washable antifungal paint and the outdoor finishing should be of weatherproof paint. The walls for the cold rooms should be of special building material and design to prevent condensation.
- 2) Floor: The floor should be of concrete and smoothly plastered. The floor finishing should be of a non-slippery heavy-duty material to withstand heavy loads and traffic. The floor should be nonporous, damp-proof, and resistant to detergent. The floor-to-ceiling height should range from 15 30 feet according to the functional area and handling equipment used.
- 3) Ceiling: The ceiling should be of fire-retardant



- 4) **Roof:** The roof should be pitched or sloped to prevent heavy rain damage.
- 5) **Door:** The doors should be of fire-retardant material. The doors should have two leaves and should be sufficiently wide to allow free and easy movement of supplies and handling equipment (such as forklifts and stackers). The exit doors should be purposefully located and fitted with luminous emergency exit signage.
- 6) Window: The windows should be available at workstation, office, and staff areas, but not in storage areas.

Receiving Area

- 1) Loading and Unloading Area: This area should be adequately spaced and properly sheltered by taking care of the vehicle height.
- 2) **Receiving Counter:** It should have adequate waiting space and should be equipped with suitable office furniture and equipment.
- 3) Sorting and Unpacking Area: This area should be adequately spaced to enable the sorting and checking of goods. The space should be sufficient for the utilization of a forklift.
- 4) **Transit/Holding Area:** The transit/holding area should be adequately spaced for storing: i) Items requiring further clarification/investigation before receiving, ii) Transit items not requiring special storage conditions, and iii) Pallets.
- 5) **Disposal Room:** This room should store discarded items (like, used boxes, wrappers, and plastic covers).

Storage Area

1) General Storage Requirement:

The storage area should be provided with air – conditioning facilities for 24 hours. The electrical supply to refrigerators, freezers, cold rooms, and air conditioning facilities should be linked to the hospital emergency power supply. A computerized alarm system should be connected to the main electrical control system of the hospital for detecting the electrical failure of cold chain equipment. Adequate space should be provided for forklifts, stackers, and trolleys. The area should have sufficient numbers of pallets, shelves, and racks.

2) Drug Store:

It should have adjustable, modular, heavy-duty open racks for storing packages of different sizes. It should have a sufficient storage area for bulk items. It should be equipped with heavy-duty plastic pallets for storing bulk items and larger cartons off the floor. These pallets should be designed to be used with forklifts to move around groups of larger items



3) Dangerous Drugs/Psychotropic Substances Store:

This area is meant for storing dangerous drugs/psychotropic substances, thus should be kept under lock and key in a special room/cabinet with an alarm system.

4) Cold Room/Pharmaceutical Refrigerator/Freezer Area:

This area should be provided based on the functionality of the hospital. It should be present within the drug store for storing drugs that require low storage temperature (like vaccines, antisera, and other biological products). Every cold room/pharmaceutical refrigerator/freezer should be equipped with a computerized temperature recorder system.

5) Intravenous (IV) Fluid Store:

This area should be adequately spaced to accommodate hemodialysis and peritoneal dialysis solution, and intravenous solutions. The space should also be sufficient for using the forklift.

6) Surgical Store:

This area is designed for storing bulk surgical/consumable/disposable items /Xray films. It should have adjustable, modular, and heavy-duty open racks. It should be provided with adequate space for bulky items.

7) Non-Drug Bulk Store:

This area is designed for storing dispensing bottles, containers, labels, and envelopes. It should have adjustable, and heavy-duty open racks. It should be provided with adequate space to allow easy movements.

Vendor selection and ordering Procurement:

Vendor selection and ordering procurement in pharmacy involves the process of identifying and evaluating potential suppliers, selecting the best supplier(s) to meet the pharmacy's needs, and placing orders with the chosen vendor(s) for pharmaceutical products, medical supplies, and other related items. Here are some steps involved in the procurement process for pharmacies:

- 1. Determine the pharmacy's needs: The first step in the procurement process is to identify what the pharmacy needs. This includes identifying the types of pharmaceutical products, medical supplies, and other related items required to meet the pharmacy's needs.
- 2. Identify potential suppliers: Once the pharmacy has determined its needs, the next step is to identify potential suppliers. This can be done through research and networking with other pharmacies, industry associations, and trade shows.
- 3. Evaluate potential suppliers: After identifying potential suppliers, the pharmacy should evaluate them based on their reliability, quality, pricing, delivery time, and other factors that are important to the pharmacy.
- 4. Select the best suppliers: Based on the evaluation, the pharmacy should select the best suppliers that meet its needs and requirements.



- 5. Negotiate contracts: Once the pharmacy has selected the suppliers, it should negotiate contracts with them. This involves agreeing on the terms and conditions of the agreement, including pricing, delivery time, payment terms, and any other important details.
- 6. Place orders: After the contracts have been negotiated, the pharmacy can begin placing orders with the selected suppliers.
- 7. **Track orders and performance:** The pharmacy should track the orders placed and monitor the performance of the suppliers to ensure that they are meeting the agreed-upon terms and delivering the expected quality of products and services.



Inventory control methods:

Effective inventory control is an essential aspect of managing a pharmacy. Proper inventory control can help reduce costs, minimize waste, and ensure that the pharmacy has the necessary medications and supplies on hand to meet the needs of patients.

Here are some common inventory control methods used in pharmacies:

- 1. First-In-First-Out (FIFO) Method: This method involves using the oldest stock first to minimize expiration or spoilage of medication. It is particularly useful for managing perishable items like vaccines.
- 2. Minimum-Maximum Method: This method sets a minimum and maximum inventory level for each medication or supply. When the inventory level falls below the minimum level, the pharmacy orders more stock to reach the maximum level.
- 3. ABC Analysis: This method involves categorizing items based on their level of importance or usage. Class A items are the most important and highest in usage, while Class C items are the least important and lowest in usage. This helps prioritize inventory control efforts.
- 4. Continuous Review Method: This method involves monitoring inventory levels on a regular basis and placing orders to replenish(restore) as needed. It is suitable for managing fast-moving items with a predictable demand.

- 4. **Barcoding and Scanning:** This method involves using a barcode system to track inventory levels and manage stock. Barcodes are scanned to identify products and monitor their usage, allowing for accurate inventory management and minimizing the risk of errors.
- 5. Automated Inventory Management Systems: This method involves using computerized software to manage inventory levels and automate the ordering process. It helps streamline the inventory management process and ensures accurate stock levels.

Inventory management:

Inventory management is crucial in the pharmacy setting to ensure that the right medications and medical supplies are available when needed. Proper inventory management can help to reduce the risk of stockouts, minimize waste, and ensure that the pharmacy is able to meet the needs of its customers.

Here are some key strategies for effective inventory management in a pharmacy:

1. Set par levels:

Determine the minimum and maximum levels of inventory that you need to maintain for each medication or supply. This will help you to order products in a timely manner and avoid running out of stock.



- 2. Track expiration dates: Ensure that you have a system in place to track expiration dates and remove expired products from your inventory. This will help you to avoid dispensing expired medications or supplies, which can be dangerous and lead to legal liability.
- 3. **Conduct regular inventory checks:** Schedule regular inventory checks to ensure that your actual inventory matches your records. This will help you to identify any discrepancies(difference between two things that should be the same) and take corrective action.
- 4. Use a computerized system: Consider using a computerized inventory management system to help you track inventory levels, order products, and manage expiration dates. This can help you to save time and reduce errors.
- 5. Monitor trends: Monitor trends in medication usage and adjust your inventory levels accordingly. This can help you to avoid overstocking or understocking certain products.
- 6. Work with suppliers: Establish relationships with suppliers and work with them to ensure that you receive timely deliveries and can quickly address any issues that arise.



Financial planning and management:

Financial planning and management are essential skills for pharmacists who want to run a successful pharmacy business. Here are some key areas to consider:

- 1. Budgeting: Creating a budget is the foundation of financial planning. Pharmacists need to know how much money they have coming in and going out each month. This allows them to allocate resources effectively, set financial goals, and monitor their progress.
- 2. Cash flow management: Managing cash flow is critical for pharmacies, as they need to maintain adequate cash reserves to pay suppliers and cover expenses. By tracking cash inflows and outflows, pharmacists can identify potential cash shortages and take steps to prevent them.
- 3. Inventory management: Managing inventory is crucial for pharmacies, as they need to balance maintaining enough stock to meet demand while avoiding excess stock that ties up cash. Implementing an inventory management system can help pharmacists track stock levels, monitor expiration dates, and identify slow-moving items.

- 4. Cost control: Controlling costs is vital for pharmacy businesses. Pharmacists need to be mindful of expenses such as rent, utilities, wages, and supply costs. By keeping a close eye on these costs, they can identify areas where savings can be made and take action to reduce expenses.
- 5. Revenue management: (Revenue is the total amount of money a business brings in from selling its goods)Pharmacists need to monitor revenue closely to ensure that they are earning enough to cover expenses and generate a profit. This requires careful management of pricing, billing, and payment processes, as well as identifying opportunities for new revenue streams.
- 6. Financial reporting: Pharmacists need to be able to generate financial reports that provide an accurate picture of the pharmacy's financial health. This includes generating balance sheets, income statements, and cash flow statements. Regular financial reporting allows pharmacists to track their progress towards financial goals and make informed decisions about future investments.



Accountancy in community pharmacy:

Accountancy is an essential aspect of running any business, including a community pharmacy. In a pharmacy, accountancy involves managing financial transactions, record-keeping, and financial analysis. Here are some of the key areas where accountancy is important in a community pharmacy:

- 1. Financial Management: Accountancy involves managing the financial operations of the pharmacy, including budgeting, cash flow management, and inventory management.
- 2. Record-Keeping: Proper record-keeping is essential for a pharmacy to ensure compliance with regulatory requirements, track financial transactions, and facilitate analysis.
- 3. Tax Compliance: Pharmacy owners need to keep accurate financial records to comply with tax regulations and minimize tax liabilities.
- 4. Financial Analysis: Accountancy involves analyzing financial statements and performance metrics to make informed decisions about the pharmacy's operations and growth strategies.
- 5. Fraud Detection: Accountancy can help detect and prevent fraud and embezzlement within the pharmacy, protecting the business from financial losses.



Day book:

- A day book is a record of all the transactions that take place in the pharmacy on a particular day.
- It includes details of all the medicines sold, the quantity sold, the price per unit, and the total amount of money collected for each transaction.
- It also includes details of any purchases made by the pharmacy, such as new stock, equipment or other supplies.
- The day book is usually prepared at the end of each day and serves as a record of all the business activities that took place during the day.

Cash book:

- A cash book is a record of all the cash transactions that take place in the pharmacy.
- It includes details of all the cash received, such as sales of medicines, as well as any cash payments made, such as payments to suppliers.
- The cash book is usually updated daily and is used to track the cash flow in and out of the pharmacy. It also helps to reconcile the cash balance at the end of each day, week, or month.



Introduction to pharmacy operation software's – usefulness and availability Customer Relation Management (CRM)

- Pharmacy operation software refers to computer programs designed to help manage various aspects of pharmacy operations, such as inventory management, prescription processing, patient data management, and billing.
- These software systems are intended to streamline workflow and improve the efficiency and accuracy of pharmacy operations.

Here are some key features of pharmacy operation software:

- 1. **Inventory management:** Pharmacy operation software can help pharmacists manage their inventory by tracking the movement of drugs in and out of the pharmacy. It can help track the expiration dates of medications and ensure that medications are properly stocked.
- 2. **Prescription processing:** These software systems can facilitate the processing of prescriptions, including capturing prescription information, verifying patient information, and transmitting the prescription to the pharmacy for filling.
- 3. Patient data management: Pharmacy operation software can help pharmacists manage patient data, including medical history, allergies, and current medications. This can help pharmacists identify potential drug interactions and provide more personalized care.



- 4. Billing and insurance management: These software systems can help manage billing and insurance claims processing, including verifying insurance coverage, processing claims, and generating reports for accounting and auditing purposes.
- 5. Point-of-sale functionality: Many pharmacy operation software systems include point-of-sale functionality, allowing pharmacists to accept payments and process transactions quickly and efficiently.

One of the most useful features of pharmacy operation software is its ability to manage customer relations.

Customer Relationship Management (CRM):

- Customer Relationship Management (CRM) software is designed to help businesses manage their interactions with customers and improve customer satisfaction.
- In the context of pharmacy operations, CRM software can help pharmacies keep track of customer orders, preferences, and history, as well as track customer feedback and complaints.
- CRM software can also help pharmacies improve communication with their customers by providing tools for email marketing, automated messaging, and appointment scheduling.

- This can help increase customer engagement and loyalty, leading to increased revenue and a stronger reputation in the industry.
- Many pharmacy operation software providers offer CRM features as part of their package, making it easy for pharmacies to adopt this technology.
- Some of the most popular pharmacy operation software programs with CRM features include PioneerRx, PrimeRx, and QS/1.

Audits in Pharmacies:

- Audits in pharmacies are an essential part of ensuring that medications are being handled and dispensed safely and accurately.
- Audits help to identify any discrepancies in the pharmacy's processes, policies, and procedures that may affect the quality of patient care.

The purpose of the audit is to identify any issues that may need to be addressed to ensure that the pharmacy is providing safe and effective medication therapy to its patients.

These issues may include:

a)Errors in prescription processing b)Inaccurate or incomplete medication records c)Problems with medication storage or inventory management d)Noncompliance with state or federal regulations e)Inadequate training or supervision of pharmacy staff

SOP of Pharmacy Management:

- The Standard Operating Procedure (SOP) of Pharmacy Management is a set of guidelines and procedures that should be followed by pharmacy staff to ensure the safe and effective delivery of pharmaceutical care.
- The SOP should be developed in compliance with local regulations and guidelines, and reviewed regularly to ensure its continued relevance and effectiveness.

Below is an outline of the key components of an SOP for Pharmacy Management:

- 1. Pharmacy Staffing: Establishing staffing requirements and ensuring adequate staffing levels to meet patient needs.
- 2. Medication Procurement: Defining the process for ordering, receiving, storing, and dispensing medications in compliance with regulations and industry best practices.
- 3. Medication Storage: Establishing procedures for the proper storage of medications, including temperature and humidity controls, and ensuring that medications are stored in accordance with manufacturer recommendations.



- 4. Medication Dispensing: Defining the process for medication dispensing, including checking for allergies and drug interactions, verifying medication orders, and labeling prescriptions.
- 5. Medication Administration: Establishing procedures for medication administration, including proper dosage and administration routes, and monitoring patient response.
- 6. Medication Errors: Establishing procedures for identifying, reporting, and preventing medication errors, including training staff on error prevention and root cause analysis.
- 7. Documentation: Defining the process for maintaining accurate and complete records of medication orders, dispensing, administration, and patient outcomes.
- 8. Quality Control: Establishing procedures for quality control, including regular audits of medication storage and dispensing procedures, and ensuring compliance with regulations and industry best practices.
- 9. Emergency Preparedness: Defining procedures for responding to emergency situations, such as medication shortages or natural disasters.
- 10. Staff Training: Developing and implementing ongoing training and education programs for pharmacy staff to ensure their continued competence and compliance with regulations and industry best practices.

Introduction to Digital Health:

- Digital health is the use of digital technologies, tools, and platforms to enhance healthcare delivery, patient care, and public health.
- It encompasses a wide range of digital tools and services that enable healthcare providers, patients, and caregivers to access, share, and analyze health information.
- The key topics include Learning Health Systems and Electronic Health Records and various types of digital health technologies to include mobile applications, wearable technologies, health information systems, telehealth, telemedicine, machine learning, artificial intelligence and big data.
- These technologies are assessed in terms of the key opportunities and challenges to their use and the evidence of their effectiveness in the field of digital health in relation to public health and healthcare globally.
- The use and application of digital health for COVID-19 forms a case study demonstrating the use of different types of digital health technologies to address key aspects of the response to the virus globally.



mHealth and Online pharmacies:

- mHealth (mobile health) refers to the use of mobile devices, such as smartphones and tablets, to support healthcare services and improve health outcomes.
- Online pharmacies, on the other hand, are digital platforms that allow patients to order medications online and have them delivered to their doorstep.
- Both mHealth and online pharmacies have the potential to improve access to healthcare and medication for people who may face barriers to traditional healthcare services.
- For example, people living in rural areas or those with mobility issues may find it difficult to visit a physical pharmacy or healthcare provider. With online pharmacies and mHealth, they can order medication or access healthcare services from the comfort of their own homes.

