

# Inventory Control and Pharmacy Store management

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**Abstract-Given the high cost of drugs and medicines and the scarcity of available resources, it is essential to implement a pharmaceutical management system that would enhance availability, promote usage, and reduce costs. Medicines have always been and probably always will be the main component of both curative and preventive healthcare. For the prevention, management, treatment, and improvement of many human diseases, pharmaceuticals are essential. It's interesting to note that, at 8 to 12% of recurring health expenditures in underdeveloped nations, pharmaceuticals represent the greatest expense category. Running a profitable and effective pharmacy or drug store requires careful attention to inventory control and drug store management. Not only is timely drug access dependent on proper organisation, but it also helps to preserve safety, cut down on waste, and control expenses.**

**Key words-Inventory control, Pharmacy, Drug store.**

## INTRODUCTION

Pharmacy

A drugstore, pharmacy, community pharmacy, or chemist is a type of retail establishment that sells a variety of goods, including prescription medications. A chemist works in the pharmacy to supervise the filling of medical prescriptions and is accessible to offer guidance on the over-the-counter medications that are offered. A conventional pharmacy would be located in a community's business district. To acquire, stock, and distribute medications to different departments, every hospital needs to maintain a medical store. Accurate evaluation of the stock inventory prediction is also necessary. Despite the average mid-term shelf life of pharmaceutical items, overstocking typically results in a loss of value. Pharmacies ought to handle crucial matters including expiration dates and safe storage, among other things. For this reason, the majority of pharmacies in use today require pharmacy inventory management.<sup>1</sup>

The Pharmacy Inventory Management System Architecture.

Pharmacy is made up of several modules: inventory, deliveries, prescriptions, billing, loads of

documents, employee, user management, etc. Managing these processes can be organized in the following architecture below can be used to manage these processes.

## Inventory Control

Unlike paper-based inventory, which is hard to maintain and prone to human error, inventory management pharmacy units let pharmacies check stock levels, specify where necessary items are kept, and update their records every time a customer makes a purchase. Aside from data-driven choices based on past performance, inventory management software also lets users choose which medications will require refills based on seasonality, weather, and other variables.

For pharmacy chains, inventory management is the key to operational success. Navigating the complexities of pharmaceutical supply chains requires an effective pharmacy inventory management system, which is essential for forecasting demand, controlling stock levels, and guaranteeing timely rejuvenation.

## Data and Document Management

Because pharmacies handle a wide variety of documents (prescriptions, data, orders), little notes are frequently misplaced and demand a large amount of storage space. Using pharmacy inventory software, you can organise your records into virtual folders where employees can easily locate information by just inputting keywords.

## User Administration

Only authorised users are granted access through user management. Pharmacies have the ability to set up role-specific access, so certain employees will only have access to inventory data, while management will have access to analytics, sales statistics, and information on individual employee performance.

## Handling Prescription Orders

Prescription management modules reduce the risk of prescriptions being stolen or falsified, expedite the processing of e-prescriptions for chemists, and provide alerts regarding incompatible drugs or allergies. This module makes it possible to improve patient care, increase efficiency, and lessen the burden of producing and marketing restricted substances<sup>2</sup>.

Why is the inventory of a pharmacy significant?

Among the retail industry's most challenging inventory management systems are those found in pharmacies. This is due to a number of factors, including government regulations, a large selection with complex features, a multitude of options, and a limited amount of shelf life and space. Numerous SKUs, different packing styles and dosages, dietary supplements, medical devices, equipment, and personal hygiene and care products are all available. For all of this, centralised management and streamlining are required. Pharmacy inventory control is important because it protects against shortages by maintaining optimal stock levels, especially for medications with severely limited shelf lives and special storage requirements (like temperature).<sup>2</sup>.

This is crucial for maintaining access to essential prescription medications and minimising the wastage of out dated medications, in addition to helping to retain customers. The quantity that can be sold in a constrained amount of time is ordered by the system. It produces incredibly precise projections by taking seasonality, demand variations, and other variables into account. By automating procedures and maximising supply costs, it also raises profitability.

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What is an inventory management system for pharmacies?

An inventory management system for pharmacies is a software for managing stock that keeps track of drug stock levels automatically, forecasts demand, guarantees timely replenishment, and keeps track of

product expiration dates (monitoring products where this indicator is exhausted). Enhancing productivity, guaranteeing effective central management, and mitigating the likelihood of overlooked prospects and surplus inventory are all made possible by this.

From purchase to sales, the pharmacy inventory management software keeps an eye on the availability of medications at every point in the supply chain. Pharmacy chains and independent stores that are growing quickly and looking to maintain efficiency and lower human error rates need this kind of system<sup>2</sup>.

Three forms of inventory management are officially recognised:

#### Visual Methodology

When using the Visual Method to manage pharmacy inventories, staff members are required to manually verify or visually examine the stock. If the inventory level of any item appears to be insufficient to cover upcoming fills, resupply is started. The technician or chemist will often write down or memorise the necessary reorder because, regrettably, they are usually too busy to place the order. All too often, stock issues are found after it is too late, that is, after the drug has run out of inventory.

This approach is ineffective because pharmacies frequently face fluctuations in inventory and demand that are almost impossible to predict.

#### Periodic Approach

Similar to the Visual Method, the Periodic Method focuses more on finishing regular, scheduled basic inventory management tasks. This strategy may use basic technology and barcode scanning to do away with the need for manual inventory status updates. This means that the pharmacy technicians check the inventory once a week, once a month, or once a year. Despite being more methodical than the Visual Method, pharmacy staff are still required to make decisions based on their knowledge of analysis, experience, and observations. It's possible for status errors to become visible after updates.<sup>2</sup>.

#### Perpetual Method

It has an automated replenishment system that makes sure that, when the stock level hits or drops below a predetermined replenishment point, medications are recognised for reorder. After items

are identified, the pharmacy staff reviews, accepts, or makes adjustments. Next, items are ordered through the pharmacy management system either manually or electronically via EDI<sup>3</sup>.

What distinguishes perpetual inventory systems from periodic inventory systems?

A perpetual inventory system continuously updates sales and purchase data, which has an especially big effect on cost of goods sold and merchandise inventory. Only periodic inventory systems, rather than continuous ones, keep track of updates to inventory and sales expenses at predetermined intervals throughout the year.

#### Definition of Stock Rotation

A key component of efficient inventory management is stock rotation, which is the orderly movement and use of products in a warehouse or retail environment. By ensuring that products are used or sold before they expire, this process reduces waste and increases revenue.

#### The Primary Stock Rotation Rule:

First in, first out (FIFO) is the primary guideline for stock rotation. According to this principle, the oldest inventory items should be used or sold first in order to maintain a steady flow and stop products from expiring while being kept unsold on the shelves. The widely used and industry-standard FIFO method improves product quality, lowers waste, and eventually boosts profitability.<sup>4</sup>

#### How Do Pharmacists Get Expertise in Inventory Management?

Recognise the items in the store.

Most pharmacists are well-versed in their drug inventory, but they still need to be mindful of what will be needed in the future. It forces them to pay attention to orders, maintain up-to-date inventory, and spot any shrinkage problems. Staff members can oversee the pharmacy and make sure it is equipped to meet customer demands by practicing effective inventory management.

#### Determine the Needs of the Customer

As a chemist, he has an additional responsibility to attend to the needs of your clients. It is imperative to comprehend the demand behaviour of customers and

maintain clear communication with drug suppliers. Pharmacies that use smart inventory management can monitor stock levels and customer demands while streamlining complex inventory handling.

Managing medications throughout the whole supply chain

Managing medications throughout the entire pharmacy supply chain is crucial. In order to manage your business effectively and preserve the good name of your pharmacy, you must be aware of the laws and regulations pertaining to drugs that minimise disputes with the government. Achieving an effective inventory management system will ensure the safety of the medical supply chain.

#### Must Prevent Overstocking

There is never a safer situation with too much stock than too little. To prevent overstock, pharmacies need to maintain relationships at both ends of the supply chain. They need to be able to communicate store requirements to vendors and have a clear grasp of demand. By minimising waste at every stage of the supply chain, this goal lowers the total cost of keeping inventory on hand.

#### Control Recurring Prescriptions

Prescription refills are typical in pharmacy management. Numerous clients are able to regularly pick up the same medication. Thus, having a system in place to handle repetitive prescriptions must be the chemist's responsibility. Pharmacy software helps store owners save time, money, and prescriptions while streamlining store operations. It provides a proactive strategy that improves the whole experience of buying drugs.

#### Instantaneous Stock Visibility

Having real-time stock visibility is essential to having a seamless drug delivery system. It provides a competitive edge and reduces the workload associated with managing drug inventories. With the use of pharmacy software, the pharmacist can achieve a certain degree of accuracy that boosts output, reduces expenses, and highlights areas for potential revenue growth.

#### Keep Drugs Active

Pharmacists must keep a close eye on their drug supply in order to reduce the possibility of expired

goods. A pharmacist cannot sell or return a product until they are aware of its expiration date and recommended usage. It's just a waste of money. When an item is about to expire, an accurate inventory management system keeps track of it.

[5]. <https://www.swindia.com/swil-blog/pharmacy-inventory-management/>. 2 Jan 2023

#### Data Management in One Place

Pharmacists can locate the data they need in one location with centralised data management. They save time in this way, which they can use for other crucial duties. This offers operational efficiency, security, consistency, and integrity for business data, among other benefits.<sup>5</sup>

#### CONCLUSION

The pharmacy industry is changing every day. It provides humanity with the assurance of rapid drug delivery, patient life safety, and astute handling of any pandemic-like scenario. However, it's crucial for pharmacy stores to maintain control over the medications that are offered for sale as well as to manage the intricate drug inventory. Only with the appropriate system in place for inventory management and tracking can this be accomplished. Whether a pharmacy is part of a medical facility or operates independently, all have a large and dynamic supply-chain network to manage. The pharmacy's supply costs are subject to certain influences that raise costs and have an adverse effect on profitability. A thorough evaluation of the stocking inventory projection is also necessary. Even though the majority of pharmaceutical products have a moderate shelf life, overstocking can still result in value loss. Understocking results in missed sales opportunities. A pharmacist may also need to deal with significant issues like expiration dates and proper storage. Therefore, a pharmacist's ability to effectively manage inventory is crucial.

#### REFERENCE

[1].<https://interexy.com › pharmacy-inventory-managementen..> 9 Aug 2023

[2].leafio.ai Pharmacy Inventory Management » Complete Guide for 2024 <https://www.leafio.ai › blog › pharmacy-inventory-man....> 15 Apr 2024

[3]. <https://www.datarithm.co/blog/pharmacy-inventory-management-methods.> 22 May 2024

[4]. The Ultimate Guide To Stock Rotation,Qodenext <https://www.qodenext.com › Home › Home.> 21 May 2024