

EFFECTIVE WAY TO IMPROVE THE SUPPLY CHAIN MANAGEMENT OF PROCURING DRUGS IN CLOUDNINE HOSPITAL

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Pharmaceutical Management

By

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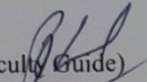
Under the Supervision and Guidance of

Mr. Rahul Sharma

2024

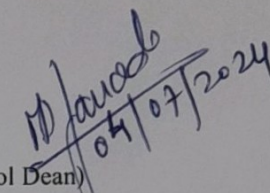
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This is to certify that dissertation titled “**Effective way to improve the supply chain management of procuring drugs in Cloudnine hospital**” is a record of the research work undertaken by **Jeminee Jaiswal (Roll No:0391)** in partial fulfillment of the requirements for the award of the degree of Master of Business Administration (MBA) in Pharmaceutical Management (PM) from the IIHMR University, Jaipur under my guidance and supervision and his approach to the research study has been sincere, scientific, and analytical.

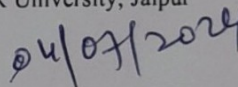

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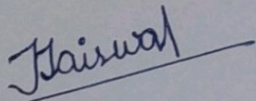

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled "**Efficient method to enhance drug procurement supply chain management in Cloudnine hospital**" is a bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.



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ABSTRACT

Supply chain management (SCM) in the pharmaceutical sector encompasses the handling of medicines, including both drugs and medical devices, covering the entire production process from raw materials to the delivery of final goods. In 2020, challenges in the pharmaceutical supply chain were a significant concern for the industry, and these issues persist even as the world moves toward a new normal. The COVID-19 pandemic has had a profound socioeconomic impact globally, disrupting every business sector. To thrive in this evolving landscape, the pharmaceutical supply chain must become more efficient, potentially requiring significant changes. Organizations with outdated systems have struggled to adapt to pandemic-induced business process changes, finding it difficult to implement necessary adjustments without the right technologies.

To achieve effective supply chain management, hospitals should create an integrated supply chain that ensures proper connectivity between departmental activities and the hospital's revenue cycle. The supply chain acts as a back-end application that integrates various operations, ensuring timely availability of medicines or products, reducing inventory waste, improving patient care, unifying all departments, and minimizing human or drug errors. Effective methods to enhance operations include integrating subsystems and using standard product codes and RFID technologies.

Healthcare logistics refers to a range of goods needed by healthcare professionals, including equipment, drugs, and supplies for medical and surgical procedures. In healthcare, precision, accuracy, and successful outcomes are essential. SCM must increase the efficiency and efficacy of available treatments. Managing hospital standards and procedures while facing rising transportation costs can be challenging. Coordinating independent subsystems can be difficult, prompting hospitals to identify weak spots for improving patient care and service levels. The primary objective of SCM is to ensure visibility across all processes. Regularly reviewing and updating centralized information flow is crucial, as is maintaining transparency among manufacturers, vendors, and insurers.

The hospital's ultimate goal is to provide patients with proper medical treatment. Pharmacy shelves should be well-stocked with high-quality medications. Hospital pharmacies rely heavily on SCM to ensure timely access to medications at the most affordable prices. The supply chain requires various vendor and supplier arrangements, especially since some medications must be stored at specific temperatures.

Accurately predicting the demand for medicines is challenging. Therefore, pharmacists collect precise drug consumption data to identify trends. In many hospitals today, the general stocker manages the supply chain, but without an understanding of SCM principles, some drugs may be in high demand but low availability, or low demand but high availability. This mismatch can lead to increased shelf life and a higher risk of drug expiration. To address this, pharmacists engage in Continuing Professional Development (CPD) for better healthcare logistics management, which includes returning medicines and medical devices that are nearing expiration.

In summary, the pharmaceutical supply chain must evolve to meet current challenges, integrating advanced technologies and methodologies to improve efficiency, visibility, and patient care. By

doing so, hospitals can ensure that they provide timely and effective treatments while maintaining cost-effectiveness and high standards of care

Keywords: Chain Management, Medicines handling, Drugs and medical devices, Production process, COVID-19 impact, Outdated systems, Integrated supply chain, Departmental connectivity, Revenue cycle ,Operations integration ,Inventory waste reduction, Patient care improvement ,RFID technologies ,Healthcare logistics

Objective	Method	Result
To Understand risk assessment and management within the supply chain.	Secondary Research	Provided functional capabilities: modelling, data management, and knowledge management to support all decision-making processes
To Analyze how supply chain management practices impact the overall success of your organization.	Secondary Research	To effectively managing the supply chain, organizations need to adopt appropriate supply chain strategies into supply management chain practices. strong predictor of supply chain performance are strategic supplier partnership, customer relationship and information sharing
To Assess skills in managing supply chain risk.	Secondary Research	Key skills are: Risk identification, Risk Assessment, risk mitigation strategies, Collaboration, Communication, Performance improvement, Continuous improvement, Monitoring & Adoption
To Explore the connection between comprehensive quality management approaches and organizational performance.	Secondary Research	Factors identified are the supply chain structure, inventory control policy, information sharing, customer demand, forecasting method, lead time, and review period length.

ACKNOWLEDGEMENT

I would like to take this opportunity to thank all the people before I start my dissertation, whose constant support helped me to bring this research paper into existence.

First and foremost, it is a great privilege for me to express my gratitude to Mr. Tridip Chatterjee (GM), Mr. Viresh Gupta (Senior Manager- Central Purchase Department) and Mrs. Shallini Pillai (Deputy Manager) for giving me the golden opportunity to do this project and for the constant co-operation and supervision. I am deeply indebted to Mr. Saif Kamal (Deputy Purchase Manager), Mr. Sounak Ghosh (Purchase Executive), Ms. Supriya M (Purchase Executive), for their valuable guidance and suggestions while conducting this study.

I express my deepest gratitude to IIHMR University, Jaipur for this great opportunity.

I thank Dr. P.R. Sodani, President, IIHMR University, and Dr. Manthan Janodia, Dean, Pharmaceutical Management, IIHMR University, for giving me the permission and guidance to do this research paper. I would also like to thank all my teachers who made me the person I am today.

I profoundly thank my mentor, Mr. Rahul Sharma, Associate Professor, IIHMR University, Jaipur, for his co-operation and guidance in materialization of this paper. I express my sincere thanks for giving an opportunity to do this research paper and his guidance and support extended throughout the period of my study.

Last, but not the least, I thank one and all who have contributed their part in helping me in my endeavor to accomplish this paper.

Jeminee Jaiswal

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ABBREVIATIONS

S.No.	Abbreviation	Expanded form
1.	SCM	Supply Chain Management
2.	CPD	Central Purchase Department
3.	SC	Supply Chain
4.	GRN	Goods Received Number
5.	PR	Purchase Requisition
6.	PO	Purchase Order
7.	IC	Incharge
8.	MHE	Material Handling Equipment
9.	PHE	Physical Handling Equipment
10.	CDSCO	Central Drugs Standard Control Organization
11.	SCOR	Supply Chain Operations Reference

CHAPTER-1

INTRODUCTION

1.1 What is Supply Chain Management?

The Supply Chain Management Association defines supply chain management (SCM) as the process of identifying, acquiring, accessing, deploying, and managing resources needed or potentially needed by an organization to achieve its strategic objectives. SCM encompasses all activities related to the movement of goods, their transformation from raw materials to finished products for end consumers, and the flow of relevant information. This includes the transportation of goods and information throughout the supply chain.

As a result, the supply chain comprises various systems, such as system administration, operations and assembly, purchasing, production scheduling, order processing, inventory management, shipping, warehousing, and after-sales support. The supply chain forms a network of interconnected processes that start with suppliers and end with customers.

SCM covers upstream purchasing activities, including converting inputs provided by suppliers through operations like production, engineering, and accounting. It also involves maintaining strong relationships with suppliers and procuring the right products from the right suppliers at the right time. Additionally, SCM includes internal procedures and downstream functions, such as the delivery of final products to consumers



Fig.1.1 Supply chain management

- 2 The objective of supply chain management (SCM) is to continually enhance the methods businesses use to acquire the resources necessary for producing goods and services. Discussing strategies for managing these resources is essential for providing high-quality services to clients. In line with SCM principles, companies can allocate up to 60% of their budget to material acquisition. The main goals of SCM include cost reduction, improved supply, shorter cycle times, high quality, and access to product and process technologies. Suppliers play a crucial role in this process, as their performance can significantly impact a company's ability to meet or exceed customer expectations, ultimately influencing business success or failure.
- 3 In the healthcare sector, supply chain management involves controlling the flow of medical products and services from the manufacturer to the patient. This process is often complex and fragmented, involving the acquisition of resources, management of consumables, and delivery of products and services to clients and patients. The flow of information regarding tangible items and healthcare products and services typically passes through various independent parties, including manufacturers, insurers, hospitals, providers, purchasing organizations, and regulatory authorities, to be completed effectively.

3.1 Factors affecting Supply Chain Management

Several factors have an impact on supply chain performance. Structure of the supply chain, rules for managing inventories, information exchange, customer demand, forecasting techniques, lead times, and duration of validation periods are a few of them. Below is an explanation of these elements.

1. Supply chain structure: The number of assets, the number of phases, and the way that materials and information move all affect how complicated the chain is. The structure of the supply chain is complex. Substores cannot contact the purchasing department directly in the event of an emergency. You must follow the proper purchasing protocol and it may take a week or more for the item to be delivered.

2. Warehouse Management Policy: Inventory management means ensuring that the company has the right products in order to avoid out of stock, prevent shrinkage, and ensure proper accounting. These decisions are related to the timing of the item order and the size of the item order. Therefore, the warehouse management mechanism includes decisions about when and how much to order. There are two inventory systems with independent needs: a regular review system and a continuous review system. The periodic check system checks the stock position on a regular basis (during the check period) and orders the appropriate quantity. Therefore, regular inventory checks include inventory counting and documentation at specific times. For example, a retailer with a regular inspection policy may count inventory at the end of the month. Regular inventory reviews reduce the amount of time an employer or manager spends on inventory analysis, freeing up more time on other aspects of business operations.

3. Information Exchange: Information exchange can be described as SC's greatest performance driver. Information connects different SC partners and allows them to coordinate their activities. Information is important for day-to-day operations at all stages of the SC. Information systems give businesses quick access to a variety of customized products. By continually sharing new information with key persons in a timely and qualitative way, managers can make better decisions and improve performance. Sharing information on the SC has many benefits, including- Reduced Bullwhip effect, better coordination between different activities, better decision making, and less uncertainty in SC. By providing and sharing information with partners, organizations can accelerate the flow of information within the SC, increase productivity and effectiveness, and improve time-to-market response. Information exchange reduces SC uncertainty and reduces the need for safety stock.

4. Prediction Method: In the supply chain, members need to predict future demand, and it is not possible to predict demand with certainty. This uncertainty leads to distortion of order volume and increased order variance. Forecast accuracy has a significant impact on key supply chain performance indicators such as inventory costs, backorder costs, sales loss costs, and customer credit. Inaccurate predictions lead to the full utilization of the factory's capabilities. Prediction methods with good ordering policies can reduce the Bullwhip effect by up to 55%. The most commonly used prediction methods include simple exponential smoothing and moving averages. The simple exponential smoothing method has the advantage of being easy to implement in a computer system because it requires less data storage. However, the increase in order deviation of the simple exponential method is greater than the increase in order deviation of the moving average prediction method.

5. Lead Time: Replenishment parameters such as lead time and review duration can also affect SC performance. Lead time is the period from when an order is received until the item arrives. The time that is the sum of the order lead time and the delivery date. One of the causes of the Bullwhip effect is the long lead time. If the lead time is long, the order will fluctuate greatly, which may lead to the Bullwhip effect. Long lead times can lead to a shortage or buildup of total supply chain inventory. Reducing lead time helps overall efficient operation

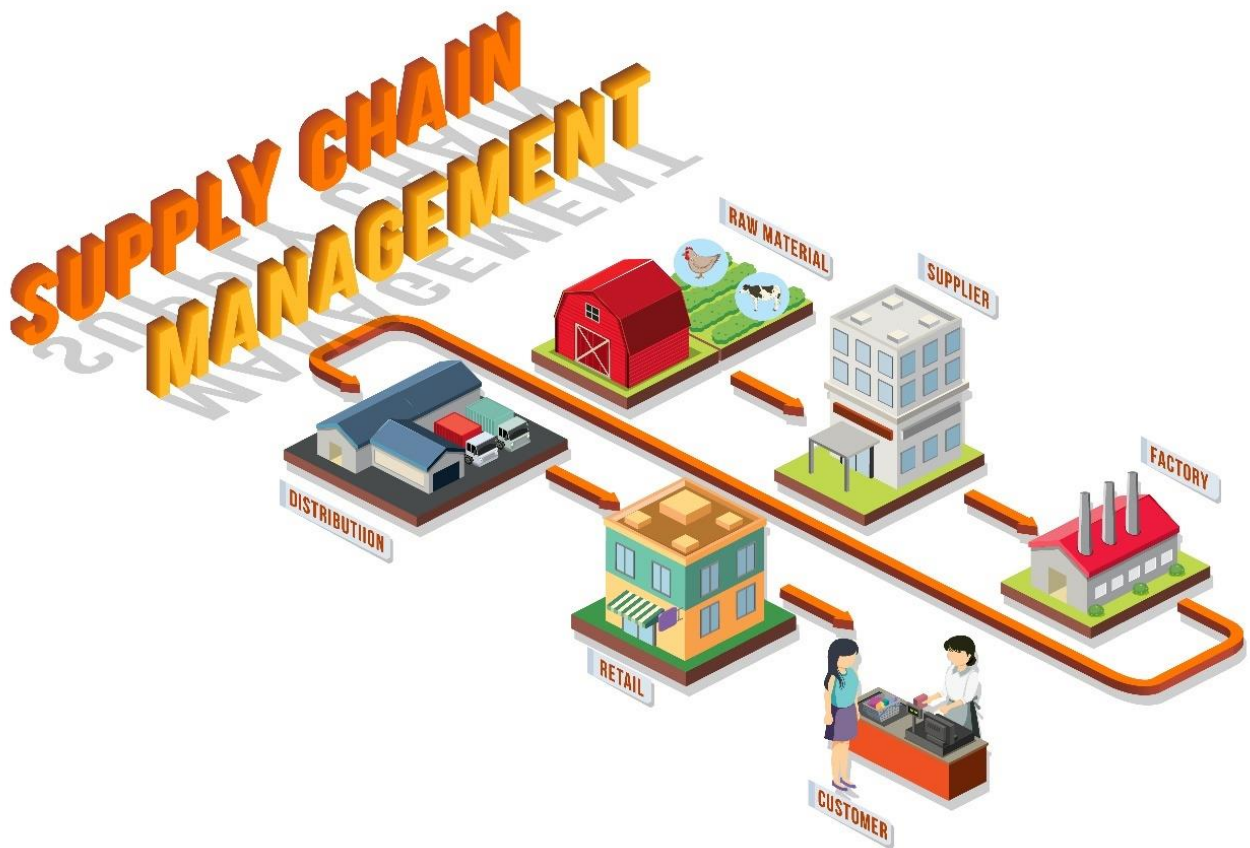


Fig.1.2 Supply Chain Structure

3.2 Supply chain management in Cloudnine hospital Bengaluru

Cloudnine hospital Bengaluru's supply chain management is centralized, with sub-stores collecting collections in software and sending them to the main store of the head office, reviewing the collections and transferring them to the Continuing Professional Development

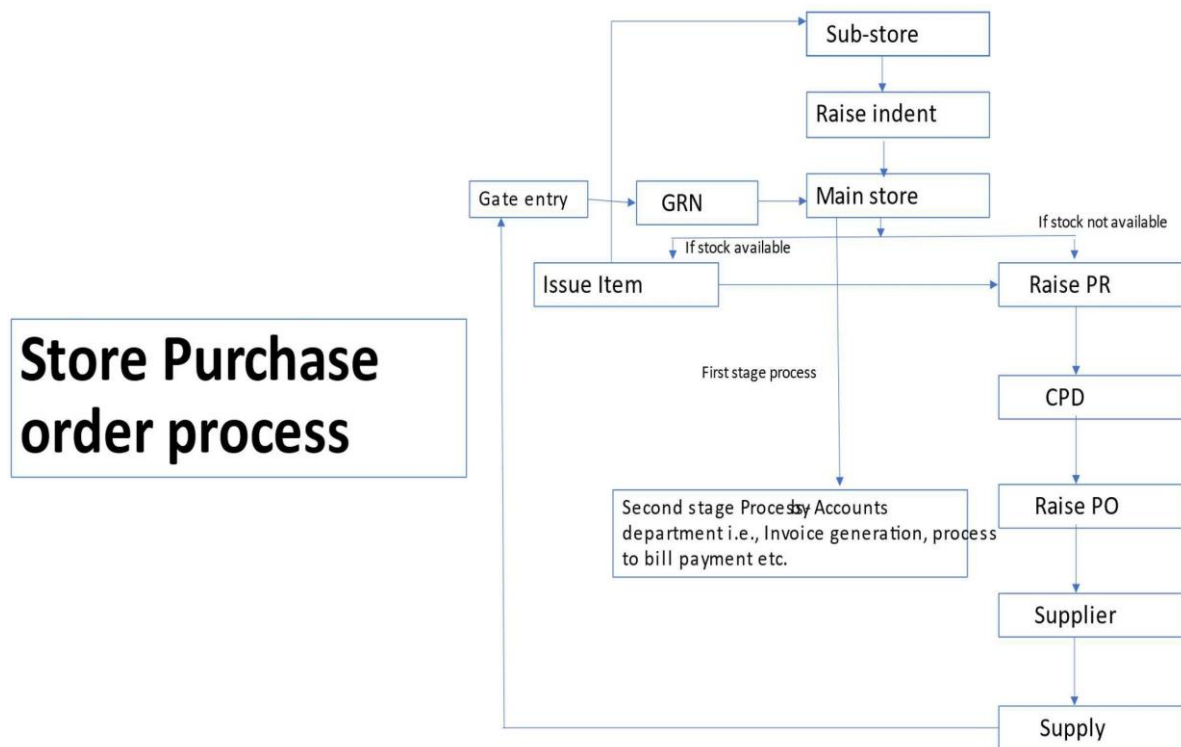


Fig.1.3 Store Purchase Order Process

(CPD)

The CPD department analyzes the collection and uses the software to create the collection order. After collecting the orders, they send an email to the provider stating the order. The provider will contact the CPD department to provide appropriate follow-up to the required indentation

The supplier delivers the required materials to the unit along with the invoice and performs the gate entrance procedure before entering the hospital staff's warehouse. This stage guard verifies that the back of the invoice is sealed and signed, then confirms the invoice number, material expiration date, and quantity. The store representative receives the item and completes the necessary steps before entering the store.

3.3 Research Question

How can Cloudnine Hospital enhance its management of supply chains and improve the efficiency and effectiveness of its supply chain operations?

3.4 Objectives :

- Understanding risk assessment and management within the supply chain.
- Analyzing how supply chain management practices impact the overall success of your organization.
- Assessing skills in managing supply chain risk.
- Exploring the connection between comprehensive quality management approaches and organizational performance.

3.5 How was the study performed?

- The study was performed using primary and secondary data. In primary data collection, purchase manual, documents and reports were used, whereas, in secondary data journals, articles were reviewed.

CHAPTER-2

LITERATURE REVIEW

Today, a company's competitive advantage largely hinges on its supply chain. Research in supply chain management focuses on optimizing resource allocation and utilization across the organization to enhance overall value. The supply chain is a network of value-added processes that connect a company's customers and suppliers. Its principles involve gathering information from suppliers, creating value, and delivering it to customers, encompassing all entities directly or indirectly involved in meeting customer needs, such as vendors, manufacturers, distributors, warehouses, and even customers themselves.

This study aims to evaluate how supply chain management strategies like lean, agile, and hybrid supply chains impact supply chain performance. It examines the effectiveness of supply chains through strategic supplier alliances, customer relationships, and information exchange. The objectives include assessing the influence of supply chain management practices on performance and exploring the outcomes of different supply chain strategies on overall business and supply chain performance. Effective supply chain management involves integrating various approaches and processes with suppliers, manufacturers, distributors, and customers to improve long-term business and supply chain performance.

Information sharing within the supply chain is fundamental to supply chain management (Moberg et al., 2002), enabling companies to adapt quickly to changing customer demands by sharing information among supply chain participants.

Performance measurement is defined as the process of quantifying the effectiveness and efficiency of an intervention. Comparing performance metrics helps identify robust supply chains, with key indicators categorized into qualitative aspects like customer satisfaction and product quality, and quantitative metrics such as cost, inventory levels, and resource utilization.

The pharmaceutical industry faces complex challenges spanning political, economic, social, technological, and legal domains. It encompasses businesses, processes, and activities involved in developing new pharmaceutical products, with pharmaceutical supply and distribution firms significantly impacting customer satisfaction.

Supply chain efficiency is crucial for cost and asset management. Efficient supply chain management reduces manufacturing, storage, and transportation costs while enhancing customer service. These costs include planning, procurement, production, delivery, return processes, cost of goods sold, direct expenses (e.g., labor, materials), and indirect costs (overheads). Efficient operations directly impact profitability and overall success, making cost reduction a vital measure of efficiency. Businesses that optimize costs can foster stronger partnerships, reduce product prices, shorten lead times, minimize manual labor, and improve profitability.

Supply chain asset management is evaluated using metrics like cash-to-cash cycle time, supply chain fixed asset returns, and working capital efficiency. Cash-to-cash cycle time measures how quickly a company can generate cash after selling a product and paying for its materials, influencing the funds available for ongoing and future activities.

S.No.	Title/ Author/Publication	Methodology	Conclusion
1	Forces, trends, and decisions in pharmaceutical supply chain management	Secondary Research	Research discovered radical shifts in the structure of the biopharmaceutical supply chain.
2	The Study of Supply Chain Management Strategy and Practices on Supply Chain Performance	Secondary Research	To effectively managing the supply chain, organizations need to adopt appropriate supply chain strategies into supply management chain practices. strong predictor of supply chain performance are strategic supplier partnership, customer relationship and information sharing
3	A study of factors affecting supply chain performance	Secondary Research	factors identified in this study are the supply chain structure, inventory control policy, information sharing, customer demand, forecasting method, lead time, and review period length.
4	Decision support framework for risk assessment of sustainable supply chain	Secondary Research	provided functional capabilities: modelling, data management, and knowledge management to support all decision-making processes

CHAPTER-3
METHODOLOGY

3.1 Study Design

Descriptive Cross-Sectional Study (a study in which the condition and potentially related factors are measured at a specific point in time)

The research process of this study is

Variables:

- **Drug Name:** Name of the medication procured (e.g., Aspirin, Insulin)
- **Dosage:** Strength and form of the medication (e.g., 325mg tablets, 100 units/mL vial)
- **Quantity Ordered:** Number of units of the medication procured
- **Unit Cost:** Cost per unit of the medication
- **Lead Time:** Time taken from placing an order to receiving the medication (in days)
- **Stockouts:** Number of instances where the medication was out of stock during the period
- **Supplier:** Name of the company from which the medication was procured

Below is the data for analysis:

S.No.	Drug Name	Dosage	Quantity Ordered	Unit Cost	Lead Time	Stockouts	Supplier
1	Aspirin	325 mg tablets	10,000	\$0.10	5	2	Acme Pharma
2	Insulin	100 units/mL vial	500	\$20.00	4	2	DV specialities
3	Albuterol	90 mcg inhaler	2,000	\$5.00	7	3	Generics Xpress
4	Duphaston	10 mg tab	500	50.97	6	3	Shri Parshva
5	Levo cetirizine	10 mg tab	1500	28	8	2	Medizone Pharma

- **Identify high-cost medications:** Analyze unit cost to see which medications contribute most to procurement expenditure.
- **Evaluate lead times:** Analyze lead times to identify medications with extended delivery times and potential stockout risks.
- **Supplier performance:** Compare lead times and stockout occurrences across different suppliers for the same medication.
- **Demand forecasting:** Analyze historical data to develop forecasting models to optimize future order quantities and minimize stockouts.

Literature Review

3.1 Organization Name

Cloudnine hospital, Bengaluru

3.2 Duration of the Study

3 Months/90 Days (01-04-2024 to 30-06-2024)

3.3 Study Tool

The data was collected by study of purchase manual, documents, and reports journals & articles.

3.4 Data Collection Procedure

In starting a purchase manual provided to understand the flow of purchase and supply chain management in organization. After one week I worked in main store, pharmacy as well as sub-store of the organization. I also got the theoretical knowledge of the procurement software which are used in organization.

3.5 Ethical Consideration

Appropriate measures were taken to ensure data security, privacy, and confidentiality. The data collected from the organization will solely be used for the purpose of the study and not any personal reasons.

3.6 Implications of the Study

This study will help the organization to understand and estimate the problems of supply chain management and find out the solutions to perform better flow of supply chain in organization. Based on the observations, some recommendations will be given that will help the organization in improving SC policies and provide better benefits to the organization.

CHAPTER-4

ANALYSIS & DISCUSSION

4.1 Analysis

4.2 Procurement Procedure in Stores

- 1) Indents are mere requisitions for collecting consumables from the main store. As the ultimate department that consumes any item, needs to be relieved of the task of physically collecting their requirements, from the main store, sub-store have been created for this demanding, receiving, safe keeping and issuing function. As more than one department can consume a specific consumable, it is obvious that a specific sub store can cater to more than one department.
- 2) the obvious assumption here is that the consuming department has a right to consume that item to discharge its designated function and the quantity consumed is normal to that function.
- 3) Ensuring this is the responsibility of the IC of that department only. The sub-store is only acting as the frontal agency. Thus, responsibility for incorrect demand and that of excessive consumption purely rests with IC.
- 4) That is the reason a separate individual is asked to approve the indent, after it has been raised and such an approving person should be, organizationally, responsible for that. In other words, IC of the department.
- 5) Purchase orders- after the PRs are approved, the activity left out in the complete process is that of actual purchase, meaning ensuring that the right item, in the right quantity, at the right price is bought and delivered to the right user (the stores) at the right time.
- 6) This function is independent one from that of the stores and should never be clubbed with the latter. This is the last activity of the purchase process.
- 7) Further, the unit head also ensures that the order is placed with a valid dealer, with proper GST registration.

4.2.2 Issue of products to the Sub-Store

- 1) Sub-store person raises the indent of required materials in software
- 2) Sub-store in-charge review the indent

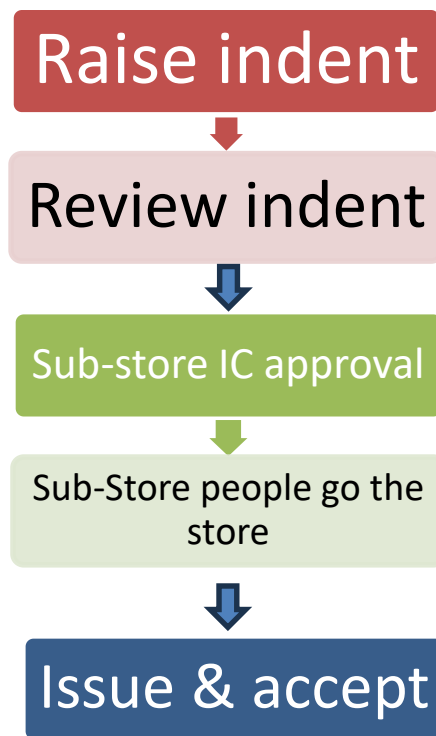


Fig.4.1- issue of products to the sub store

- 3) After reviewing the indent sub-store in-charge approve the indent for main store
- 4) sub store person got to the main store to take the products
- 5) Store in-charge check the indents in software and issue the products to the sub-store person.

4.1.3 Handling of the material by Stores-Person

Before the entry of the products into the store, store person does the following check-ups:

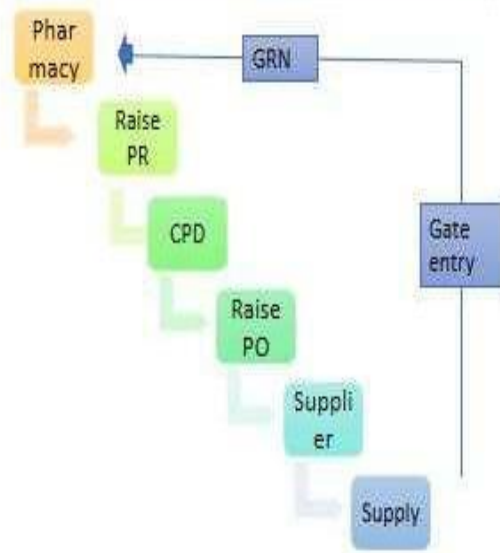
- ✓ Check the supplier's name
- ✓ Batch number and item number of the products
- ✓ Amount and quantity of the products
- ✓ Medical or non- medical items
- ✓ it is paying or non-paying items
- ✓ Purchase order number
- ✓ Breakage of the products
- ✓ GRN- Goods Received Number preparation
- ✓ Arrange of the products in their racks

In store department there is separate racks for the Paying and non-paying materials. Temperature sensitive products keeps in store and maintained 25-degree Celsius temperature. Vaccine and injectable products keep on refrigerator to avoid the quality of the products. Stationery and spar items keep on other room.

4.2.3 Supply Chain process in Pharmacy

The hospital has a central pharmacy. The pharmacist creates a list of required medical devices(PR) in the software and sends it to the purchasing department. The CPD department analyzes the product, confirms the availability of the product with software, then creates an order and sends it to the seller. The vendor received the request and responded to the CPD department regarding the product. The hospital needs a separate room to store new products that have not yet been updated with the software.

Purchase order process in pharmacy



4.2.4 Expired and Defective Products

Defective expired product returned to the supplier before 6 months have passed since the product expired. The store manager creates a list of products that will expire in the coming months and sends it to the CPD department. The CPD department analyzes the product and then contacts the supplier to provide product flow details. In return, the provider hands the credit to the CPD department. Full refund of the received product if the product is returned before 6 months have passed.

4.3 Discussion

4.3.1 Problems and Loopholes in Supply Chain Management

- 1) **Warehouse management-** Pharmaceutical inventory management plays a central role in hospital management. Drug inventory management at hospital pharmacies is critical to providing ongoing support services. Inventory management of medicines is very important. Materials in the warehouse should be properly stored on shelves and transported from one location to another, using appropriate precautions and equipment. Hospital warehouses are not ideal warehouses, they are smaller than ideal warehouses. There is less space. Due to the small footprint, it is difficult to move products from one location to another or place products on shelves. The product may be damaged or damaged on the move. There must be a good way to handle the goods in the store, but they are not properly followed. New products are stored outdoors before being moved to the warehouse to save space
- 2) **Forecasting method-** Supply chain management forecasting is when a supplier decides when to prepare a product and when to order it. The In-Store Moving Average Forecasting method is used to examine data points by creating a subset average series from complete data. Because they are based on historical averages, moving average forecasts do not take into account that current data may be a better indicator of the future and need to be given more weight. Also, seasonality and trends are not taken into account. Therefore, this method is ideal for inventory management of small quantities. The actual demand for products may be higher than the forecasted products, which may inconvenience your sub-business and may require you to procure urgent products.
- 3) **supply chain structure-** The definition of supply chain structure includes the suppliers of raw materials, components, and services that a company needs to manufacture products and sell them to intermediate or end-users. At the hospital, the indent is pulled from the substore to the main store, where the main store analyzes the required indents, creates a PR, and sends it to the purchasing department. The purchasing department re-analyzes the required indentation and contacts the supplier. .. This process takes time. In the case of emergency supplies for a side business, the same procedure must be followed, which may cause inconvenience to the side business.
- 4) **Distribution of the products-** The main goal of distribution management is to maintain a constant supply of medicines to the required facilities while ensuring that resources are used as effectively as possible. Distribution costs, including storage and transportation costs, are an important factor in the

operating costs of public healthcare systems. Material distribution does not rely on good system design and management. Lack of a well-designed and well-managed distribution system. From time to time, they fail to maintain a constant supply of products and keep them in good condition through distribution.

Proper follow up of logistic protocols- Material handling is a broad concept in supply chain management. This is a basic process that involves various types of equipment and activities that are either manual or semi-automatic / automatic. This material is intended for "Movement, Protection, Storage, and Management of Materials and Products in Manufacture, Storage, Distribution, Consumption, and Disposal." There are many moving parts in the warehouse. Poor material handling has widespread results. For better or for worse, it affects production flow, employee safety, and employee morale. Please refrain from using available handling aids as it will reduce the footprint and make it difficult to lift the product with proper stands, space and lighting.

- 5) **software management-** Supply chain management tools help proactively react to demand fluctuations and arising supply chain bottlenecks, optimize inventory costs, achieve on-time order delivery.
There should be use of software to define the racking and arrangement of the products. It is not present, so it increases the workload of the newly joined store in charge.

CHAPTER-5

RECOMMENDATIONS

Some of the recommendations and suggestions for effectively improving the Supply Chain Management of procuring medical, non-medical and general products in Cloudnine hospital are as follows-

- Materials in the warehouse should be kept in proper racks alphabetically with proper dosage form, for easy accessibility. High-risk and flammable materials should be stored separately, and a cautionary note should be pasted near that area.
- The present pharmacy is small, whereas the area of at least 600-1000sq.ft. should be allotted to the pharmacy as per the guidelines of CDSCO.
- Every month, some products should be kept separately only for emergency purpose, and not to be dispensed regularly. This will help in emergency situations where the products get out-of-stock a day or two before the scheduled surgery.
- Proper equipment for handling some products should be used. Ex., Manual Pallet Trolley, Protective covers, and Safety equipment (heavy-duty sheets made of nylon, plastic, or tarpaulin). MHE should be operated only by well-trained staff. Some products such as acids and flammable products need extra caution while handling them, and proper safety measures must be taken to prevent any unforeseen accidents.
- It is possible to employ forecasting techniques like "Adaptive Smoothing." It makes a prediction using a number of different factors. It offers a more thorough look at changes over time and reveals unique trends. It involves automated technologies that record, gather, and aggregate data in real-time and concentrates on certain factors to make better judgments. It can produce precise predictions over a vast product library using automation.
- A software should be used which determines what product is placed at which location. This will help in finding the products much easily and is less time-consuming. Also, if a new person joins, they can easily identify the various products arranged in the stores.
- In case of emergency procurement of drugs and medical products, the Sub-Store should raise indent directly to the CPD, who will analyze it and contact the vendor. This will reduce the time taken for delivery of products.

CHAPTER-6

CONCLUSION

In case a robust supply chain and supply chain management are not in place, this study addresses some of the dangers that might arise in the regular functioning of Cloudnine hospital. Proper communication among staff, physicians, patients, and material procurement is critical since hospital operations directly affect the patient's life, but it is not done properly owing to a lack of effective SCM. not.

Strategic supplier partnerships, customer relationships, and information exchange are excellent indicators of supply chain effectiveness (refer to Table 5). It should be highlighted that the supply chain performance cannot be produced by a supply chain strategy that is not integrated into supply chain management. The results of the study demonstrate the necessity of integrating supply chain management into supply chain management practices in order to achieve this.

The main advantages of the SCM are:

- Workflow optimized for different teams and stakeholders.
- Maintain strict inventory control to be commercially viable and readily available when needed.
- Reduce downtime and financial loss due to broken equipment, expired medicines, etc.
- Optimize device / drug costs by bulk or partial ordering based on consumption trends, and improve supplier management by digitizing all communications and tracking consumption.

It is important to identify and design all SCM processes and policies, but it is highly dependent on stakeholders. Therefore, we have to make repeated efforts to-

- Establish a safety culture
- Proper communication and teamwork during training
- Advanced equipment and suitable environment

To effectively managing the supply chain, organizations need to adopt appropriate supply chain strategies into supply management chain practices. Effective supply chain management is critical determinant to building and sustaining competitive advantage in the marketplace.

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