

SUMMER INTERNSHIP PROGRAM

At

NARAYANA HEALTH, KOLKATA

From 12th May 2025 to 18th July 2025

A REPORT BY

HARSHAL BARI

“Enhancing Supply Chain Efficiency through Process Optimization”

Master of Business Administration

Roll Number - 0648

PHARMACEUTICAL MANAGEMENT

2024-2026

Under the Mentorship of

Dr. Akshay Kumar Mishra

(Associate Professor)



CERTIFICATE**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Harshal Samadhan Bari a student of IIHMR University Jaipur, and pursuing two years full time MBA (Pharmaceutical Management) underwent 10 Weeks of summer internship (SIP) with us from May 12, 2025, to July 17, 2025.

During the summer internship (SIP), Mr. Harshal Samadhan Bari has successfully completed the Project in Material Management titled - Enhancing Supply Chain Efficiency through Process Optimization under guidance of Dr. Mohit Sharma (Manager).

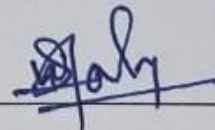
The student's performance during the summer internship was Excellent



Dr. Mohit Sharma
Manager

Guidance Team

Mr. Samit Howladar
Deputy General Manager



Mr. Umesh Kumar Sahu
Deputy Manager

SAMYAT HEALTHCARE PRIVATE LIMITED

CIN: U86100KA2023PTC175567



IIHMR University Faculty Mentor Approval

This is to certify that **Mr. Harshal Samadhan Bari** of academic year 2024-26 of **School of Pharmaceutical Management** has prepared a poster with respect to his summer internship held during May-July 2025.

He has carried out work as per the guidelines. His poster is approved for presentation.

Date : 28/07/2025

A handwritten signature in blue ink, appearing to read 'Akshay', is positioned above the printed name.

Dr. Akshay Kumar Mishra
Associate Professor

ABOUT THE ORGANISATION

Narayana Health (formerly known as Narayana Hrudyalaya) is an Indian for-profit private hospital network headquartered in Bangalore. It was founded by Dr. Devi Shetty in the year 2000. The facilities offer medical care in over 30 medical specialties and three of its hospitals. Since 2014, the group operates Health City Cayman Islands in Grand Caymen

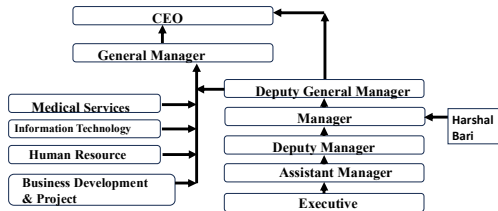
VISION

"To be a trusted healthcare partner, providing accessible, high-quality, and affordable healthcare services while also focusing on patient-centric experiences and leveraging technology for seamless care."

MISSION

"To make healthcare accessible to all.."

ORGANISATION STRUCTURE



SWOT Analysis

STRENGTH

- Large-Scale Operations
- Vendor Tie-ups
- Brand Reputation

WEAKNESS

- Errors in GRN
- Limited Staff Training
- Poor Expiry Tracking System

OPPORTUNITIES

- Technological Advancements
- Vendor Performance Ratings
- Expansion of SOPs
- Staff Skill Development

THREATS

- Regulatory Non-Compliance
- Cybersecurity Risks
- Supply Chain Delays
- Inventory Wastage Risk



Project

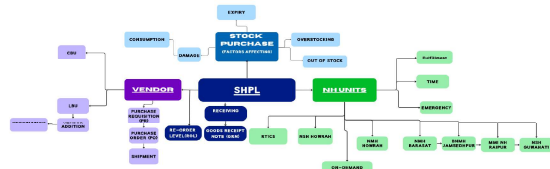
To optimize inventory management by reducing Days of Inventory (DOI), enhancing supply chain efficiency, and minimizing cost through data-driven analysis

OBJECTIVES

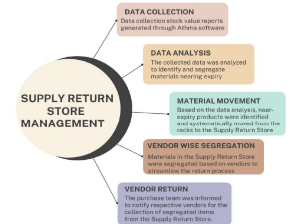
- To analyze historical inventory data and identify consumption patterns, slow-moving and fast-moving products.
- To calculate Days of Inventory (DOI) for critical items and propose methods to maintain optimal stock levels..
- To detect issues related to near-expiry and expired products and propose a structured daily audit system

SIGNIFICANCE OF PROJECT?

- To reduce excess inventory and avoid financial losses due to overstocking
- To improve operational efficiency in hospital supply chain processes
- To optimize stock availability for vital and emergency items.
- To identify and resolve gaps in the return-to-vendor (RTV) process.



Supply Return Store Management



THEORETICAL UNDERSTANDING

In Research Methodology, we learned how to create data collection tools

Concepts of inventory control like ABC, FSN, VED, and DOI.

PRACTICAL EXPOSURE

Conducted an audit using the data collection tool learned in Research Methodology.

Applied FSN and DOI on real hospital data to identify overstock/stockouts.

VALUE ADDITIONS

- Understood real-time hospital inventory and billing workflows.
- Learned to calculate and interpret Days of Inventory (DOI).
- Gained hands-on experience with Athma ERP software.
- Developed skills in audit creation and expiry management.
- Practiced vendor coordination and return handling
- Applied models (ABC, FSN, VED) to real problems.
- Provided hands-on experience in hospital supply chain operations, helped me to apply classroom theories like FSN, VED, and DOI in real settings.

SUGGESTIONS

- Implement a monthly DOI review to keep inventory levels optimal.
- Digitize expiry audits using tablets or mobile forms for real-time tracking.
- Conduct regular training sessions for warehouse staff on inventory basics.

CHALLENGES FACED

- Difficulty in identifying near-expiry items due to lack of proper audit tracking
- Handling large datasets and drawing insights initially was challenging.

Compiled Report

Name of the Organisation: NARAYANA HEALTH, KOLKATA

Area/ Department/ Project of Summer Internship Program: Supply Chain Management

Name of the Student: Harshal Samadhan Bari

Roll no: 0648

Stream: MBA PM 16 (2024-26)

Activity Done	• Onboarding and Induction: I attended sessions by the HR Brati Aich Ma'am and Deputy General Manager Samit Howladar sir to understand the hospital's background, structure, and expectations from me. This helped me settle into the new environment as the place and location was very new and different for me to and start my internship with clarity and confidence. I was also introduced to various stakeholders including heads of departments. This created a clear understanding of the organizational culture, work expectations, and how my work fits into the larger system. Then I was introduced to our Manager Dr. Mohit Sharma sir who explained me each and every thing regarding the flow and work of the SHPL Warehouse. • Warehouse Visit and Workflow Understanding: During my warehouse visit, I observed all key operational areas such as receiving, shelving, picking, packing, and dispatch. I gained clarity on the layout and how stock flows from vendor receipt to consumption. I also learned about documentation practices, use of FIFO in physical arrangements, and observed discrepancies in shelf labelling and physical stock. • Inventory Data Collection: I collected and reviewed one year's worth of inventory data covering item names, consumption trends, batch details, procurement dates, expiry status, vendor information, and item categorization. I cleaned and organized the data in Excel, preparing pivot tables and graphs to visualize trends and support further analysis and here I learned about the material planning over which generally purchase team work. • DOI Calculation: I calculated Days of Inventory (DOI) for different categories of products (medicine, surgical, consumables) using average daily consumption. I created a model to automatically calculate DOI for any item
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	based on input values. This helped identify overstocked products and predict stockouts in others, enabling actionable stock planning. • Segregation of Fast/Slow-Moving Items: I categorized all items into fast-moving, slow-moving, and non-moving using frequency of usage and consumption volume. This FSN analysis allowed me to highlight products that were unnecessarily occupying storage and tying up working capital. I also created a color-coded visual report to present this to the supply chain manager. • Athma Software Exploration: I learned how to navigate the Athma system to access GRN, inventory movement, and return modules. I entered and verified incoming product data, matched invoices and batches, and ensured proper system entries. I identified mismatches between physical and system entries, raising flags for correction, and documented a checklist for error-free GRN entry. • Expiry Audit Implementation: I observed that expiry tracking was not systematized and proposed a structured daily audit format. I designed and implemented a tracker in Excel that records item name, batch number, expiry, stock quantity, and shelf location. I trained store staff to update the tracker daily and use color alerts for near-expiry items. This audit helped avoid future wastage and created accountability. • Managing Supply Return Store: I was assigned full charge of the RTV (Return to Vendor) store. I mapped existing return stock, created a digital record, classified items as damaged/expired/incorrect delivery, and initiated return requests. I followed up with vendors via calls and emails, submitted return forms, and coordinated physical return. I successfully reduced total RTV value from ₹11 lakh to ₹5 lakh. I also documented a return process SOP. • Billing: I worked with the billing team to understand how supplies are billed during inpatient and surgical procedures. I tracked delays in billing for urgent items, identified gaps in system updates, and noted delays between issue and billing. I did the billing of the various Narayana Health Units include NSH, NMH, RTICS which are the major units of Narayana Health.
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Linking theory (Classroom learning) with practice at your organisation	• Inventory Control Techniques: Applied ABC, FSN, VED, and DOI models learned in classroom to real inventory data to classify and prioritize products for better control. Demonstrated strategic thinking by identifying critical issues like overstock, lack of expiry checks, and return delays, and implementing solutions. • Operations Management: Understood the warehouse workflow, identified bottlenecks in billing and GRN processes, and suggested ways to reduce idle time and avoid process duplication. Understood the financial losses due to overstock and expiry, improved return systems to recover money via credit notes, and reduced dead stock value. • Quality Assurance: Practiced real-time quality assurance by verifying GRN entries, cross-checking expired items, and maintaining audit checklists for consistency. • Material Management: Applied concepts like buffer stock, reorder level, lead time, and economic order quantity while analyzing inventory and designing RTV and expiry systems. • Principles of Management: Coordinated and delegated tasks to warehouse staff, worked cross-functionally with billing and pharmacy, and displayed time management and problem-solving. Observed how product availability, prompt billing, and urgent supply handling influence patient satisfaction and hospital service reputation. • Human Resource Understanding: Gained insight into workforce behavior, communication gaps, training needs, and built a good rapport with ground staff to implement process improvements.
Gaps identified on the working area	• Ineffective Daily Audit: The expiry check was being done manually and inconsistently, with no records or action tracking. Near-expiry items were stored with regular stock, increasing chances of wastage.

Suggestions for improvement

- Create a Monthly DOI Review Cycle: Develop a calendar to review DOI for all high-value and high-consumption items every month. This will keep stock levels optimal and reduce over-purchasing.
- Put in place strong procedures, such as frequent audits, training for runners, employing medical professionals, requiring the recording of medication distribution and receipt timings, and making sure the unit in charge gets medication during peak hours.
- Assign RTV Responsibility: Allocate specific staff for RTV management and define clear timelines for return actions. Maintain a digital return register and weekly follow-up with vendors.
- SOP for GRN Verification: Prepare a simple GRN SOP including batch matching, physical verification, shelf allocation, and system entry. Train staff on its use.
- Improve communication and supplier management, standardize specifications and bundle purchases for cost savings, adopt electronic systems for automated demand generation and streamlined ordering, enforce clear policies and centralize purchasing, and maintain regular ATHMA software maintenance for optimal performance are all ways to improve procurement efficiency.

Key Learnings

- Utilize machine learning and advanced analytics to shape and forecast demand; improve supply chain visibility with Vendor-Managed Inventory (VMI) and end-to-end systems; reduce costs with product value analysis and Group Purchasing Organizations (GPOs); control risks with strong security and backup plans; comply with regulations; and give sustainability top priority with eco-friendly procurement, waste minimization, and energy-efficient investments.
- Establish audit schedules, communication protocols for discrepancies, and continuous process improvement. Incorporate automated GRN approval and real-time inventory tracking. Standardize procedures and documentation. Enforce procurement policies. Provide cross-departmental training and refresher courses.

Signature of the Student: Harshal Bari

Approved by the IIHMR University's Mentor: Dr. Akshay Kumar Mishra

Associate Prof. IIHMR