SUMMER INTERNSHIP PROGRAM

At

MANIPAL HOSPITALS, JAIPUR

FROM 12TH MAY 2025 TO 21TH JULY 2025

A REPORT BY

SARVESH KUMAR SINGH

Master of Businesss

Administration

(hospital and health management)

Roll no 2070

2024-26

under the Mentorship of

DR. SWAPNIL GADHAVE

IIHMR UNIVERSITY

manipalhospitals

LIFE'S ON

21th July 2025

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Sarvesh Kumar** has worked as a **Trainee** in the department of **Operations** at **Manipal Hospital, Jaipur** (A Unit of Manipal Health Enterprises Pvt. Ltd.) from **12th May 2025** to **21th July 2025.**

His conduct was found to be good during this period.

For Manipal Hospital, Jaipur
(A Unit of Manipal Health Enterprises Pvt. Ltd)

Shweta Verma
Unit HR Head

MANIPAL HOSPITAL, JAIPUR
JAIPUR
A unit of MHEPL

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IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Mr. Sarvesh Kumar Singh** of academic year 2024-26 of **Institute of Health Management Research** 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: 30/07/2025

Dr. Swapnil Gadhave
Assistant Professor
IIHMR University, Jaipur

Patient Flow And Experience Optimization In The Radiology Department At Manipal Hospitals Jaipur

Presented By- **Sarvesh Singh (2070) MBA HM 29** Under the guidance of **Dr. Swapnil Gadhave**

BRIEF DESCRIPTION ABOUT ORGANIZATION

Manipal hospitals is one of India's foremost multi speciality healthcare providers. Manipal hospitals currently India's second largest hospital chain . Manipal hospitals Jaipur is a 225 bedded facility equipped with state to art infrastructure and advanced medical technologies. It is NABH and NABL accredited tertiary care centre offering a comprehensive procedures in Rajasthan top among private hospitals . The Manipal cancer care centre is the only private centre in Rajasthan offering end to end oncology services

MISSION & VISION

"to enhance " growth, differentiation and people" and to serve the patients with a smile

"To be destination of choice for healthcare in the communities they serve"
To become the most preferred and respected healthcare organization

THEORETICAL AND PRACTICAL KNOWLEDGE

Studied hospital departmental structure and their interrelationships in hospital management

Learned about patient flow models like input throughout output and bottlenecks in health services

Understood the importance of KPIs like TAT, BOR , HAI , ALOS

Studied the factors influencing patients satisfaction such as environment clarity of communication wait time and staff responsiveness

Witnessed real time interdepartmental coordination, between OPD pharmacy billing and diagnostic

Mapped out patient movement across departments in real time , identified common pain points.

Tracked patient discharge delays and staff dependency in IPD .

Gather real patient feedback data through Zykrr and noted common issues affecting patient satisfaction

MAJOR LEARNING

- First- hand exposure of hospital operations
- Understanding of healthcare challenges
- Enhance analytical and observational skills
- Professional growth and work ethics

CHALLENGES

- Data accessibility constraint
- Limited interaction with patients
- Managing Multiple tasks
- Communication gap with department heads

OBJECTIVES

- To asses the current patient flow process in the department
- To identify bottlenecks and pain points for the patients
- Recommend actionable strategies to optimize flow and improve patient overall experience

SCOPE OF STUDY

- Modalities covered: x ray CT scan, MRI PET scan, USG
- Total data points collected: 230+ patients
- Focused modalities Xray and MRI

METHODOLOGY

- Study design: Observational + process mapping
- Sample size: 160+ patients
- Data collection tool; Time motion study, Staff interview, Patient feedback form

KEY OBSERVATION

Parameter	observation
X ray TAT	9-13 minute per patient
MRI TAT	25 -30 min (basic case)
Peak days	150+ x ray cases
	25+ MRI cases
Patient dropout	Avg 3 -5 patient (MRI) a few patients (X-ray)

GAP IDENTIFIED

- Long waiting time
- Only single MRI and single CR x ray modality
- Delay in image acquisition and film process
- No fan and ventilation in x ray room

EXPECTED BENEFITS

Metrics	Before	after (estimated)
X ray TAT	9 – 13 min	3 -4 minutes
MRI patients	20 patients	35 - 40 patients
Dropout	3 – 5 cases (MRI) a few patient (X-ray)	Rare chances can perform more than 250+ x rays per day

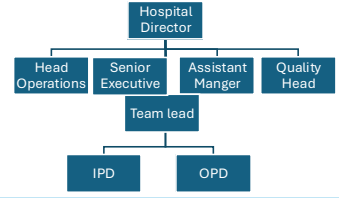
SWOT ANALYSIS

Strength	Weakness
➢ Strong brand reputation ➢ Advanced technology (robotic surgery . linac machine) ➢ One of the highest revenue generating unit in Manipal chain ➢ Highest reach and footfall to rural patients approx 70%	➢ Less Cash patient ➢ Patient nurse ratio is not adequate ➢ Poor outer infrastructure reduces visual appeal for walk in patients ➢ inconsistent doctor availability leading to increased waiting time and patient dissatisfaction
Opportunities	**Threats**
➢ Hire more trained and skilled nursing staff ➢ Including one more MRI modality to retain the patients and improve efficiency ➢ Collaboration with institute and corporate companies to expand the market reach ➢ Expansion of infrastructure and space to improve patient convenience	➢ Lack of Parking space create rush during peak days ➢ Patient leakage to competitors due to delay and high occupancy ➢ Regulatory risk for government scheme patients ➢ Competitors like CK Birla EHCC and apex attracts patients with prime locality and better infrastructure

SUGGESTION FOR IMPROVEMENT

- A help desk with designated staff to assist patient and issue
- Streamline interdepartmental coordination
- Adding one more MRI machine or Upgrading the existing one can help to retain the patients and improve efficiency,
- Change CR x ray modality with DR X ray System to reduce total procedure time and perform more cases
- Redesign X ray room with radiation safety protocols and necessary measures

ORGANOGRAM



Other project undertaken

- **Parking Utilization**
- **Revenue leakage analysis**

(Week 1)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 1 From: 12 May 2025 to 17 May 2025

Activity Done	• Introduced to the hospital officials, met my organization mentor • Visited HR department to understand hospital rules, protocols, structure and core values • Had a brief discussion with mentor about operations and responsibilities • Observed the OPD desk A and B , map out the patient flow • Understood the HIS Trak Care, and payment methods •
Linking theory (Classroom learning) with practice at your organisation	• Applied the knowledge of hospital administrations and management, learned during hospital services module to understand layout, health and utility services, NABH guidelines and division of work.
Gaps identified on the working area.	• No specific desk for follow up and appointment patient • Undertrained staff to handle big crowd • Doctors arriving late causing long waiting time • Lack of signage and no help desk
Suggestions for improvement	• A specific desk for appointment and follow up patient also for elderly patient • Training sessions for undertrained staff • Performance based bonuses to doctor to motivate them • Install proper signage and a dedicate help desk

Plan for the next week	Visiting Radiology department to cover work flow and identify gaps

Signature of the Student Sarvesh K Singh

Approved by the IIHMR University's Mentor

On the last day of every week Saturday -) report in the above format should be submitted to the faculty mentor. Submission of total 10 reports in 10 weeks is compulsory. Each report should not be more than 2 pages.

(Week 2)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 2 From: 19 May 2025 to 24 May 2025

Activity Done	• Covering radiology department • Observed the complete workflow in radiology department including X ray MRI CT scan and ultrasound • Identified the bottlenecks in infrastructure and workflow specific in X ray CT and MRI • Interacted with technicians and registration staff to understand the patient volume and machine capacity • Track down the TAT of scans, safety measure for patient and technicians
Linking theory (Classroom learning) with practice at your organisation	• Used the principles of operations management and lean concept to understand and find issues and gaps • Used my experience and radiology background
Gaps identified on the working area.	• Poor x ray room infrastructure high chances of radiation leakage • Lack of skilled paramedical department in Ultrasound department • Single modality of CR X ray which causing delay in scan time and increase workload • MRI patient volume is higher result patient dropout • Staff was not following radiation safety precautions
Suggestions for improvement	• Redesign the x ray room layout • Installing a DR x ay system • Upgradation or installing one more MRI system • staff training program on radiation safety

Plan for the next week	Visiiting Billing department to understand hospital revenue system

Signature of the Student Sarvesh K Singh

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(Week 3)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 3 From: 26 May 2025 to 31 May 2025

Activity Done	• I visited the cancer centre of Manipal hospital to see the process of radio therapy and patient preparation • Met with the radiation safety officer discussed about the radiology department problems and safety negligence • Move to billing department met with billing head • Understood the categories of cashless patients and services provides • Get assigned a task to track and take follow ups of cashless cases from the the TPAs directly • Identify the reason of delay in IPD billing • Shadowed the whole TPA process
Linking theory (Classroom learning) with practice at your organisation	• Applied the knowledge of finance and Revenue Cycle management
Gaps identified on the working area.	• Delay in nursing clearance and discharge summery result delay in billing • TPA pre auth pending due to documentation • Charges were mentions on interim bills and missing on final bill
Suggestions for improvement	• A dedicated team to continuously contact to TPAs • Better communication between IPD and billing department • Proper and safe storage of files

Plan for the next week	Going to dive more deep in billing department

Signature of the Student Sarvesh K Singh

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(Week 4)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 4 From: 2 June 2025 to 7 June 2025

Activity Done	• Visited credit cell • Understood the claim filing process • Review files and documents for better understanding • Visited AR to see the claim settlements pf cashless patients • Analysed and review the disallowance cases and reasons • Understood the revenue structure and sources of hospital
Linking theory (Classroom learning) with practice at your organisation	• Applied the knowledge of finance and Revenue Cycle management
Gaps identified on the working area.	• Wrong health package coding • Health services given Outside of package • Lack of documents to justify • Med verve portal who just reviews the files
Suggestions for improvement	• professional medical coding team • In-house real-time file auditing team rather than med verve • Communication between doctor and medical coding team
Plan for the next week	going to cover IPD

Signature of the Student Sarvesh K Singh

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(Week 5)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 5 From: 9 June 2025 to 14 June 2025

Activity Done	• Visited IPD • Covered general ward, super speciality ward , multi-speciality ward • Observed admission process, and counselling • Bed allotment to patient shifting • Coordination between counselling nursing station and consultant • Monitored patient categorization cash insurance gov beneficiary • Patient discharge process
Linking theory (Classroom learning) with practice at your organisation	• Understood the health schemes and government schemes • Real life implication of bed management resource allocation and patient safety
Gaps identified on the working area.	• Not proper counselling on financial aspect • Delay in bed allotment • Nurse patient ratio is not adequate • Delay in discharge process
Suggestions for improvement	• Hiring of paramedical staff • A proper counselling session and • Introduce a pre discharge checklist within HIS •
Plan for the next week	going to cover emergency department and pharmacy

Signature of the Student Sarvesh K Singh

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(Week 6)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 6 From: 16 June 2025 to 21 June 2025

Activity Done	• Observed the triage process – how patients are categorized into zone based on the severity • Followed patients journey from emergency to admission or discharge • Discussed about the readmission rate and responsiveness during golden hour • Reviewed all the equipment and availability of doctors as per need • Observed the short stay admission for dialysis minor procedures
Linking theory (Classroom learning) with practice at your organisation	• Used KPIs like TAT, readmission rate , HAI , • Hospital codes (Red, yellow , blue , orange, blue, black)
Gaps identified on the working area.	• Ambulance staff and emergency staff were lacking BLS ATLS training
Suggestions for improvement	• Mandatory BLS and ATLS training for every staff
Plan for the next week	Assigned a task to find solution of parking utilization

Signature of the Student Sarvesh K Singh

Approved by the IIHMR University's Mentor

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(Week 7)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 7 From: 23 June 2025 to 28 June 2025

Activity Done	• Conducted ground-level observations of hospital parking facilities (staff, patient, and visitor zones). • Mapped current parking layout and capacity across entry and exit points. • Collected feedback from security staff, parking attendants, and visitors regarding congestion and delays. • Documented operational inefficiencies during peak hours and emergency vehicle movement. • Initiated a draft proposal for optimized space utilization and signage improvement.
Linking theory (Classroom learning) with practice at your organisation	• Applied knowledge of hospital Layout & Management in analysing vehicle flow and service efficiency. • Lean Management principles to identify non-value adding steps in current parking processes. • Integrated aspects of Stakeholder Analysis to understand the concerns of multiple user groups.
Gaps identified on the working area.	• Vehicle Congestion & Overcrowding • Parking Space Unavailability • Parking Charge Disputes • Staff Behaviour & Non-compliance • 6. Cleanliness & Hygiene Issues
Suggestions for improvement	• Zoning and Colour Coding • Staff Vehicle Identification • Infrastructure & Capacity Expansion • Training and Behaviour Management

Plan for the next week	Going to cover support and utility services and departments

Signature of the Student Sarvesh K Singh

Approved by the IIHMR University's Mentor

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(Week 8)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 8 From: 30 June 2025 to 5 july 2025

Activity Done	• Visited housekeeping understood the shift scheduling, infection control and linen cycle • Visted security department • Biomedical department to understand equipment maintenance log and breakdown report • CSSD department where shadowed end to end process of instrument sterilization • Monitored equipment's like autoclave ETO, hot air oven • chemical and biological indicators used to visually check for assurance
Linking theory (Classroom learning) with practice at your organisation	• knowledge of Essential of hospital service, support and utility services • SOPs and NABH compliances framework for infection control, waste handling and fire safety
Gaps identified on the working area.	• Outsourced biomedical waste services • Sterilized items not properly dried out • Some cameras and lights do not work • Biomedical waste bins were not placed at some point and not labelled properly • Non-working or too old biomedicaland electronic devices which often bugs or not working completely
Suggestions for improvement	• Labelling and installing waste bins specially at entry gate • Drying sterilized items properly before dispatch • Fix or change broken or non-working CCTV and light.

	•
Plan for the next week	Going to cover ICUs and OT

Signature of the Student Sarvesh K Singh

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(Week 9)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 9 From: 7JULY 2025 to 13 july 2025

Activity Done	• Observed patient flow, admission process and department coordination in MICU and SICU • Learned about critical care protocols, • Reviewed Cath labs scheduling, patient preparation and post procedure handling • Visited OTs following proper hygiene measures to observe surgical case preparation , consumables tracking and post operative sterilization process •
Linking theory (Classroom learning) with practice at your organisation	• Concept of zoning, sterilization ,air handling units and surgical safety protocols • Bed turnover rate in ICUs
Gaps identified on the working area.	• Documentation delay • Lack of coordination between department causing overlapping in cases • Ot equipment downtime
Suggestions for improvement	• Cath lab slot booking • Regular audits • EHR integration with bedside monitors
Plan for the next week	Going to compile all the learning and work on projects

Signature of the Student Sarvesh K Singh

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(Week 10)

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 Stream: HM

Week no: 10 From: 14 JULY 2025 to 20 July 2025

Activity Done	• Met with quality head to get understand quality compliance and importance of quality department in hospital • Got a hospital marketing exposure • Conducted a final review of key departments • Discussed the findings and solution with mentor and senior operations executive • Finalized the project • Received the experience certificate • Concluded the internship on a solid note
Linking theory (Classroom learning) with practice at your organisation	• NABH standards and quality compliance • Marketing management
Gaps identified on the working area.	No gaps Identifed --
Suggestions for improvement	• Reach out to institutes and tie ups with corporates for expansion and marketing.
Plan for the next week	Going to give a presentation on the project

Signature of the Student Sarvesh K Singh

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Compile Report

Name of the Organisation: Manipal hospitals, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations department

Name of the Student: Sarvesh Kumar Singh

Roll no: 2070 **Stream: HM**

Activity Done	• Observed the OPD desk A and B, map out the patient flow Understood the HIS Trak Care • Covering radiology department • Observed the complete workflow in radiology department including X ray MRI CT scan and ultrasound • Identified the bottlenecks in infrastructure and workflow specific in X ray CT and MRI • Met with the radiation safety officer discussed about the radiology department problems and safety negligence • Move to billing department met with billing head • Understood the categories of cashless patients and services provides • Get assigned a task to track and take follow ups of cashless cases from the TPAs directly • Visited AR to see the claim settlements pf cashless patients • Analysed and review the disallowance cases and reasons • Visited IPD • Covered general ward, super speciality ward , multi-speciality ward • Observed admission process, and counselling • Bed allotment to patient shifting • Patient discharge process • Observed the triage process – how patients are categorized into zone based on the severity • Followed patients journey from emergency to admission or discharge

	• Conducted ground-level observations of hospital parking facilities (staff, patient, and visitor zones). • Mapped current parking layout and capacity across entry and exit points. • Visited housekeeping understood the shift scheduling, infection control and linen cycle • Visted security department • Biomedical department to understand equipment maintenance log and breakdown report • CSSD department where shadowed end to end process of instrument sterilization • Observed patient flow, admission process and department coordination in MICU and SICU • Learned about critical care protocols, • Reviewed Cath labs scheduling, patient preparation and post procedure handling • Met with quality head to get understand quality compliance and importance of quality department in hospital • Got a hospital marketing exposure • Conducted a final review of all key departments
Linking theory (Classroom learning) with practice at your organisation	• Applied the knowledge of hospital administrations and management, learned during hospital services module to understand layout, health and utility services, • lean concept to understand and find issues and gaps • Used my experience and radiology background • Applied the knowledge of finance and Revenue Cycle management • Understood the health schemes and government schemes • Monitored KPIs like TAT, readmission rate , HAI , • Hospital codes (Red, yellow , blue , orange, blue, black) • Applied knowledge of hospital Layout & Management in analysing vehicle flow and service efficiency.

	• Lean Management principles to identify non-value items • Concept of zoning, sterilization, air handling units and surgical safety protocols • Marketing management
Gaps identified on the working area.	• No specific desk for follow up and appointment patient • Undertrained staff to handle big crowd • Doctors arriving late causing long waiting time • Poor x ray room infrastructure high chances of radiation leakage • Lack of skilled paramedical department in Ultrasound department • Single modality of CR X ray which causing delay in scan time and increase workload • MRI patient volume is higher result patient dropout • Staff was not following radiation safety precaution • Delay in nursing clearance and discharge summery result delay in billing • TPA pre auth pending due to documentation Wrong health package coding • Health services given Outside of package • Lack of documents to justify • Not proper counselling on financial aspect • Delay in bed allotment • Nurse patient ratio is not adequate • Vehicle Congestion & Overcrowding • Parking Space Unavailability • Parking Charge Disputes • Staff Behaviour & Non-compliance • 6. Cleanliness & Hygiene Issues • Sterilized items not properly dried out • Some cameras and lights do not work • Biomedical waste bins were not placed at some point and not labelled properly • Documentation delay • Lack of coordination between department causing overlapping in cases of OT Cath lab and radiology • Ot equipment downtime

	•
Suggestions for improvement	• A specific desk for appointment and follow up patient also for elderly patient • Training sessions for undertrained staff • Performance based bonuses to doctor to motivate them • Install proper signage and a dedicate help desk • Redesign the x ray room layout • Installing a DR x ay system • Upgradation or installing one more MRI system • staff training program on radiation safety • A dedicated team to continuously contact to TPAs • Better communication between IPD and billing department professional medical coding team • In-house real-time file auditing team rather than med verve • Communication between doctor and medical coding team to decide the health package under right code • Proper and safe storage of files expansion of MRD • Hiring of paramedical staff • A proper clear financial counselling session • Zoning and Colour Coding for staff and visitor • Staff Vehicle Identification • Infrastructure & Capacity Expansion • Training and Behaviour Management • Labelling and installing waste bins specially at entry gate • Drying sterilized items properly before dispatch • Fix or change broken or non-working CCTV and light • Cath lab slot booking • Regular audits or every department • EHR integration with bedside monitors • Reach out to institutes and tie ups with corporates for expansion and marketing.

Signature of the Student Sarvesh K Singh

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