SUMMER INTERNSHIP PROGRAM

at

Chest and TB Hospital

From 15th May 2025 to 29th July, 2025

A REPORT BY

Name of the student: Neha Yadav

Master of Business Administration

Hospital and Healthcare Management

2024-26

under the Mentorship of

Dr. Sarthak Sen Gupta

IIHMR UNIVERSITY

Name of Institution:- Institute of Respiratory Diseases, SMS Medical College, Jaipur

Completion Certification from the Organization

CERTIFICATE

This is to certify that Ms. Neha Yadav, Enrolment No. IHMR-U/01/2024-26/2006 of (batch) of 2024-26 Institute of Health Management Research has worked with our organization for his/her summer internship from 15.05.2025 to 29.07.2025 (date) The overall performance shown by her during the period was excellent/good/average.

Date :- 29.07.2025

Chand Bhandari.
अधीक्षक
श्वसन रोग संस्थान
जयपुर

(Signature of organization Mentor)

Name – Dr. Chand Bhandari
Designation – Superintendent
Seal Stamp of the Organization.

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that Dr Neha Yadav of academic year 2024-26 **Institute of Health Management Research** has prepared a poster with respect to her summer internship held during May-July 2025.

She has carried out work as per the guidelines. Her poster is approved for presentation.

Date: 31/07/2025

Dr.Sarthak Sen Gupta

Assistant Professor

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SUMMER INTERNSHIP PROGRAM
IIHMR UNIVERSITY, JAIPUR

OPTIMIZING HOSPITAL DISCHARGE TURNAROUND TIME THROUGH EFFECTIVE QUEUE MANAGEMENT

University Mentor: Dr. Sarthak Sen Gupta

Submitted by: Neha Yadav
Roll NO- 2006
Hospital Mentor -Dr Bhupender

Brief History

Established with the mission to combat one of the oldest and deadliest infectious diseases, TB Sanatorium Hospital has been a cornerstone of tuberculosis treatment and respiratory care in the region. Originally founded as a dedicated center for the isolation and recovery of TB patients, the hospital has evolved over the years to incorporate modern diagnostic and treatment facilities while preserving its core focus on pulmonary health. With a legacy rooted in public health service, the hospital continues to play a vital role in serving economically weaker sections and supporting national TB eradication efforts, all while adapting to advancements in medical science and healthcare delivery.

Learning and Value Additions

Difference Between Practical Exposure and Theoretical Knowledge

- Theoretical: Classroom learning emphasized ideal SOPs, lean management, and use of hospital information systems (HIS) for patient admissions.
- Practical: On-ground processes were mostly manual, with delays caused by documentation, staff dependency, and lack of digital tools.
- Gap Realized: Theory promotes streamlined processes, but ground realities include resistance to change, staff limitations, and lack of IT adoption.

Challenges Faced During Internship

- Difficulty in coordinating with departments due to limited cooperation and lack of inter-departmental sync.
- Observed staff burnout and confusion during high patient load, with no clear ownership of queue control.
- Absence of structured data or KPIs on wait times made analysis more dependent on manual observation.

Major Learnings

- Understood how queue mismanagement directly impacts patient satisfaction and hospital efficiency.
- Gained exposure to real-time process observation, data collection, and basic time-motion study techniques.
- Developed soft skills such as communication, adaptability, and initiative while handling on-ground tasks.

SWOT Analysis

STRENGTHS
- Dedicated Admission Staff – Staff is assigned specifically for managing patient admissions, ensuring accountability.
- Standard Operating Procedures (SOPs) – Basic admission steps are well-defined and followed.
- Availability of 24x7 Services – Admission facility operates round the clock, supporting emergency and inpatient care.

WEAKNESSES
- Manual Paper-Based Process – Lack of digital systems results in delays and redundant paperwork.
- Limited Staff During Peak Hours – Staff shortage leads to longer waiting times during rush hours.
- Lack of Real-Time Queue Monitoring – Patients remain unaware of their position in the queue, creating confusion and frustration.

OPPORTUNITIES
- Implementation of Digital Queue System – Introducing a token system or mobile-based admission tracking can reduce congestion.
- Staff Training in Queue Management – Soft skill and process optimization training can improve service quality.
- Integration with EMR/EHR – Linking admission with medical records can streamline patient onboarding and reduce time.

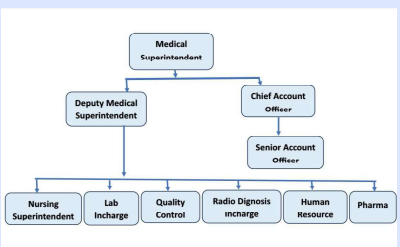
THREATS
- Patient Dissatisfaction – Delays or mismanagement can lead to negative feedback or loss of trust.
- Risk of Operational Overload – Poor queue control can cause staff burnout and process breakdowns.
- Increased Competition from Private Hospitals – Competitors offering faster, digital-first experiences may attract patients.

Vision & Mission

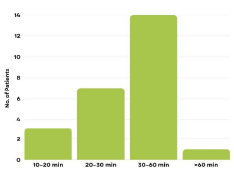
To be a leading center of excellence in respiratory and tuberculosis care, dedicated to enhancing patient outcomes through compassion, innovation, and community-focused service.

- To provide affordable and accessible treatment for tuberculosis and respiratory diseases.
- To promote early diagnosis, effective treatment, and patient education for disease prevention.
- To support national public health goals through research, training, and community outreach programs.

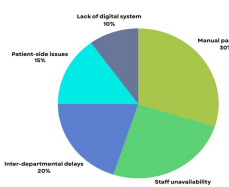
Organisation Structure



Distribution of OPD Waiting Time



Causes of Delay in Admission Process



USEFULNESS OF INTERNSHIP

The internship provided hands-on experience in analyzing hospital workflows, particularly patient admissions.
It helped bridge the gap between classroom concepts and real-time healthcare operations.
Exposure to queue management highlighted the importance of process efficiency in enhancing patient satisfaction.

CHALLENGES FACED

Limited digital infrastructure and manual documentation often led to longer waiting times.
Coordinating across departments was difficult due to unclear responsibilities and communication gaps.
Staff resistance to change also posed a hurdle in process analysis and data collection.

SUGGESTIONS FOR IMPROVEMENT

Introduce a digital queue/token system to manage patient flow and reduce bottlenecks.
Train staff in queue management and communication during peak hours.
Deploy additional resources or shift-based staff scheduling to handle high patient volumes efficiently.

Conclusion

The internship at TB Sanatorium Hospital provided meaningful insights into the challenges and inefficiencies of the patient admission process. By analyzing queue patterns and delays, I identified key operational gaps and proposed actionable strategies to improve patient flow. Implementing a structured queue management system can not only reduce waiting times but also enhance patient satisfaction and hospital throughput. This experience reinforced the importance of bridging academic knowledge with real-world healthcare operations.

Reporting Format (Weekly)

Name of the Organisation: Chest and TB hospital

Area/ Department/ Project of Summer Internship Program: Medical education Rajasthan

Name of the Student: DR. NEHA YADAV

Roll no: 2006 Stream: HOSPITAL MANAGEMENT

Week no: 01

From:15 MAY……to……17 MAY……

Activity Done	Introduction to Hospital, hospital staff, RMO, Superintendent. Orientation Program Observed and documented OPD process flow of patient registration, consultation. General observation of patient service. Estimated and documented waiting time of patient after slip and meeting doctor. Recorded waiting time of patient getting Xray, usg films. Data collected of RGHS and MAA yojana of April month
Linking theory (Classroom learning) with practice at your Organisation	Applied Hospital Operations Management concepts to study the OPD and discharge process. Reminded Organisational Behaviour lessons to understand staff- patient interaction and workflow patterns.
Gaps identified on the working area.	Being a TB hospital, there were no precaution measures taken by staff and patients, very few were seen using masks. Poor resources as acs and ducting were not proper working creating problems to staff and patients. Directions and signs to patients in the opd area are poor.

Suggestions for improvement	Digital Tracking for discharge process to reduce delays. Online diagnostic reports
Plan for the next week	Monitoring and observing in detail. Tasks assigned by the government.

Signature of the Student

Neha

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Dr. Neha Yadav

Roll no: 2006 Stream: MBA Hospital Management

Week no:02

From:19/05/25……to……24/05/2025…….

Activity Done	Calculated waiting time for dispensing of medicines of the patient. Data given for total ipd and opd of April month. Observed how the laboratory area works, how the sample is collected and where it is sent for further process. Took feedback from patients and staff about the workflow.
Linking theory (Classroom learning) with practice at your Organisation	Healthcare process flow, hospital operations management, and quality assurance were all successfully applied in the MRD setting. My theoretical understanding of Lean Management analysis helped me identify inefficiencies in the discharge workflow.
Gaps identified on the working area.	Insufficient gaps telling patient where to go resulted in unnecessary delays in discharge. Long waiting hours causes patients delay in their treatment process.
Suggestions for improvement	Clear signage and way finding, this result in reducing confusion and unnecessary delays. Streamlined Discharge Process- implementing a standardized checklist, ensuring all necessary steps completed efficiently. Waiting time reduction-implement strategies such as appointment based, increase staffing levels,

Plan for the next week	Conduct a workflow analysis. Analyze waiting times Data Collection.

Neha

Signature of the Student

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Dr. Neha Yadv

Roll no: 2006 **Stream: HM**

Week no: 03

From:26/05/25……to……31/05/25……

Activity Done	Understanding of PWD department Understanding of lab department, how vial is collected and where to submit. sample collection process. Understanding of DOTS - how patients register through apps, online and offline registration process.
Linking theory (Classroom learning) with practice at your Organisation	Safety codes about which we have learnt in module of Essentials of hospital services. The infection control measures that should be taken in the hospital were also told and all precautionary measures is taken while visiting the departments.
Gaps identified on the working area.	Gap between risk factors and prevention strategies Long waiting hours for patients Proper sanitization is not there, as while collecting lab samples patients spills off their urine, sputum sample which increases the risk of increase of tb
Suggestions for improvement	Improve sanitation practices – ensure proper hand hygiene practices among healthcare staff.

	Provide adequate cleaning and disinfection of surfaces and equipment's. Optimize staffing and resource allocation to meet patient demand.
Plan for the next week	Continue with Process audit. Process lifeline and Store room audit

Signature of the Student

NEHA

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and tb Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Dr. Neha Yadav

Roll no: 2006 **Stream: HM**

Week no: 4

From:02/06/2025……to……07/06/2025…….

Activity Done	Went to Kawatiya hospital to see QMS- Queue management System of the hospital and understanding of token system. Observed parking area workflow. Understanding of tender system in government hospital. Understanding of PWD department.
Linking theory (Classroom learning) with practice at your Organisation	Safety codes about which we have learnt in module of Essentials of hospital services. The infection control measures that should be taken in the hospital were also told and all precautionary measures is taken while visiting the departments
Gaps identified on the working area.	Patient has to wait outside opd for long hours and there is no any sitting area available for patients resulting in sitting on floors causing mis management. Insufficient availability of chairs and sitting area for patients.

Suggestions for improvement	Token system /QMS should be applies to reduce waiting hours of patients. Waiting hall or chairs availability should be provided.
Plan for the next week	Monitoring and observing in detail, collect data if required. Tasks assigned by the government and Medical Supredendent.

Signature of the Student - NEHA

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and tb hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Neha Yadav

Roll no: 2006 Stream: HM

Week no: 05

From:9 June……to……14 June…….

Activity Done	Visited and observed the workflow of Lifeline department, Store room, Pathology lab of the hospital. Understanding of HIV department. Took feedback from the patients and staff about workflow of that particular department. Provided one month report of the work done to the MS and HR of SMS hospital
Linking theory (Classroom learning) with practice at your Organisation	Process management- involves analyzing and improving workflows to increase efficiency and effectiveness. Change management- Implementing changes based on feedback and observation requires effective change management. Human Resource Management- providing report to the MS and HR and taking feedback from staff relate to HRM practices. Organisational Behaviour- how people interact within groups and organizations.
Gaps identified on the working area.	The lab is understaffed, which leads to delays in test results and impact patient care.

	The HIV counter is currently located in high-risk area, increasing the risk of exposure to staff and patients. Washbasin issues in Pathology Lab- the washbasin is not functioning properly and is not located near the sputum collection area, increasing the risk of TB transmission. The washroom seat is damaged and needs to be repaired. Store Room temperature- The store room where medicines are kept does not have air conditioning, and the room temperature is 40 degrees Celsius, which can affect the potency of medicines that requires temperature between 30-32 degrees Celsius. There is insufficient space to store cartons of medicines, which can lead to disorganization and potential stock management issues.
Suggestions for improvement	Recruit additional staff- hire more pathologists, laboratory technicians and support staff to ensure adequate coverage. Relocate the HIV counter- move the HIV counter to separate area with minimal foot traffic to reduce the risk of exposure. Install a new washbasin near sputum collection to minimize the risk of TB transmission. Repair the washroom seat and regular maintenance. Install air conditioning to the store room, monitor temperature to ensure it remains withing required range. Allocate additional storage space Implement inventory management- develop an inventory management system to track stock levels, minimize waste and optimize storage.
Plan for the next week	Working on the project given by the hospital. Analyzing and observing workflow and recording gaps, identifying issues.

Signature of the Student - NEHA

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Neha Yadav

Roll no: 2006 Stream: HM

Week no: 6

From:16 June……to……21 June…….

Activity Done	Understanding of BMW (Biomedical Waste) department. Audit of OPD, laboratory, store room, pathology lab, MAA Yojana counter. Working on the project – analysis of nursing staff responsibility in government hospital. Understanding of work culture of nursing staff and roles they do based on their grading. Conducted routine floor visits across OPD entrance, General wards, Washroom facilities, Laboratory area.
Linking theory (Classroom learning) with practice at your Organisation	In the class we were taught about OPD department works and to minimize the consultation time we did consultation TAT to find out the issues that are responsible for longer consultation time and ways it can be reduced. Safety codes which we have learnt in modules of Essentials of hospitality services. Data analysis in module of biostatistics.
Gaps identified on the working area.	No physical or digital medium is available for patients to report issues or share suggestions. No shade near DD, as patient face problems while waiting to collect medicines during rainy weather. Gap between risk factors and prevention strategies. No help desk, therefore delays in discharge of patients.

Suggestions for improvement	Design clearly marked, locale complaint boxes in visible, accessible locations. Feedback form in both Hindi and English language. Maintain a complaint register and generate monthly reports for review during hospital quality meetings. Establish a help desk or information centers to assist patients and smooth functioning of Organisation.
Plan for the next week	Analyzing responsibilities of nursing staff. Routine floor visits.

Signature of the Student

NEHA

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Neha Yadav

Roll no: 2006 Stream: HM

Week no:7

From:23 June……to……28 June……

Activity Done	Conducted routine floor visits across OPD entrance, Labs, General Wards, Washroom facilities. Took feedback from patients. Analysis of responsibilities of security guards and their roles in hospital. Understanding of tender system in a government hospital. Working on the project given by the hospital- analysis of responsibilities of nurses in a government hospital.
Linking theory (Classroom learning) with practice at your Organisation	As studied in class about NABH survey, there were many things I was able to execute. The infection control measures that should be taken in the hospital were also taught that were properly kept in mind while taking the rounds around the departments.
Gaps identified on the working area.	There is no proper paint on the walls of the hospital and ceiling is there in almost every room. Water coolers are not in a good shape. Server is down and works slow causing patient to wait for longer time, windows is broken – glass of window. Chair is broken and not available enough including in departments like lifeline. Lack of staffs in labs.

Suggestions for improvement	Maintenance of walls – Proper paint should be done on the walls of hospital. Regular inspect the walls and paint them as needed. Implement a maintenance schedule to ensure timely repairs. Upgrade the server infrastructure to handle peak hours more efficiently. Also implement a backup system to minimize downtime during peak hours. Conduct a survey to determine the optimal number of chairs needed in waiting areas and there should be additional chairs to meet in demand whenever there is need. Implement a system for reporting broken chairs to ensure prompt attention. Inspect all windows in the hospital and repair or replace them as needed. Conduct a staffing analysis to determine the optimal number of staff needed in labs. Hire additional staff to meet the demand and ensure timely patient care.
Plan for the next week	Analysis of roles and responsibilities of nursing staff. Routine floor visits. Taking feedback from patients.

Signature of the Student

NEHA

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Neha Yadav

Roll no: 2006 Stream: HM

Week no: 8

From:30/06/2025……to……05/07/25…….

Activity Done	Conducted daily rounds of departments to understand workflows. Visited kanwatiya Hospital to observe patient handling and infection control practices. Visited and observed Operation Theatre (OT) functioning, equipment layout and OT protocols. Visited BMW department and understanding the workflow and bar code system. Continued report making and documentation on various hospital issues and solutions.
Linking theory (Classroom learning) with practice at your Organisation	Applied concepts of Hospital Operation Management during OT visit and surgical department observation. Used knowledge of Health Communication and Public Health IT Tools while educating patients about the Raj Uppchar App. Related learnings from Infection control and Biomedical Waste Management Linked hospital department coordination theories with real-time interdepartmental working during rounds and project initiation.

Gaps identified on the working area.	Lack of digital awareness among patients, many were unaware of online appointment systems. OT scheduling and documentation systems are not fully streamlined or digitized. TB patients use common areas, posing a cross- infection risk to general patients. Need for more patient-friendly communication material regarding online tools and hospital services.
Suggestions for improvement	Install posters or digital screens demonstrating use of the RajUppchar App in OPD waiting areas. Provide a dedicated help desks to assist patients in booking online appointments. Improve OT documentation and create digital dashboards for daily surgical scheduling. Consider separate pathways or designated waiting areas for TB patients to reduce the risk. Regular patient awareness drives to improve utilization of government health IT tools.
Plan for the next week	Routine floor visits. Continue working on pending reports. Prepare a weekly presentation of progress to supervise and finalize pending reports.

Signature of the Student

NEHA

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: Neha YADAV

Roll no: **Stream:**

Week no: 09

From:07 JULY……to……12 JULY ……

Activity Done	Calculated patient waiting time in OPD and diagnostic departments. Calculated waiting time for X- ray, USG To enhance patient experience and satisfaction. Identify peak hours and deploy resources accordingly. To propose sustainable queue solutions.
Linking theory (Classroom learning) with practice at your Organisation	Operations Management- involves the administration of practices to create the highest level of efficiency within an organization. It includes managing resources, supervising production. It is used in reducing waiting times and improve patient satisfaction.
Gaps identified on the working area.	Long Waiting Times – Patients often experience long waiting times in OPD and diagnostic departments. Inefficient Resource Allocation Lack of Real – Time data
Suggestions for improvement	Implement a queue management System- Utilize a digital queue management system that can track patient waiting times, provide real time updates and optimize the queue flow. Adjust staffing levels according to demand during peak hours to reduce waiting times.

Plan for the next week	Working on the project given by the hospital. Weekly rounds in departments.

Signature of the Student

Neha

Approved by the IIHMR University's Mentor

Reporting Format (Weekly)

Name of the Organisation: Chest and TB Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: NEHA YADAV

Roll no: 2006 Stream: HM

Week no: 10

From:14 JULY……to……19 JULY ……

Activity Done	Did project given by hospital and made ppt on the topic- IPD analysis for a day. Calculated admission, discharge, maa yojana, medicine data. Daily rounds in store room, lifeline, lab, ipd.
Linking theory (Classroom learning) with practice at your Organisation	Patient- Centered Care- providing care that is respectful of and responsive to individual patient preference, needs and values. Timely access to Care- Ensuring that patients receive timely and efficient care, minimizing time and delays. Effective Communication- Clear and effective communication between healthcare providers, patients, and families. Patient Flow Management- managing patient flow to minimize waiting times and optimize resource utilization.
Gaps identified on the working area.	Delays in admission, discharge, or treatment processes. Miscommunication between healthcare providers, patients and families. Inefficiencies in managing patient flow, leading to waiting times and resources utilization.

Suggestions for improvement	Enhancing communication strategies for more efficient, patient flow management system

Signature of the Student

Approved by the IIHMR University's Mentor

Compiled Report

Name of the Organisation: Chest and TB Hospital

Area/ Department/ Project of Summer Internship Program: Medical Education Rajasthan

Name of the Student: NEHA YADAV

Roll no: 2006 Stream: HM

From:15 MAY……to…29 JULY……

Activity Done	Introduction to hospital staff and orientation.- Observed OPD patient registration, consultation, waiting times for X-ray, USG, and pharmacy.- Data collection on RGHS, MAA Yojana, IPD/OPD stats, medicine dispensing times.- Understanding of PWD, DOTS, Biomedical Waste, HIV, Lab, Store Room, Nursing duties.- Conducted workflow audits, floor rounds, and project-based analyses (Queue Management, Nursing Responsibility).- Calculated patient waiting times and peak hours; submitted weekly reports and presented a project on IPD analysis
Linking theory (Classroom learning) with practice at your Organisation	Applied Operations Management to discharge and OPD workflows. - Used Lean Management to identify inefficiencies. - Organizational Behaviour applied to observe staff-patient interactions. - Infection Control and Biomedical Waste Management practices reviewed during visits. - HRM and Communication strategies applied in team coordination and feedback collection. - Health IT and data analytics used to assess appointment and patient flow systems.
Gaps identified on the working area.	Poor signage and wayfinding in hospital premises. - Long patient waiting times and no Queue Management System. - Understaffing in labs, washroom and hygiene issues. No proper seating or waiting area in OPD. - HIV counter in high-risk zone; improper biomedical waste disposal. - Poor infrastructure: damaged chairs, non-functional washbasins, server downtime. - Lack of digital awareness among patients. - No help desk or complaint system for feedback

Suggestions for improvement	- Install digital Queue Management and tracking systems. - Improve signage and patient navigation. - Recruit additional lab and support staff. - Establish help desks, feedback systems, and shaded waiting areas. - Relocate high-risk services (e.g., HIV counter) to safer locations. - Regular maintenance of infrastructure (washrooms, chairs, windows). - Improve communication through posters, digital screens, and education drives. - Implement inventory and patient flow management tools
Key learnings	• Gained practical experience by applying academic concepts to hospital operations. • Learned the value of standardizing processes, communicating effectively, and using data to improve healthcare quality. • Developed skills in identifying service inefficiencies and implementing effective operational improvements. • Learnt to manage Organisational limits, drive change, and foster teamwork. • Improved leadership and analytical abilities by directly participating in hospital projects.

Signature of the Student

NEHA

Approved by the IIHMR University's Mentor