SUMMER INTERNSHIP PROGRAM

at

Wockhardt Hospital, Mumbai Central, Mumbai

From 12th May 2025 to 17th July 2025

A REPORT BY

Dr Tushar Maheshwari

Master of Business Administration

Hospital and Health Management

Roll no: 2107

2024-26

under the Mentorship of

Dr. Vidya Bhushan Tripathi

Assistant Professor,

IIHMR University,

Jaipur

NEW AGE WOCKHARDT HOSPITALS | LIFE WINS

July 12, 2025

TO WHOMSOEVER IT MAY CONCERN

This is to certify that, **Dr. Tushar Maheshwari**, student of IIHMR Jaipur has completed his Summer Training Programme at '**Wockhardt Hospitals**, located in **Mumbai Central**', in the **Medical Administration** from **12th May 2025** to **12th July 2025**. During his internship, he was mentored by Dr. Mahavir Gajani, Head – Medical Admin.

He has completed the following projects:

- Project Titles: Analysis of Marginal Utilisation of ICU beds.
  Audit for DVT Prophylaxis in TKR and THR Patients.

He has successfully carried out the projects undertaken by him during his Summer Training Programme and his approach to the projects has been sincere, scientific, and analytical.

Mukul Sharma
Head - Human Resources
Wockhardt Hospitals Ltd.
South Mumbai

Wockhardt Hospitals Ltd. MUMBAI Unit Adam's Wylie Memorial

Dr. Mahavir Gajani
Head – Medical Admin
Wockhardt Hospitals Ltd.
South Mumbai

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Mr. Soni Manav Anuj Kumar** 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: 29/07/2025

Mr. S.P. Chattopadhyay
Assistant Professor

TO STUDY ICU WORKFLOW AND IDENTIFY FACTORS CONTRIBUTING TO MARGINAL BED UTILIZATION FOR RECOMMENDING PROCESS IMPROVEMENTS.

Presented By: Dr Tushar Maheshwari
Roll No:2107
Stream: Hospital And Health Management

University Mentor: Dr Vidya Bhushan Tripathi

Organization Mentor: Dr Mahavir Gajani

DESCRIPTION OF ORGANIZATION

Wockhardt Hospital, Mumbai Central is a multi-specialty tertiary care NABH-accredited hospital, known for advanced patient care, especially in cardiology, orthopaedics, neurosciences, and critical care. It plays a key role in delivering affordable, quality healthcare in Mumbai city.

VISION

To be a leading healthcare institution in the region, recognized for its commitment to quality, patient-centric care, and innovative medical practices.

MISSION

To make "Life Win" by providing advanced healthcare through cutting-edge technology and clinical expertise.

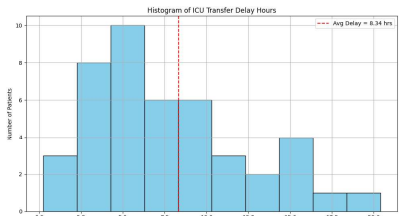
ORGANIZATION STRUCTURE

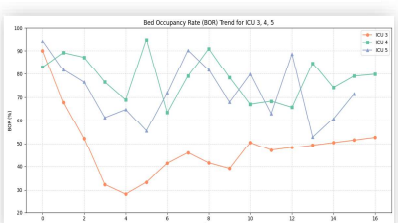
OBJECTIVE

- To understand the patient flow and operational workflow of the ICU — from admission to discharge
- To identify delays and inefficiencies in the transfer process of patients from ICU to ward
- To identify gaps in interdepartmental communication and coordination impacting ICU bed turnover.

METHODOLOGY

An Observational and Audit-Based Study Using Qualitative and Quantitative data, to Evaluate ICU Transfer delay hours, Bed Occupancy Rate and Overall ICU Admission Rate





Theoretical Understanding vs Practical Exposure

Aspect	Theoretical Understanding	Practical Exposure
ICU Bed Utilization	Seen as a function of clinical need and severity of illness	Also driven by administrative delays, discharge clearance, and ward availability
Patient Transfer	Assumed to be systematic and timely once patient is stable	Often delayed due to communication gaps, pending paperwork, or staff shortage
Workflow Coordination	Believed to be guided by SOPs and protocols	In reality, workflows are often informal, with coordination relying heavily on interpersonal follow-ups

SWOT

STRENGTHS

- NABH & JCI-accredited tertiary care hospital with strong clinical governance
- Central location with good patient inflow and access to multi-specialty care.
- Experienced critical care team with 24x7 intensivist coverage.
- Strong infection control and

WEAKNESSES

- Lack of real-time dashboards for ICU occupancy and discharge readiness.
- Dependency on manual processes and verbal communication for bed management.
- Limited digital integration between clinical and

OPPORTUNITIES

- Capability to Expand
- Nearby Catchment Monopoly
- Use ICU data for predictive analytics to forecast bed needs

THREATS

- Rise in Competitors
- Perception of high cost
- Risk of delayed admission for critical patients due to occupied ICU beds by stable patients

TOWS

	Opportunities	Threats
Strengths	SO Strategies) Use strong ICU team + analytics to forecast and expand capacity Leverage NABH /JCI reputation to tap nearby catchment areas	ST Strategies) Use 24/7 intensivist coverage to reduce delays for critical patients Promote infection control & location advantage to counter cost perception and competition
Weakness	WO Strategies) Integrate real-time dashboards using existing data to support expansion Shift from manual to predictive analytics to manage ICU readiness	WT Strategies) Digitally streamline ICU bed management to avoid delays Minimize verbal miscommunication to lower risk of misallocated ICU stays

Key learnings

- Gained in-depth understanding of ICU workflows — from patient admission to discharge
- Realized the importance of timely patient transfer in optimizing bed availability and care quality.
- Improved skills in data analysis, documentation review, and SOP evaluation.
- Understood the significance of HIS and digital tools in tracking patient movement and occupancy.
- Gained confidence in presenting findings professionally and contributing meaningfully to process improvement.

Usefulness

- Internship experience improved my skills in healthcare operations, hospital workflow analysis, and practical decision-making.
- Understood the gap between clinical stability and administrative discharge delays.
- Gained hands-on exposure to real-time ICU operations and patient movement challenges.

Challenges Faced During Internship

- Limited access to real-time ICU data due to confidentiality and system restrictions.
- Difficulty in coordinating with multiple departments (ICU, wards, operations, billing) for information collection.
- Reluctance from some staff to share details or discuss operational issues openly.

Suggestions

- Implement a Real-Time ICU Bed Monitoring Dashboard
- Appoint a Patient Transfer Coordinator
- Use Colour-Coding in HIS for Transfer-Ready Patients
- Conduct Regular ICU Utilisation Audits

Reporting Format (Week 1)

Name of the Organisation: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Medical Administration

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 Stream: Hospital Management

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

Activity Done	• Orientation at Wockhardt Hospital. • Introduction to the ICU setup, workflow, and patient admission-discharge process. • Identification of stakeholders involved in ICU operations.
Linking theory (Classroom learning) with practice at your organisation	• Applied concepts of hospital operations and bed management from classroom. • Understood NABH guidelines related to ICU.
Gaps identified on the working area.	• Absence of a centralized dashboard for real-time ICU bed tracking. • Limited visibility into reasons for marginal ICU stay.
Suggestions for improvement	• Conduct routine audits for non-clinical ICU extensions.
Plan for the next week	• Start collecting ICU occupancy and admission/discharge data. • Observe daily rounds and documentation practices.

Signature of the Student Tushar Maheshwari

Reporting Format (Week 2)

Name of the Organization: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Medical Administration

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 Stream: Hospital Management

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

Activity Done	• Initiated data collection on ICU occupancy trends. • Observed patient transfer and ICU workflow during peak hours. • Reviewed ICU admission criteria and documentation.
Linking theory (Classroom learning) with practice at your organisation	• Applied bed management strategies in real-time contexts. • Used principles of Hospital Information Systems (HIS) to retrieve ICU data.
Gaps identified on the working area.	• Discharge readiness assessments often missing or incomplete in records. • Patients remain in ICU longer than medically necessary due to administrative lags.
Suggestions for improvement	• Appoint a dedicated ICU discharge coordinator. • Implement daily interdisciplinary rounds including ward teams.
Plan for the next week	• Identify marginal ICU cases and reasons for delay • Initiate interaction with nursing and support staff for insights.

Signature of the Student Tushar Maheshwari

Reporting Format (Week 3)

Name of the Organization: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Operations, Medical Administration

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 **Stream: Hospital Management**

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

Activity Done	• Compared weekday vs weekend patterns in ICU throughput. • Interviewed ICU nurses and RMOs regarding barriers to timely discharge. • Studied turnaround times for cleaning and re-preparation of ICU beds.
Linking theory (Classroom learning) with practice at your organization	• Applied concepts from hospital support services and service level agreements. • Studied both clinical and operational causes for excess ICU stay.
Gaps identified on the working area.	• Discrepancies in ICU admission timing vs. actual bed occupancy.
Suggestions for improvement	• Implement Admission-to-Occupancy Time Tracking:
Plan for the next week	• Coordinate with support departments for delay logs (transport, housekeeping, etc.).

Signature of the Student Tushar Maheshwari

Reporting Format (Week 4)

Name of the Organisation: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Operations, Medical Administration

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 **Stream: Hospital Management**

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

Activity Done	• Collected data on bed idle time after patient discharge. • Audited 50 patient files for reasons of excess ICU stay. • Classified delays into clinical, administrative, and infrastructure-related. • Collaborated with support services to understand transport bottlenecks.
Linking theory (Classroom learning) with practice at your organisation	• Utilized root cause analysis and process improvement models. • Connected theoretical models to live care transitions and workflow patterns.
Gaps identified in the working area.	• No standardized documentation of delay reasons.
Suggestions for improvement	• Introduce a delay reason tracker for ICU shift reports.
Plan for the next week	Evaluate turnaround times for ICU bed cleaning and readiness.

Signature of the Student Tushar Maheshwari

Reporting Format (Week 5)

Name of the Organization: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Operations, Medical Administration

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 **Stream: Hospital & Health Management**

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

Activity Done	• Investigated delays caused by non-availability of ward beds post-discharge order. • Tracked the frequency and impact of late-night or weekend delays.
Linking theory (Classroom learning) with practice at your organisation	• Applied concepts of hospital bed management and TAT (turnaround time) metrics.
Gaps identified in the working area.	• No real-time visibility into ward occupancy for ICU staff.
Suggestions for improvement	• Establish a live ward occupancy display accessible to ICU.
Plan for the next week	• Start report compilation and data visualization.

Signature of the Student Tushar Maheshwari

Reporting Format (Week 6)

Name of the Organization: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Operations, Medical Administration, Quality Department

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 **Stream: Hospital & Health Management**

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

Activity Done	• Investigated delays caused by non-availability of ward beds post-discharge order. • Tracked the frequency and impact of late-night or weekend delays.
Linking theory (Classroom learning) with practice at your organization	• Applied concepts of interdepartmental coordination and SOP adherence. • Related healthcare communication protocols and escalation matrices to ICU challenges.
Gaps identified on the working area.	• No ongoing monitoring tool for ICU workflow deviations. • Improvement measures not revisited post-audit cycles.
Suggestions for improvement	• Establish an ICU utilization dashboard with weekly updates. • Institutionalize fortnightly review of ICU transitions and delays.
Plan for the next week	• Finalize report with mentor feedback. Conduct final review session with hospital administrator

Signature of the Student-Tushar Maheshwari

Reporting Format (Week 7)

Name of the Organization: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Operations, Medical Administration, Quality Department

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 **Stream: Hospital & Health Management**

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

Activity Done	• Completed final analysis of ICU occupancy, discharge delays, and marginal stay cases. • Correlated ICU stay duration with revenue outcomes in insurance vs self-pay patients.
Linking theory (Classroom learning) with practice at your organization	• Connected learnings from hospital administration and communication to interdisciplinary coordination.
Gaps identified on the working area.	• Delay documentation is not linked to financial impact or length of stay metrics.
Suggestions for improvement	• Include delay reason and financial implication mapping in monthly ICU audits.
Plan for the next week	• Prepare internship presentation and final report. Create summary insights, key findings, and strategic recommendations for hospital leadership.

Signature of the Student- Tushar Maheshwari

Reporting Format (Week 8)

Name of the Organisation: Wockhardt Hospital, Mumbai Central, Mumbai

Area/ Department/ Project of Summer Internship Program: Operations, Medical Administration, Quality Department
Roll no: 2107 Stream: Hospital & Health Management

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

Activity Done	• Delivered final presentation on ICU bed utilization, marginal stay analysis. • Submitted the complete internship report with validated data and evidence-based recommendations.
Linking theory (Classroom learning) with practice at your organisation	• Synthesized academic knowledge on hospital operations, health economics, and quality management into practical outcomes. • Applied reporting and project communication skills in high-level stakeholder presentation.
Gaps identified in the working area.	• No structured mechanism to implement or track recommendations from internal audits or internship projects
Suggestions for improvement	• Develop a system where every internal audit/intern project recommendation is assigned an owner and timeline.
Plan for the next week	Audit for DVT prophylaxis in TKR & THR patients.

Signature of the Student Tushar Maheshwari

Compiled Reporting Format

Name of the Organization: Wockhardt Hospital, Mumbai Central, Mumbai

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

Name of the Student: Dr. Tushar Maheshwari

Roll no: 2107 **Stream: Hospital and Health Management**

Activity Done	**Orientation & ICU Workflow Understanding** • **Understood overall ICU structure, operations, and admission-discharge process.** • **Identified key stakeholders involved in ICU activities.** ◆ **Data Collection & Occupancy Trends** • **Collected data on ICU occupancy and admission/discharge patterns.** • **Compared weekday vs weekend throughput differences.** • **Audited 50 patient files to find causes of delayed ICU stay.** ◆ **Staff Interaction & Observation** • **Observed ICU staff during daily rounds and discharge planning.** • **Conducted interviews with ICU nurses and RMOs to explore delays.** • **Interacted with nursing, support, and housekeeping staff.** ◆ **Workflow & Process Mapping** • **Studied turnaround time for ICU bed cleaning and readiness.** • **Tracked delays caused by non-availability of ward beds post-discharge.** • **Collected delay logs from support departments (transport, housekeeping).** ◆ **Audit & Classification** • **Classified delays into clinical, administrative, and infrastructure-related causes.** • **Reviewed documentation gaps and lack of structured feedback.** • **Studied marginal stay cases and linked them with patient profiles.**

	◆ **Analysis & Final Presentation** • **Analyzed financial implications of delayed discharges (insurance vs self-pay).** • **Prepared report, insights, and recommendations for hospital leadership.** • **Delivered final presentation to hospital admin team.**
Linking theory (Classroom learning) with practice at your organization	**Hospital Operations & Bed Management** • **Applied bed allocation, turnaround time (TAT), and hospital occupancy theories in ICU settings.** ◆ **Health Information Systems (HIS)** • **Retrieved ICU data and monitored admission/discharge through HIS portals.** ◆ **Root Cause Analysis** • **Used process improvement and RCA tools to classify ICU delay reasons.** ◆ **Interdepartmental Coordination** • **Linked classroom learning of coordination models with support service delays (housekeeping, transport).** ◆ **Communication & Leadership** • **Observed the role of effective interdisciplinary communication in reducing delays.** ◆ **Quality & Audit Tools** • **Applied structured audit approaches and performance tracking taught during academics.** ◆ **Financial & Operational Linkage** • **Correlated theoretical cost implications with real-world excess ICU stay in insurance/self-pay patients.**
Gaps identified on the working area.	**Gaps Identified** ◆ **Lack of Real-Time Bed Tracking** • **No centralized dashboard for ICU and ward bed availability.** • **Limited visibility for ICU staff into current ward status.** ◆ **Discharge Readiness Issues** • **Discharge assessments were often incomplete or delayed.** • **Administrative delays caused non-clinical extensions in ICU.** ◆ **Documentation Discrepancies** • **No proper tracking of admission-to-occupancy timelines.** • **Delay reasons not documented or classified properly in shift reports.** ◆ **Operational Bottlenecks** • **Cleaning and readiness turnaround time varied due to lack of coordination.** • **Transport and housekeeping delays contributed to idle ICU beds.**

	◆ **Inconsistent Review Mechanisms** • **No system to revisit workflow improvement suggestions post audit.** • **Lack of linkage between delays and financial or operational indicators.**
Suggestions for improvement	◆ **Real-Time Dashboards** • **Implement centralized ICU utilization and ward bed occupancy dashboards.** ◆ **Appoint Discharge Coordinator** • **Assign a dedicated staff to manage ICU discharge readiness and handovers.** ◆ **Delay Reason Tracker** • **Introduce structured delay reason classification in daily ICU shift reports.** ◆ **Weekly Review Mechanism** • **Institutionalize weekly ICU transition and delay review meetings.** ◆ **Interdisciplinary Rounds** • **Include ward teams in ICU rounds to expedite transfer and discharge decisions.** ◆ **Audit Improvement Ownership** • **Link each audit finding to a specific department owner and timeline for closure.** ◆ **Admission to Occupancy Time Tracking** • **Monitor and analyze the time lag between patient admission and actual bed occupancy.**
Key Learnings	**Practical Application of ICU Management** • Understood live bed tracking, admission, discharge planning, and delays. ◆ **Real-Time Exposure to Hospital Systems** • Worked with HIS, occupancy logs, discharge forms, and ICU registers. ◆ **Analytical Thinking** • Used data-driven insights to identify causes of marginal ICU stay. ◆ **Team Collaboration** • Experienced interdisciplinary collaboration with clinical and non-clinical staff. ◆ **Communication Skills** • Improved professional communication with nursing teams, support staff, and hospital leadership. ◆ **Audit and Quality Improvement** • Participated in internal audits, helped frame improvement plans. ◆ **Leadership Insights**

	Observed the importance of proactive leadership in ICU efficiency and compliance

Signature of the Student
Tushar Maheshwari

Approved by the IIHMR University's Mentor