SUMMER INTERNSHIP PROGRAM

at

Ck Birla Hospitals (RBH), Jaipur

From: 12 May 2025 to 21 July 2025

A REPORT BY

Dikshant Gupta

Master of Business Administration

Healthcare Analytics

Roll no: 0006

2024-26

under the Mentorship of

Dr. Swapnil Gadhave

IIHMR UNIVERSITY

JAIPUR

CK Birla Hospitals
RUKMANI BIRLA HOSPITAL

RBH/2025/Jul/HRD/6865

Date: 21 Jul 2025

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Dikshant Gupta** has successfully completed his internship in the **Medical Services** Department from 12 May 2025 to 21 Jul 2025.

His behavior was respectful, punctual, and in alignment with hospital policies. He showed enthusiasm to learn, adapt, and communicate effectively with staff members, while maintaining a professional attitude throughout the program.

We commend his dedication and discipline during the tenure and believe he has gained valuable exposure to the work culture and expectations of a healthcare environment. We wish a continued success in all future academic and professional pursuits.

For **CK Birla Hospital – RBH**

Ravi Kumar
Unit Head | Human Resources

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Mr. Dikshant Gupta** of the academic year 2024-26 **School of Digital Health** 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

Dr Swapnil Gadhave

Assistant Professor

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Root Cause Analysis (RCA) Of Physical Discharge Delays Post Financial Clearance In A Tertiary Care Multispecialty Hospital

Presented By: Dikshant Gupta
Batch: HA-01 Roll no. 0006

University Mentor: Dr. Swapnil Gadhave
Organization Mentor: Dr. Kusum Yadav

CK BIRLA HOSPITALS | RBH
Rukmani Birla Hospital JAIPUR

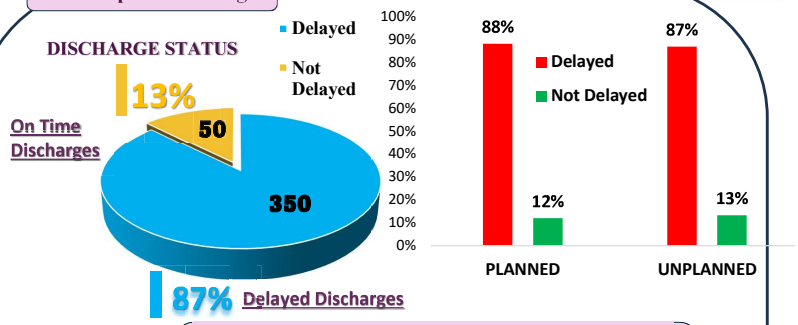
Organization

History-1969-1979: First private hospital with cutting-edge facilities in Kolkata.1989-1999: Established BM Birla Heart Research Center, the first Indian hospital to receive NABH award.1999-2019: Launched Rukmani Birla Hospital (RBH) in Jaipur in 2016.
Background- The CK Birla Group operates hospitals in Gurugram (CK Birla), Jaipur (RBH), and Kolkata (CMRI, BM Birla Heart Research Centre). CK Birla Hospital in Jaipur is a 230-bed multi-specialty hospital.
RBH offers 24-hour specialized healthcare with highly trained staff.

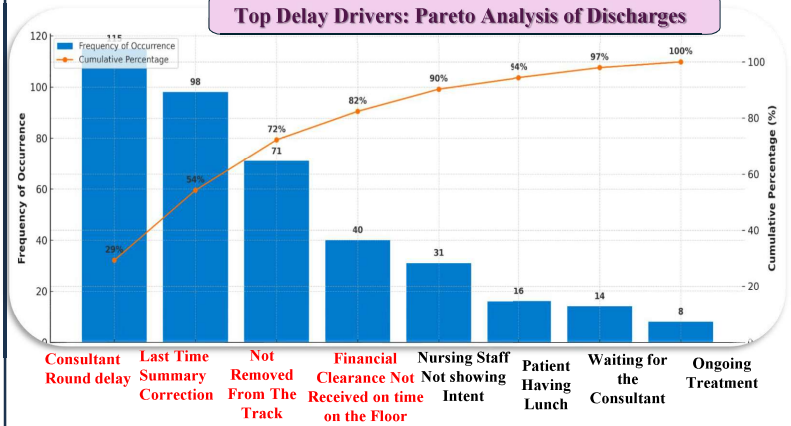
Vision & Mission

Vision: To provide the best of Patient Service & Clinical Excellence.
Mission: To set the bar for providing an incomparable patient experience through clinical and service excellence in an exclusive environment that holds innovation and quality, as well as compassion, accountability, and transparency.
Key Principles: The foundation of RBH has been laid on three key principles that define the ethos: Clinical Excellence, Ethical Conduct and Patient Centric.

Graphs & Findings

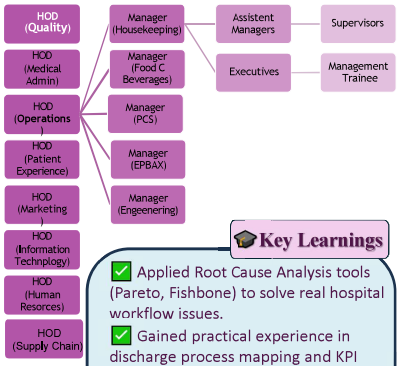


Top Delay Drivers: Pareto Analysis of Discharges



Organization Structure

Vice President



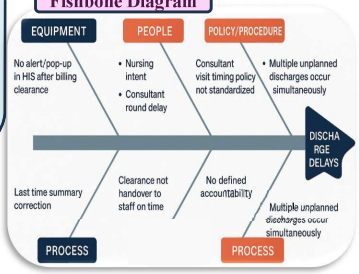
Methodology

Data Collection: Gathered discharge timing data from the Hospital Information System (HIS) and conducted floor-wise observations.
Process Mapping: Mapped the discharge workflow from financial clearance to patient exit to identify operational bottlenecks.
Delay Categorization: Classified key reasons for delay.
Root Cause Analysis: Used Fishbone Diagram and Pareto Analysis to identify the most frequent causes.
Recommendations: Proposed actionable steps to streamline discharge processes and improve KPI adherence.

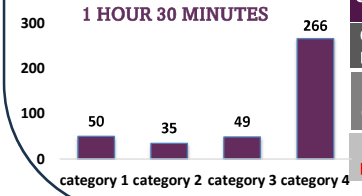
Key Learnings

- Applied Root Cause Analysis tools (Pareto, Fishbone) to solve real hospital workflow issues.
- Gained practical experience in discharge process mapping and KPI tracking.
- Strengthened data analysis and visualization skills using Microsoft Excel
- Understood the role of interdepartmental coordination in timely patient discharge.

Fishbone Diagram



Nursing Discharge TAT Distribution



Category 1 (≤ 30 mins): 50 cases(12.5%) On Time
Category 2 (31–45 mins): 35 cases(8.75%) Slightly Delayed
Category 3 (46–60 mins): 49 cases(12.25%) Needs Overview
Category 4 (> 60 mins): 266 cases (66.5%) Major Delays

Project Objectives

- To identify the key root causes contributing to discharge delays after financial clearance.
- To assess compliance with the 30-minute discharge timeline using data-driven analysis.
- To recommend process improvements for enhancing discharge efficiency and patient experience.

SWOT

Strengths
- Based on 400 real discharge cases
- Multi-stakeholder input (consultants, nurses, billing, security).
- Effective use of RCA tools (Pareto, Fishbone, trend mapping).
- Data-driven and measurable outcomes.

Weakness
- Patients often not removed from system (track) after physical discharge
- Lack of nursing accountability for discharge execution.
- No real-time alert after billing clearance.
- Inconsistent consultant rounding times

Opportunities
- Tech tools like HIS alerts and tablets for real-time updates.
- Train nurses for discharge ownership and TAT compliance.
- Dashboards to monitor discharge KPIs.
- Timely discharge boosts patient satisfaction

Threats
- ⚠ Consultant unavailability during peak discharge time.
- ⚠ Delay in attendant-floor communication.
- ⚠ Poor interdepartmental coordination.
- ⚠ Delay in discharge leads to bed blockages and reduced turnover

Theoretical Exposure

- Learned RCA tools like Fishbone and 5 Whys to trace root causes.
- 2.Explored the role of HIS in tracking discharge workflows.
- 3.Studied how KPIs support data-driven hospital quality improvement.

Practical Exposure

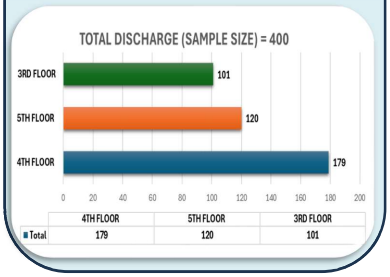
- Created a Fishbone Diagram to map discharge delay reasons
- Analyzed HIS data showing 12–26% on-time discharges.
- Suggested HIS alerts and dashboard use to improve discharge TAT

Project Scope

- **Sample Size**: A Total Of **400 Patients** Discharges Were Analyzed During The Study Period.
- **Floor Wise Distribution:**
  - 3rd Floor: 101 Discharges
  - 4th Floor: 179 Discharges
  - 5th Floor: 120 Discharges
- **Time Frame** : 45 DAYS

Time Period : May-June 2025

Departments Covered
- Billing.
- Medical Staff
- Housekeeping



Challenges

- Delayed Consultant Rounds : Late rounding resulted in postponed final clearance and discharge orders.
- Last-Minute Summary Corrections : Edits due to medication updates, pending investigations, or diagnosis revisions delayed summary completion.
- Lack of Timely Patient Removal from System: Patients physically discharged were still showing active due to non-updated system status.
- A common observation is that generally attendants delay floor level clearance by 10 to 15 minutes, impacting the timeliness of discharge
- Poor Nursing Intent or Follow –through: Discharge-related tasks not prioritized.
- Communication Gaps Across Departments: Disjointed updates between consultants, nursing, billing, and security affected coordination.

Suggestions

1. Prioritize Early Consultant Rounds Especially for cash-paying patients who typically complete financial clearance between 9:30 AM and 10:00 AM. Align consultant rounds between 10:00 AM and 10:30 AM to ensure timely discharge.

2.Training Focus: Educate doctors on the importance of timely and accurate discharge summary finalization.

3.Reduce Delays from Uninformed Financial Clearance
- Billing staff should remind attendants to inform nurses post-clearance.
- Implement auto-generated HIS/EHR pop-ups at nurse stations to notify when a bill is cleared.

4.Nursing Accountability for Track Removal
•Promptly remove discharged patients from the system.
•Each nurse is fully accountable for their patient's discharge process.

5. Smart Discharge Tracking System Involve security and housekeeping with tech-enabled support:
•Deploy shared tablets at nursing/discharge stations for real-time status updates.
•Train staff to log discharge confirmations with patient ID and bed number.
•Ensure communication between security and nursing, using tablets to record exit time and user details for account

Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations

Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

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

Activity Done	1. Orientation Sessions: Participated in structured orientation programs conducted by respective department heads on the following topics: • Basic Life Support (BLS) protocols • Quality Assurance Framework at CK Birla • Infection Control Policies and Biomedical Waste Handling • Fire Safety Procedures and Evacuation Drills • Hospital Marketing and Branding Strategies • Overview of Multi-Departmental Functions (Clinical and Non-Clinical) 2. Departmental Observations: Gained exposure to hospital functioning and interdepartmental coordination through rotational observations: • IPD (In-Patient Department): Patient admission to discharge flow • OPD (Out-Patient Department): Patient registration, consultation & appointment system • MRD (Medical Records Department): Record keeping, digitization, and retrieval process • OT (Operation Theatre): Zoning, aseptic protocols, OT schedule board • CSSD (Central Sterile Supply Department): Instrument sterilization and packaging cycle • Laboratory Services: Sample collection, processing, and LIS integration

	• IT Department: Overview of HIS (Hospital Information System) and real-time data entry • PCS (Patient Care Services): Patient rounding, grievance redressal, service quality • Pharmacy Services: IP and OP prescription handling, stock auditing, FIFO practices
Linking theory (Classroom learning) with practice at your organisation	• applied classroom concepts such as hospital zoning in OT, emergency color codes, and workflow design. • Observed practical implementation of emergency exit routes, hospital signage, and waiting area zoning. • Understood real-life applications of patient journey mapping, digital health records, and facility layout.
Gaps identified on the working area.	• Not everyone is digitally very fast in updating records in the Hospital information system. • Signage boards need to be updated at some floors.
Suggestions for improvement	• More training should be given to the staff for being digitally compliant • Signage boards should be replaced and made better for the patients and attendants
Plan for the next week	• Finalisation of summer internship projects. • Learn more about the hospital functioning. • Allocation of departments

Signature of the Student

Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur.

Area/ Department/ Project of Summer Internship Program: Operations

Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

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

Activity Done	• Assigned to inpatient floors to observe and understand the Patient Discharge Process in real-time.
	• Gained detailed exposure to both Planned and Unplanned Discharges and the distinction between their workflows.
	• Mapped and studied each step in the Discharge Lifecycle, including:
	  o Discharge Initiation by Consultant
	  o Nursing Clearance
	  o Pharmacy Clearance
	  o Billing Process
	  o TPA and Financial Clearance
	  o Final Nursing Discharge
	  o Physical Discharge of Patient
	• Studied various Discharge KPIs and TAT Metrics, including:
	Discharge Initiation TAT, Nursing Clearance TAT, Pharmacy Clearance TAT, Billing TAT, Financial Clearance TAT, Final Nursing Discharge TAT Overall Physical Discharge Adherence (within 30 minutes post-billing)

Linking theory (Classroom learning) with practice at your organisation	• Application of Process Mapping concepts learned during operations coursework to trace discharge flow. • Familiarity with Turnaround Time (TAT) analysis and its impact on patient throughput and hospital efficiency.

	• Practical understanding of KPI dashboards, root cause identification, and discharge compliance metrics in healthcare settings.
Gaps identified on the working area.	• Noted inconsistency and delays in Final Nursing Discharge TAT, with several discharges taking more than 30–60 minutes post-financial clearance. • Lack of real-time communication or alerts between teams once financial clearance is complete. • Nursing staff not always aligned or responsive immediately after clearance, causing delays.
Suggestions for improvement	• Dedicated Discharge Tracker: Real-time alert system in HIS or a digital tool for notifying nursing team post-financial clearance. • TAT Training for Nursing Staff: Awareness and accountability for discharge ownership. • Checklist-Based Discharge Protocol: Nursing SOP revision to include response-time benchmarks after clearance.
Plan for the next week	• Finalize topic and title of internship project based on identified concern. • Begin data collection and root cause analysis for Nursing Discharge TAT Delays. • Interact with stakeholders (nursing, quality, floor coordinators) for qualitative inputs. • Start drafting initial RCA framework and timeline for project execution.

Signature of the Student

Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations

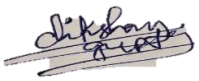
Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 3 **From: 26th May to 31st May 2025**

Activity Done	**Project Initiation**: Started working on the RCA-based quality improvement project. • KPI Focus: % of patients discharged within 30 minutes post financial clearance. • Data Collection Started: Sources: HIS, billing records, nursing logs, handover sheets, manual checklists. • Fields: UHID, admission/discharge times, billing time, physical discharge time, delay cause, ward. • Excel Tracker Created: Designed to calculate time gaps, flag delays (Y/N), record causes, and department data. • Preliminary RCA Begun: • Identified early delay patterns. • Collected staff feedback on discharge bottlenecks (e.g., nursing backlog, consultant delay, missing summaries).
Linking theory (Classroom learning) with practice at your organisation	•KPI Measurement & Analytics: Used healthcare analytics for tracking key metrics. •Data Management: Applied Excel tools like pivot tables and conditional formatting. •Root Cause Analysis: Identified bottlenecks like nursing backlogs and transport issues. •Data Interpretation & Reporting: Used quantitative methods to analyze discharge trends.
Gaps identified on the working area.	•Delays in doctors completing discharge summaries. •Lack of coordination between billing and nursing. •No real-time alert system post billing clearance.

	•Limited wheelchair/stretchers availability. •Patients or attendants are unprepared to leave. •No SOP for discharge timing. •No escalation or accountability protocol.
Suggestions for improvement	Proposed interventions based on early findings: • Pre-discharge Checklist • Pharmacy Notification System. • Automated Alerts in HIS • Transport Readiness Protocol • Root Cause Documentation
Plan for the next week	• Continue data logging for the full sample size. • Begin visual analysis using charts in Excel. • Prepare department-wise adherence reports. • Conduct 1–2 informal interviews with nursing staff for qualitative insights.



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Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations

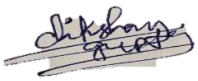
Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 4 **From: 2nd June to 7th June 2025**

Activity Done	□ Continued data collection on discharge process delays from multiple IPD floors. □ Adopted a floor-wise rotation method, observing discharge processes on alternate days per floor. □ Monitored planned and unplanned discharges closely, capturing timestamps for: • Billing clearance • Nursing notification • Physical discharge □ Tracked actual patient exit times and delay intervals. □ Identified operational challenges contributing to extended discharge timelines. □ Recorded feedback from nursing and administrative staff during real-time discharge observations. □ Updated central Excel tracker with each patient's discharge TAT and initial delay reason.
Linking theory (Classroom learning) with practice at your organisation	• Healthcare Operations & KPIs: Practically implemented concepts of measuring Key Performance Indicators (KPIs) to evaluate discharge efficiency. • Observation Techniques: Applied systematic observation methods for qualitative insights on discharge workflow. • Data Management: Maintained structured records of discharge events floor-wise using Excel for analysis.

	• Turnaround Time (TAT): Used theoretical understanding of TAT to benchmark process delays and identify gaps.
Gaps identified on the working area.	• Discharge summaries were not ready when billing clearance was issued. • Lack of proactive communication between billing, nursing, and consultants. • Physical discharge was not being updated timely in HIS; delays were unaccounted. • Consultants often visited wards late, delaying discharge orders. • Nursing staff were unaware of cleared cases or took time to initiate discharge procedures
Suggestions for improvement	• Allocate specific nursing staff to monitor daily discharge planning. • Create floor-wise dashboards in HIS for real-time discharge status tracking. • Ensure availability of signed DS before billing clearance. • Introduce a cross-departmental discharge coordination huddle each morning.
Plan for the next week	• Expand sample size across all active IPD wards. • Begin categorizing discharge delays by department, consultant, and time of day. • Initiate draft of RCA framework (root cause matrix). • Start preparing visual charts and floor performance summaries.



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Weekly Report

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Area/ Department/ Project of Summer Internship Program: Operations

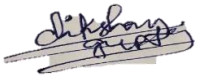
Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

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

Activity Done	• Continued data collection and entry across remaining IPD floors to ensure adequate sample size for final analysis. • Collected timestamp data on planned and unplanned discharges for an additional 5 days to capture weekday variability. • Conducted floor visits to clarify ambiguous or missing entries in the tracker (e.g., discharge summary finalization, transport delays). • Revalidated previous data with nursing stations and billing counters to ensure accuracy of discharge TAT records. • Expanded the Excel tracker with new columns (e.g., TPA involvement, transport time) for deeper analysis. • Began grouping delay reasons into broader categories (doctor-related, process-related, patient-related, etc.) for visualization.
Linking theory (Classroom learning) with practice at your organisation	• Health Information Management: Reinforced the importance of structured and accurate data entry during operational audits. • Hospital Workflow Mapping: Gained deeper understanding of discharge cycle variations across different units (general vs. private wards). • Data Cleaning & Pre-Analysis: Understood the practical steps in preparing raw hospital data for decision-making.
Gaps identified on the working area.	• Consultant Round Delay and Waiting for the Consultant impacted discharge initiation.

	• Cases were delayed due to Last Time Summary Correction or combined issues (Consultant Round Delay + Summary Errors). • Nursing staff at times were Not Showing Intent to Discharge the Patient post-clearance. • Patients were Not Removed from the Track in HIS even after physical discharge.
Suggestions for improvement	• Implement a centralized HIS pop-up alert for discharge readiness including checklist completion flags. • Introduce discharge intent training sessions for nursing staff. • Create a transport request system within HIS to pre-book wheelchair/stretcher. • Assign floor-based discharge coordinators to bridge communication gaps among departments. • Use smart dashboards to display real-time discharge progress and pending steps.
Plan for the next week	• Finalize RCA documentation and categorize delays by severity/frequency. • Summarize adherence performance floor-wise and department-wise. • Draft full report and prepare infographic-based presentation.



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Weekly Report

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Area/ Department/ Project of Summer Internship Program: Operations

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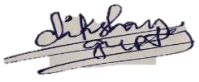
Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 6 **From: 16th June to 21st June 2025**

Activity Done	• completed floor-wise data collection across all 3 IPD floors, including discharge timelines and causes of delay. • Verified entries from the discharge checklist, HIS, and physical floor registers for accuracy. • Standardized reasons for discharge delays into 8 major categories based on cumulative observations. • Performed quantitative analysis of data collected using Excel pivot tables and charts. • Created a delay matrix: Floor vs. Delay Reason vs. Frequency. • Developed bar graphs and Pareto charts based on frequency of reasons like “Consultant Round Delay”, “Summary Errors”, “Late Financial Clearance”, etc. • Conducted focused group discussions with nursing in-charges and floor coordinators for feedback on top identified issues.
Linking theory (Classroom learning) with practice at your organisation	• Applied Descriptive Statistics and Dashboard Design from Healthcare Analytics coursework to analyze patient discharge delays. • Used Fishbone Diagram (Ishikawa) and Pareto Principle (80/20 Rule) to identify root causes and focus areas for corrective actions. • Translated process mapping concepts into real-world discharge flow visualization from patient readiness to exit. • Engaged in stakeholder feedback collection similar to evaluation frameworks taught under Monitoring & Evaluation modules.

Gaps identified on the working area.	• Low HIS Adherence: Inconsistent entry of actual discharge time in HIS leading to tracking issues. • Fragmented Communication: No standardized escalation protocol between nursing and billing/TPA. • Late Consultant Rounds: Consultant visits after 11:30 AM delay the discharge readiness across floors. • Discharge Summary & Medication Errors: Last-minute corrections. • Housekeeping Delay: Bed clearance and patient shifting sometimes deferred due to manpower issues. • No Intimation to Security: Security not notified on time about patient's departure, leaving tracking incomplete.
Suggestions for improvement	• Develop real-time discharge dashboard linked to HIS for nursing and operations visibility. • Implement automated notifications for pending steps (billing, summary, pharmacy). • Conduct daily morning huddle between consultants, nurse in-charge, and billing team for planned discharges. • Fix cut-off time for discharge summary finalization (e.g., before 10 AM). • Include security and housekeeping in the discharge communication loop via common WhatsApp or app-based group.
Plan for the next week	• Finalize visual reports (bar graphs, pie charts, floor-wise dashboards) using real data. • Start writing the internship project report draft covering Introduction, Objectives, Methodology, Analysis, and RCA. • Prepare PPT presentation for final evaluation with mentor. • Schedule review meeting with mentor and nursing/quality head to present the analytical findings and solution plan. • Get feedback and approval on the final intervention or recommendation model.



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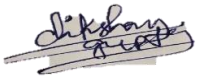
Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 7 **From: 23rd June to 28th June 2025**

Activity Done	• Consolidated and finalized all data collected floor-wise over the internship duration. • Performed comprehensive Root Cause Analysis (RCA) for major delays post-financial discharge. • Designed final visual analytics dashboard including: • Floor-wise delay pattern • Pareto Chart for top reasons • Time adherence trends (within 30 minutes KPI) • Prepared and polished a detailed PowerPoint presentation summarizing: • Project Objectives • Methodology & Data Collection • RCA and Key Findings • Proposed Interventions • Suggestions and Conclusion • Shared the dashboard visuals and final presentation with the quality mentor and department lead. • Successfully received approval and feedback from mentor with positive remarks on analysis depth and visual quality.
Linking theory (Classroom learning) with practice at your organisation	• Root Cause Analysis: Used tools like Fishbone Diagram and Pareto Chart to identify main delay reasons. • KPI Monitoring: Measured discharge time post-financial clearance as per taught KPI frameworks.

	• Process Mapping: Mapped discharge flow to detect delays using M&E concepts. • Data Analysis & Visualization: Used Excel dashboards for presenting findings clearly, as taught in analytics courses.
Gaps identified on the working area.	• Low Discharge Adherence: Only 12–26% of patients were discharged within 30 minutes post financial clearance, far below target. • Consultant Round Delays: Final visits often delayed, especially in general wards, affecting DS finalization. • Summary Corrections: Frequent last-minute edits in discharge summaries delayed physical discharge. • Lack of Nursing Proactiveness: Nursing staff in some units did not initiate discharge steps proactively. • Vehicle Wait Time: Delays due to unavailability of patient transport (private vehicles or ambulances). • Inadequate Real-time Tracking: No live dashboard or central alert system for discharge readiness status.
Suggestions for improvement	• Launch a discharge status dashboard for real-time visibility floor-wise. • Establish a fixed consultant round timings to avoid late DS sign-off. • Appoint a “discharge process lead” per shift to monitor TATs. • Promote ownership-driven discharge planning among clinical staff.
Plan for the next week	• Start a new project on Prescription Audit in OPD Pharmacy. • Finalize audit format and align with NABH guidelines. • Collaborate with OPD pharmacists and consultants for data access. • Get the project framework approved by the mentor. • Begin sample data collection for prescription compliance review.



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Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations

Name of the Student: Dikshant Gupta

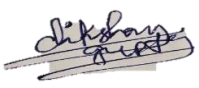
Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 8 **From: 30rd June to 05th July 2025**

Activity Done	• Initiated a new quality audit project focused on OPD prescription reviews.
	• Utilized the "Prescription Review Checklist (OPD)" as per hospital audit format.
	• Collected photographic data of prescriptions from OPD departments with necessary patient de-identification.
	• Started manual auditing of prescriptions based on elements like:
	  o Dose/unit/route/frequency correctness.
	  o Generic naming and legibility.
	  o Documentation of allergy, drug duplication, a
	  o antibiotic use, and follow-up instructions.
	• checklist used to evaluate:
	• Medication availability, legibility, correctness.
	• Antibiotic prescription parameters.
	• Follow-up and allergy documentation.
	• Carried out a detailed prescription audit using a structured checklist developed for OPD pharmacy.
	• Focused on major specialties: Neurology, Cardiology, Medicine, Gynecology, and Pulmonology.
	• Week 8 data collection (n = 120 prescriptions)

Linking theory (Classroom learning) with practice at your organisation	• Understood the practical challenges of rational prescription practices. • Gained exposure to audit-based quality improvement initiatives.

	• Improved skills in identifying documentation errors and clinical risk indicator
Gaps identified on the working area.	• Excessive use of brand-name drugs. • Low documentation of allergies and follow-up advice. • Non-adherence to prescription format norms (capital letters, complete instructions). • High antibiotic use without culture sensitivity testing. • Lack of feedback mechanisms or decision support systems in prescription flow.
Suggestions for improvement	• Promote generic prescribing through prompts and training. • Integrate EMR-based allergy alert systems. • Encourage capital letter usage and complete documentation via SOP revision. • Display EDL (Essential Drug List) and antibiotic policy near prescribing desks. • Institutionalize monthly prescription audits for continuous improvement.
Plan for the next week	• Continue Prescription Audit: Expand data collection to additional OPD departments (e.g., Pediatrics, ENT) to improve sample diversity. • Data Cleaning & Validation: Refine the Excel dataset by correcting entry errors, handling missing values, and ensuring completeness. • In-Depth Analysis: Perform department-wise and prescriber-wise trend analysis to identify patterns in brand/generic use, antibiotic prescriptions, and allergy documentation. • Benchmarking: Compare findings with national/international prescription standards (WHO guidelines, NABH norms).



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Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations

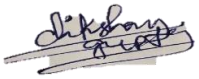
Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 9 **From: 7th July to 12th July 2025**

Activity Done	• Continued OPD prescription audit project using the standardized checklist. • Expanded data collection from Neurology, Cardiology, Pulmonology to include ENT and Pediatrics OPDs. • Total prescriptions reviewed reached 260 (Week 9 additions = 140). • Data entered into structured Excel sheet with variables like prescriber name, department, generic/brand status, dose/frequency, allergy note, follow-up, antibiotic class. • Cleaned and validated data to remove duplications and corrected entry mismatches. • Prepared pivot tables and charts for: • Generic vs. Brand prescribing trends. • Department-wise antibiotic usage. • Completeness of prescription documentation. • Identified outliers and common non-compliance patterns.
Linking theory (Classroom learning) with practice at your organisation	• Applied healthcare analytics principles to real-world hospital data. • Understood audit cycle, clinical governance, and quality assurance frameworks. • Developed familiarity with NABH guidelines and WHO prescription standards.
Gaps identified on the working area.	• ENT and Pediatrics had even lower rates of allergy and follow-up documentation (below 30%). • Prescriber-wise analysis showed inconsistency in following prescription standards. • No real-time monitoring or digital prescription flagging in the HIS.

Suggestions for improvement	• Implement visual reminders in OPDs (e.g., prescription SOP posters). • Conduct orientation sessions for junior doctors on prescription completeness. • Encourage HIS-based prescription templates with mandatory fields.
Plan for the next week	• Complete the final round of data collection from remaining OPDs (e.g., Dermatology, Orthopedics). • Perform comprehensive statistical analysis of the complete dataset. • Finalize the Excel audit tool for hospital use. • Draft summary report and PowerPoint for final presentation to hospital mentor and department heads.



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Weekly Report

Name of the Organisation: CK Birla Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Operations

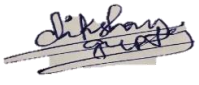
Name of the Student: Dikshant Gupta

Roll no: 0006 **Stream: Healthcare Analytics**

Week no: 10 **From: 14th July to 21st July 2025**

Activity Done	• Reviewed total prescriptions: ~120 (cumulative across weeks) • Continued data entry into Excel of manually audited prescription parameters. • Compiled and analyzed audit indicators from OPD prescriptions. • Created PowerPoint presentation of findings and recommendations. • Presented both projects (Discharge Delay RCA and Prescription Audit) to hospital mentors and department staff.
Linking theory (Classroom learning) with practice at your organisation	• Understood OPD prescribing trends and common documentation gaps. • Learned to design and execute prescription audits using Excel. • Improved data analysis and presentation skills for quality reporting. • Gained insights into key clinical indicators like antibiotic use, allergy history, and generic prescribing. • Presented findings and recommendations to mentors and hospital staff.
Gaps identified on the working area.	• Low Generic Prescribing Only 12% of prescriptions used generic drug names. • Antibiotic Stewardship Lapses Culture sensitivity was ordered in just 21% of antibiotic cases. • Inadequate Allergy Documentation

	Allergy history missing in 62% of prescriptions. • Treatment Duration Often Not Mentioned Only 55% had treatment duration clearly documented. • Incomplete Follow-up Advice Follow-up instructions provided in only 68% of cases. • Partial Capital Letter Usage 22% of prescriptions were not written in capital letters, risking misinterpretation. • Dose/Frequency Omissions 15% of prescriptions had incomplete dose or frequency details.
Suggestions for improvement	• Promote Generic Prescribing: Use EMR nudges and regular CMEs. • Antibiotic Stewardship: Mandate culture sensitivity tests; add EMR prompts for duration/frequency. • Allergy Documentation: Make it mandatory in EMR; conduct clinician training. • Treatment Duration & Follow-up: Enable EMR reminders for completion. • Improve Legibility: Enforce capital letter use; include in SOPs. • Visual SOPs: Display EDL and antibiotic guidelines in OPDs/wards. • Feedback & Recognition: Share audit results; reward compliant departments. • Regular Audits: Conduct quarterly audits to monitor trends.
Plan for the next week	As my internship has concluded, there is no further plan for the upcoming week. The final tasks, data collection, analysis, and reporting have been successfully completed and submitted as part of the project deliverables.



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Approved by the IIHMR University's Mentor