

SUMMER INTERNSHIP PROGRAM
at
Sawai Mansingh Hospital, Jaipur

From 15 May 2025 to 29 July 2025

A REPORT BY

Subhmita Ghosh

Master Of Business Administration

Healthcare Analytics

Roll no: 0028

2024-26

Under the Mentorship of
Dr. Sarthak Sengupta – Assistant Professor



Name of Institution
SAWAI MAN SINGH HOSPITAL (JAIPUR)

Completion Certification from the Organization
CERTIFICATE

This is to certify that **Ms. Subhmita Ghosh** of batch **2024-2026** from **IIHMR UNIVERSITY, JAIPUR** of **School Of Digital Health - MBA Healthcare Analytics** has worked with our organization for her summer internship from **15 May 2025 to -29 July 2025**. The overall performance shown by her during the period was excellent.

Date :- 29 July 2025

Signature of organization Mentor

Name – Dr. Sushil Kumar Bhati
Designation – Medical Superintendent



Seal Stamp of the Organization.

चिकित्सा अधीक्षक
सवाई मानसिंह चिकित्सालय
जयपुर

IIHMR University Faculty Mentor Approval

This is to certify that **Ms. Subhmita Ghosh** of academic year 2024-26 **School of Digital Health, IIHMR University, Jaipur, Rajasthan** 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.

A handwritten signature in blue ink, appearing to be 'S' followed by a flourish.

Date: 30/07/2025

Dr. Sarthak Sengupta
Assistant Professor

UNDERSTANDING THE BOTTLENECKS OF THE OPD SERVICES



Government of Rajasthan
Medical Education Department

Presented by: Subhmita Ghosh
Roll No:0028 Stream- MBA- HA

About The Organization

Sawai Man Singh (SMS) Hospital, established in 1936 and affiliated with Sawai Man Singh Medical College, is the premier government tertiary-care facility in Rajasthan . With over 6,250 beds and handling approximately 31.6 lakh OPD visits in 2024 (~8,000–10,000 patients daily), it is a major hub for healthcare across Rajasthan and neighboring states.

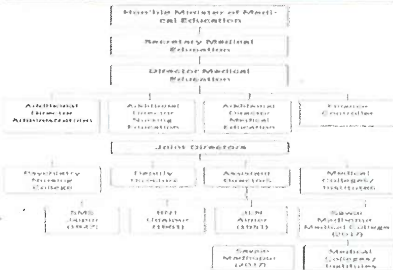
Vission

To deliver accessible, affordable, and high-quality healthcare while serving as a center of medical excellence in Rajasthan.

Mission

To provide compassionate patient care, promote medical education and research, and continuously improve healthcare services.

Organization Structure



SWOT ANALYSIS

Strengths:

- Centralized control.
- Free and subsidized healthcare
- Use of Digital platforms like IHMS).
- Wide medical network.

Weakness:

- Severe Crowding
- Fragmented Services
- Staffing and behaviour issues

Opportunities:

- Digital appointment and mobile registration
- Completion of new infrastructure.
- Implementation of QMS is underway.

Threats:

- Patient Dissatisfaction and Complaints.
- No proportional staffing.
- Resource constraints.

THEORY VS PRACTICAL EXPOSURE

- Applied theory from Essentials of Demography and Digital Health in real-time observations.
- Used Excel to create trend analysis graphs as taught in Tableau and analytics modules.

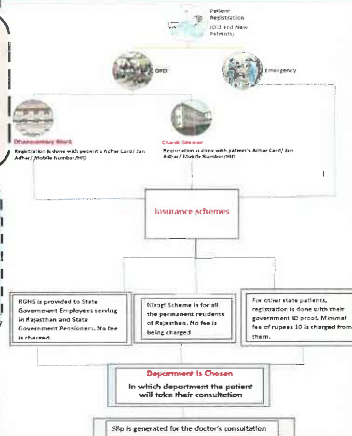
METHODOLOGY

- Collected monthly OPD patient flow data and analysed which department has the maximum patient inflows from 8 am to 2 pm.
- Understood the online IHMS OPD registration workings.

CHALLENGES

- Patients unaware or unable to access IHMS online features.
- Lack of staff training on digital tools.
- High Patient Volume During Peak Hours, No real-time crowd or queue tracking at OPDs.

OPD WORK FLOW



RECOMMENDATIONS

- Provide IHMS and digital tool training to staff and patients.
- Display banners and set up helpdesks to promote IHMS usage.
- Limit no of walk-in patients
- Temporarily increase manpower during peak hours.

KEY LEARNINGS

- Developed a practical understanding of using digital systems like IHMS for patient and resource management.
- Learned how bottlenecks, wait time, and patient satisfaction metrics can be quantified and improved.
- Enhanced my skills in Analysis & Reporting.

Reporting Format (Week-1)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

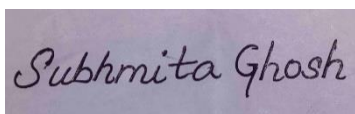
Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Center

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: One **From :** 15-05-2025 TO 17-05-2025

Activity Done	• Observed all the departments of the Hospital. • Visited various hospital wards, including General, ICU, Post-Operative, Emergency, and Neurosurgery. • Observed whether the patients are from Rajasthan or other States.
Linking theory (Classroom learning) with practice at your organisation	• I was able to get a Hospital Overview and understand the patient demographics, which we were taught in our Essentials Of Demography Module.
Gaps identified on the working area.	• Inadequate Staffing in Certain Wards: • Limited space in the wards results in patients' discomfort and restricts the movement of staff and patient parties.
Suggestions for improvement	• Expand ward space in high-pressure areas like Neurosurgery. • Improve interdepartmental communication for smoother patient transfers.
Plan for the next week	• To observe the workings of the IHMS system. • To observe how data is stored and retrieved.



Signature of the Student

Reporting Format (Week-2)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan- Data Center

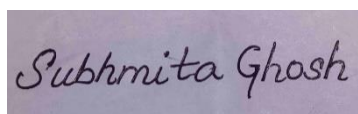
Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Second **From:** 19-05-2025 TO 24-05-2025

Activity Done	• Observed how the IHMS system functions at the doctor's desk in the ENT department under the supervision of Dr. Mohnish Grover. • Observed and understood how the IHMS system functions in the hospital ward, including the various processes involved. • Learned about the processes of the IHMS system in the Blood Bank - how data is entered, which departments are linked to it, and how the data is stored and managed. • Attended a meeting where I learned how to add Biomedical Waste (BMW) information into the IHMS system and gained a comprehensive understanding of the entire process involved. • Learned the detailed process of using the IHMS system at the doctor's desk. • Dr. Bhati assigned me the task of collecting data from the hospital departments regarding the data colocation rooms - including the number of rooms and their allotment.
Linking theory (Classroom learning) with practice at your organisation	• I was able to apply the theoretical knowledge I gained from my entire MBA- Healthcare Analytics curriculum in the first year.
Gaps identified on the working area.	• Noticed that some staff faced difficulties using the IHMS system due to limited training, and data was often incomplete or inconsistent. • Departments had different ways of working, which caused confusion and communication problems between teams.

Suggestions for improvement	• Provide regular IHMS training for staff and standardize procedures across departments. • Improve communication channels between teams and maintain an organized.
Plan for the next week	• To observe how the OPD in Dhanwantary Building works. • To collect the real-time data of patients in-time, in the OPD.



Signature of the Student

Reporting Format (Week-3)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Center

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Three **From:** 26-05-2025 TO 31-05-2025

Activity Done	• Visited the Dhanwantary Block. • Observed the workflow from patient registration to consultation. • Noted patient arrival times and initial congestion periods.
Linking theory (Classroom learning) with practice at your organisation	• Theoretical knowledge on data management and patient tracking was applied while collecting and analysing real-time patient in-time data.
Gaps identified on the working area.	• Lack of a digital queue or token system, leading to manual crowd control and confusion. • Limited real-time data usage for operational planning. • Understaffing during peak OPD hours.
Suggestions for improvement	• Introduce a token-based or app-enabled digital queue system for OPD patients. • Standardize and train staff on real-time patient data entry across all OPD counters. • Allocate additional staff during 8 AM–12 PM, based on recorded footfall. • Install digital display boards showing patient queue status and wait times. • Develop a central coordination desk to improve interdepartmental communication.

Plan for the next week	• To observe the workings of Charak Bhawan OPD Building.
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Reporting Format (Week-4)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

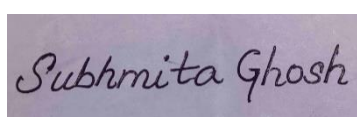
Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Center

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Four From : 02-06-2025 TO 07-06-2025

Activity Done	• Conducted daily observations of the OPD functioning in Charak Bhawan, which hosts Dermatology and Ophthalmology departments. • Measured waiting times at different service points. • Took informal feedback from patients regarding crowding, queue handling, and service quality.
Linking theory (Classroom learning) with practice at your organisation	• Ideal OPD design ensures a smooth, time-efficient patient journey, as we were taught theoretically, and practically observed bottlenecks in token and consultation areas in Charak Bhawan OPD.
Gaps identified on the working area.	• Overcrowding observed during peak hours (10:00 AM – 12:00 PM). • No electronic display or audio notification for patient calling.
Suggestions for improvement	• Allocate different counters for new and follow-up patients. • Use display boards and automated token announcements to streamline flow. • Add more benches/chairs; ensure proper ventilation and drinking water availability.
Plan for the next week	• To observe the OPD of Dhanwantary Building and see the workings of IHMS in OPD registration.



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Reporting Format (Week-5)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

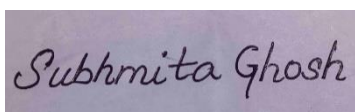
Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Center

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Five **From :** 09-06-2025 TO 14-06-2025

Activity Done	• Took informal feedback on waiting time and token handling experience. • Dhanwantry has a relatively better-organized QMS but lacks integration with online systems. • Evaluated QMS in Skin and Ophthalmology departments.
Linking theory (Classroom learning) with practice at your organisation	• Classroom Learning covered concepts of integrated QMS in hospital setup, but practical Observation at SMS Hospital has IHMS, which can help patients for online OPD registrations, but is not used by patients.
Gaps identified on the working area.	• Patients are unaware of digital options like IHMS for booking appointments or viewing queue status. • Digital systems are not user-friendly for less tech-savvy or elderly patients, leading to low adoption
Suggestions for improvement	• Organize short workshops for administrative staff on fully utilizing existing digital tools like IHMS modules. • Set up small digital help counters with volunteers/staff to assist patients in using online registration.
Plan for the next week	• To evaluate, and suggest improvements in the existing Diet Management.



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Reporting Format (Week-6)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education,
Rajasthan – Data Center

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Six **From :** 16-06-2025 TO 21-06-2025

Activity Done	- Noted that diet requests are initiated online and then accepted by the ward operator. - Observed the preparation process of various diet types (e.g., normal, diabetic, soft, liquid). - Noted instances where patients were discharged after food dispatch, leading to the distribution of food among newly admitted patients.
Linking theory (Classroom learning) with practice at your organisation	Classroom Learning covered timely coordination from food preparation to delivery is crucial but practically, Food is prepared and dispatched on time, but delays and errors occur due to poor real-time communication.
Gaps identified on the working area.	- No structured system for patients to give feedback on food quality, taste, or quantity. - Prepared food is often circulated among new admitted patients due to last-minute discharges.
Suggestions for improvement	- Use electronic diet order systems linked to patient admission/discharge to avoid food wastage. - Provide simple feedback forms or digital tablets for patients to rate food quality, quantity, and service.
Plan for the next week	To take surveys from the IPD patients about the food they get in the wards.

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Reporting Format (Week-7)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

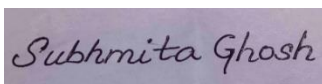
Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Center

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Seven **From :** 23-06-2025 TO 28-06-2025

Activity Done	• Identified and visited multiple wards, including General Medicine and Neurology, to cover diverse patient categories. • Approached admitted patients and/or their attendants during non-critical hours (post-mealtime). • Conducted the survey verbally for patients who were unable to write. • Prepared summary notes on frequently mentioned issues for further reporting.
Linking theory (Classroom learning) with practice at your organisation	• Patient feedback is essential for quality improvement as per theoretical knowledge, but practically collected direct feedback from IPD patients to assess satisfaction with hospital food.
Gaps identified on the working area.	• Patients reported that the same type of food is served daily, leading to monotony and loss of appetite. • Many patients expressed dissatisfaction with the taste and seasoning of the food, especially long-term admitted patients.
Suggestions for improvement	• Design a weekly rotating menu approved by dieticians to add variety and maintain nutritional value. • Place simple feedback forms or suggestion boxes in wards to collect regular input on food quality and service.
Plan for the next week	• To compile weekly findings and suggestions into a report.



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Reporting Format (Week-8)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Centre

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Eight **From :** 30-06-2025 TO 05-07-2025

Activity Done	- Reviewed features available for online OPD registration, appointment booking, and token generation. - Practically performed a trial registration by entering patient details (name, age, gender, mobile number, and department selection). - Noted that online-registered patients still need to verify their registration at the counter before consultation. - Discussed system limitations, usage rate, and plans with IHMS support staff.
Linking theory (Classroom learning) with practice at your organisation	Digital Health Module covered that E-health tools improve access, reduce wait times, and support telemedicine, and practically IHMS offers time-saving online registration, but most patients still prefer or rely on walk-in methods.
Gaps identified on the working area.	- The majority of patients are unaware of the IHMS online OPD registration facility. - Despite availability, only a small percentage of patients use IHMS for OPD registration. - No banners, posters, or help desks in OPD areas guiding patients to register online. - Online-registered patients must still verify at the physical counter, reducing the benefit of pre-registration.
Suggestions for improvement	- Display banners, posters, and digital screens in waiting areas explaining the benefits and steps of online registration. - Deploy a Digital Assistance Counter near the OPD to guide patients through the IHMS registration process.
Plan for the next week	To analyse the past years' OPD patient count and see the seasonal trends.

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Reporting Format (Week-9)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education,
Rajasthan – Data Centre

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Nine **From:** 07-07-2025 **TO** 12-07-2025

Activity Done	• Collected monthly OPD patient count data from the Data Centre. • Segregated data into monthly and seasonal formats (e.g., summer, monsoon, winter). • Plotted line graphs and bar charts to visualize monthly patient footfall over different years. • Analysed which departments see season-specific spikes.
Linking theory (Classroom learning) with practice at your organisation	• Classroom lessons emphasized trend analysis using tools like Excel, Tableau, but practically used Excel charts and data grouping to identify monthly and seasonal OPD trends at SMS Hospital.
Gaps identified on the working area.	• No centralized dashboard or visual system exists to track OPD patient trends month-wise or season-wise. • Seasonal patterns are not being used to forecast patient load or prepare resources in advance. • OPD load is reviewed anecdotally, without applying basic statistical or visualization techniques.
Suggestions for improvement	• Train staff on basic analytics tools and how seasonal trends can support preventive strategies. • Integrate automated data pipelines to extract and update patient count regularly without manual effort.
Plan for the next week	• To analyse the patient flow and peak hours of OPD in Dhanwary Building and Charak Bhawan.

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Reporting Format (Week-10)

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Centre

Name of the Student: Subhmita Ghosh

Roll no: 0028 **Stream:** Healthcare Analytics

Week no: Ten **From:** 14-07-2025 TO 21-07-2025

Activity Done	• Conducted hourly observations in both Dhanwantri Building and Charak Bhawan from 8:00 AM to 2:00 PM over multiple working days. • Recorded patient arrivals, queue lengths, and waiting time at regular intervals. • Segregated patient flow by department (e.g., General Medicine, Orthopaedics in Dhanwantri; Dermatology, Ophthalmology in Charak Bhawan). • Identified department-specific rush hours.
Linking theory (Classroom learning) with practice at your organisation	• Concepts of time-motion study, bottleneck identification, and resource utilization. Hourly observation of patient inflow helped identify peak hours and bottlenecks in SMS OPDs. • Theory covered that waiting time is a critical indicator of service quality in outpatient services. Practically, Patient interviews revealed dissatisfaction due to long queues during peak hours.
Gaps identified on the working area.	• Increases congestion at counters during peak times (9:30 AM – 11:30 AM). • No separate counters or lanes for follow-up vs new patients.
Suggestions for improvement	• Use electronic display boards to show current token numbers and estimated wait times. • Use IHMS or a mobile app to allow patients to book specific time slots. • Basic crowd control and time management strategies should be imparted.
Plan for the next week	• Design a sample OPD dashboard using mock data to present a model for trend-based resource planning. • Conduct focused interviews with registration staff and doctors to understand peak-hour challenges.

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Compiled Report

Name of the Organisation: Sawai Mansingh Hospital, Jaipur

Area/ Department/ Project of Summer Internship Program: Department of Medical Education, Rajasthan – Data Centre

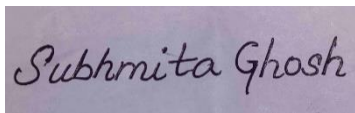
Name of the Student: Subhmita Ghosh

Roll no: 0028

Stream: Healthcare Analytics

Activity Done	• Observed all departments and ward demographics at SMS Hospital. • Learned the functioning of IHMS across departments like ENT, Blood Bank, Ward Desk, and Biomedical Waste entry. • Studied Dhanwantry OPD flow—patient in-time, crowding, registration to consultation. • Observed Charak Bhawan OPD (Dermatology, Ophthalmology), measured wait times, and took patient feedback. • Compared QMS and IHMS integration between buildings. • Evaluated Diet Management—preparation, dispatch, feedback system, wastage causes. • Conducted IPD surveys on food quality, frequency, and taste. • Practiced online OPD registration using IHMS and interviewed the tech support team. • Collected and visualized OPD patient data seasonally to detect spikes. • Conducted hourly observations in Dhanwantry & Charak Bhawan for peak hour analysis.
Linking theory (Classroom learning) with practice at your organisation	• Applied theory from Essentials of Demography and Digital Health in real-time observations. • Used Excel to create trend analysis graphs as taught in Tableau and analytics modules. • Implemented classroom learning on time-motion study, QMS design, and patient satisfaction. • Feedback survey methods, dashboard designing, and crowd analysis aligned with the curriculum in Healthcare Operations.
Gaps identified on the working area.	• Inadequate staff and limited space in certain wards. Inconsistent IHMS data entry due to lack of training and department-wise variability. • Absence of centralized QMS or token system in OPD; high manual intervention. • Patients unaware or unable to access IHMS online features. No real-time crowd or queue tracking at OPDs. • Food wastage due to discharge-timing mismatch and lack of structured patient feedback.
Suggestions for improvement	• Provide IHMS and digital training to staff and patients. • Implement token-based QMS with digital displays and mobile-based slot booking. • Use IHMS to integrate diet dispatch with real-time patient status. • Display banners and set up helpdesks to promote IHMS usage. • Design dashboards for seasonal trends and operational planning. • Develop rotating weekly food menus to improve satisfaction and reduce monotony.

Key Learnings	• Gained hands-on exposure to hospital workflows, especially OPD operations and data systems. • Developed a practical understanding of using digital systems like IHMS for patient and resource management. • Improved analytical skills in identifying seasonal trends and optimizing resource allocation. • Learned how bottlenecks, wait time, and patient satisfaction metrics can be quantified and improved. • Strengthened skills in communication, feedback collection, and healthcare operations monitoring.
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Signature of the Student

Approved by the IIHMR University's Mentor