



EVALUATING DIGITAL INNOVATIONS FOR PATIENT EXPERIENCE: AN OBSERVATIONAL STUDY AT AIIMS BHOPAL.

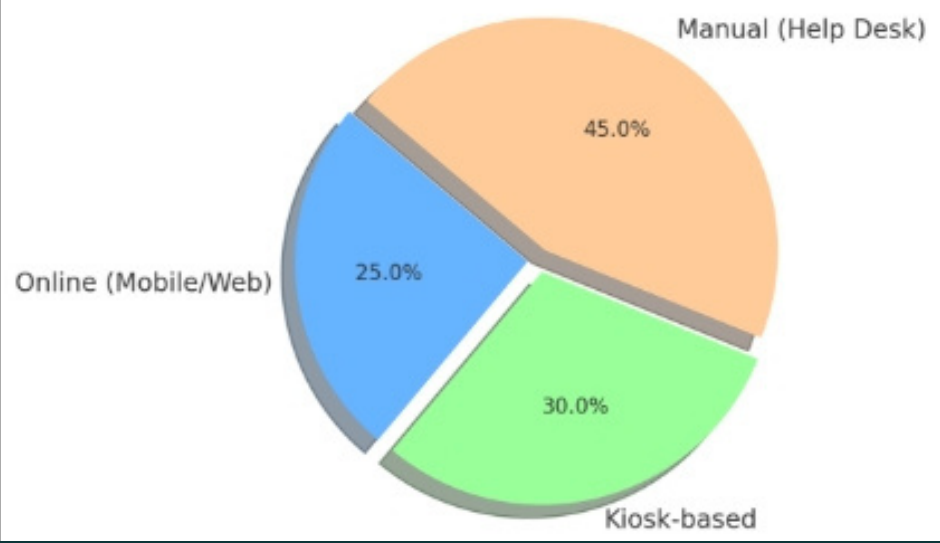
About Organization

AIIMS Bhopal, established in 2012 under Pradhan Mantri Swasthya Suraksha Yojana PMSSY, is a leading medical and teaching institute modeled after AIIMS Delhi. With a 1,250-bed modern hospital, it offers advanced care including robotic surgeries, organ transplants, cancer and cardiac treatments. The facility features 20 modular OTs, ICUs, digital records, and dedicated zones for trauma, maternity, and emergencies. It also runs community clinics and supports national health programs. Backed by expert departments and modern infrastructure, AIIMS Bhopal is a key center for healthcare, research, and outreach in Central India.

Introduction

With increased focus on digitalization in the healthcare sector, institutions such as AIIMS Bhopal have initiated digital interventions to improve service delivery and patients' experience. This project aims at assessing the efficacy of digital innovation in the OPD registration process. By direct observation and patient contact, the study evaluates system usability, identifies gaps in operations, and provides recommendations to enhance digital registration within a tertiary care setup.

Key Findings



Name - Dr. Shreyash Prajapati
Roll no - 2088(MBAHM 29)
Faculty Mentor - Dr. Goutam Sadhu
Organization Mentor - Dr. Kawal Krisha Pandita

Vision

To provide good and affordable healthcare in all regions, train skilled doctors and staff, and support research on important health problems in India.

Mission

To become a top medical institute by providing quality education, research, and caring healthcare with a scientific approach.

Objective

To evaluate the role of digital tools in enhancing OPD registration at Aims Bhopal, and identify barriers affecting their optimal utilization.

Difference between practical exposure at sip organization and theoretical understanding from IHMR UNIVERSITY

At IIHMR, I learned structured concepts of hospital operations, digital health, and management theories.

- During my sip at AIIMS BHOPAL, I saw the gap between ideal processes and actual on-ground implementation.
- While theory emphasized smooth digital workflows, I observed challenges like low digital literacy, system downtimes, and resistance to change.
- Research methodology taught in class was hard to fully apply due to confidentiality, time limitations, and coordination issues.
- The experience highlighted the importance of adaptability, communication skills, and practical problem-solving beyond textbook knowledge.
- Overall, the internship helped me connect academic learning with real-world healthcare delivery challenges

TOWS analysis

- S-T** Utilize institutional support and real-time data to proactively address technical glitches and build trust among hesitant users.
- S-O** Leverage existing digital systems and high patient inflow to promote awareness campaigns and integrate with national platforms like ABDM.
- W-T** Develop a backup protocol and allocate budget to reduce dependence on manual fallback and minimize disruption during downtimes.
- W-O** Enhance staff training and improve patient digital literacy to maximize the benefit of existing digital infrastructure.

Major Learnings During Internship

Patient Communication: clear, multilingual communication enhances digital adoption.

Coordination: effective interdepartmental coordination results in smooth operations.

Manpower Utilization: appropriate staffing and training enhance the efficiency of services.

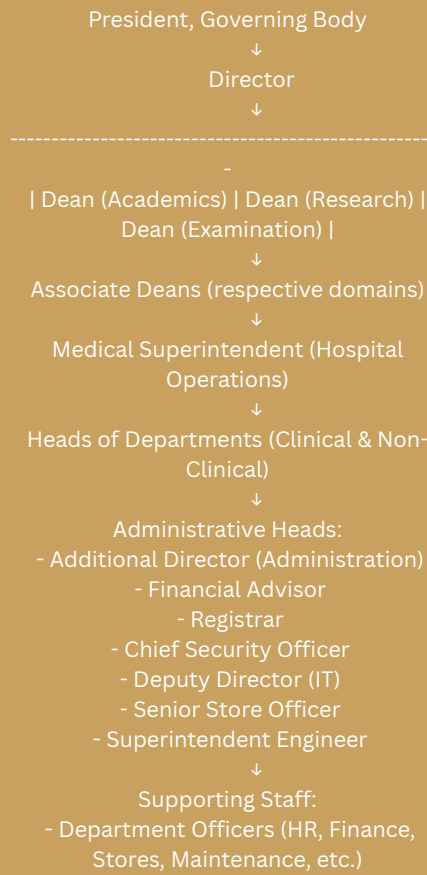
Operational Efficiency: efficient workflows minimize waiting time and congestions.

Budget Management: sufficient funding is critical for the sustenance of digital infrastructure.

Suggestions

- Install a Real-Time Feedback System Gather patient feedback through SMS, QR codes, or touch screens following registration.
- Hybrid Model Approach Continue to provide manual registration for patients who cannot access digital platforms. Develop an integrated, parallel workflow to provide inclusivity without compromising on service delays.
- Digital Literacy and Inclusion Campaigns Conduct short digital literacy training in OPD or through community outreach. Engage local health workers (ASHA/ANMs) to create awareness in rural settings.
- Deploy Digital Help Desks Station trained staff or volunteers adjacent to kiosks to assist and instruct patients with digital registration, particularly during busy hours. Deliver brief tutorials on the use of online booking or kiosks. Enhance Patient Awareness and Communication

Organization Structure



S
W
O
T

- Established digital systems (e-Hospital, kiosks).
- High patient volume enabling real-time observations.
- Institutional support for innovation and research.
- Low digital awareness among some patients.
- Manual processes still dominate during system issues.
- Limited staff training on digital facilitation.
- Scope for patient digital literacy campaigns.
- Potential model for other government hospitals.
- Integration with national digital health platforms (ABDM).
- Technical glitches and system downtime.
- Resistance to digital shift by patients/staff.
- Budget and manpower constraints.

Challenges Faced During Internship

- Data Collection & Privacy: Limited access because of confidentiality issues.
 - Limited Time Exposure: Brief duration of internship with very restricted time provided across the departments blocked in-depth understanding.
- Departmental Coordination: Lack of coordination resulted in delays in information sharing and process observation.

Results

The research identified that OPD registration innovations in the form of digital solutions, like e-Hospital systems and self-registration kiosks, have augmented operational effectiveness and minimized waiting hours. Nevertheless, constrained patient awareness, uneven digital uptake, and infrastructure deficiencies remain the major constraints to maximizing utilization. The initiative indicated that there is a requirement for improved patient support, staff training, and upgrading of systems to enhance the overall digital experience for patients.