CHAPTER 13

To Study the Project Management on Digital Experience by Understanding the Assessment of Silos and Implementing EMR in Hospital Setting

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INTRODUCTION

The implementation of electronic health records (EHRs) is hindered by various challenges and limitations, despite the potential advantages they offer. These obstacles predominantly revolve around financial constraints, technical limitations, standardization restrictions, psychological factors influencing people's behaviours, and organizational constraints. Numerous research studies indicate that resistance to change plays a more substantial role than other implementation barriers in hindering the widespread adoption of EHR systems [1][2].

The review explored the consequences of Electronic Health Record (EHR) deployments and persistent challenges in adopting and utilizing EHR systems. Although certain adverse effects, such as heightened workload and dysfunctional workflows, appeared to persist consistently over time, there was an observed uptick in positive benefits. However, it's important to note that the review had limitations, including inadequate analysis of the included publications and a lack of uniformity in the definitions of EHRs. Additionally, comprehensive contextual information about the research settings was lacking in the reviewed studies [3].

The belief in the transformative potential of digital technologies to substantially improve operational decision-making in hospitals, thereby enhancing the effectiveness, efficiency, and accessibility of patient treatment, is well-founded. This perspective is substantiated not only by our own research but also by findings from other studies, alongside the continuous advancements in hospitals' utilization of data and technology. Digital transformation presents hospitals with the opportunity to enhance decision-making in critical areas such as patient flow,

personnel management, planning, and supply chain processes [4].

RESEARCH OBJECTIVES

1. To investigation into the Integration of Digital Experiences and Their Advantages within Existing Hospital Systems Processes.

RESEARCH METHODOLOGY

The study adopted a primary research approach with a qualitative study design, conducted at Meta16 labs and Healthcare Analytics, utilizing the MetahOS Operating System as the primary product under evaluation. The study population encompassed two 40-bedded hospitals and one 300-bedded hospital, with a sample size of 132 end users categorized into various roles, including 50 Front desk users, 25 Doctor Secretaries, 35 Call Centre Agents, 12 Admission counter Users, and 10 Admin users. Simple Random Sampling was employed as the sampling method, with inclusion criteria focusing on Call center CRM (Customer Relation Systems) and OPD Front office systems, while excluding IPD and Telehealth processes. The study utilized Excel as the primary tool, and the duration of the research was set at three months. This comprehensive study aimed to shed light on the integration of digital experiences within hospital systems and their impact on various user roles and functionalities.The UAT Report served as the primary source of data collection as it directly involved the end users' acceptance of a particular process conducted on the system. The UAT was customized by the Project manager to address all scenarios faced by the end user and underwent review by the Hospital Administration. Each scenario was further broken down into

several steps within the system's process, validated by the end user as either Pass or Fail.

RESULTS AND DISCUSSION

The study focused on two key areas within the hospital systems: Call Center (CRM and Webform) and OPD (Registration/Billing & Queue Management). In the Call Center segment, the total sample size comprised 39 individuals, including 35 Call Centre Agents, 3 Call Centre Managers, and 1 Administrative staff member. The fishbone diagram illustrated the current status, while Figure 4.2 depicted the acceptance of the digital patient experience among Call Centre workforces. UAT test findings, as presented in Figure 4.3, showed a 90% pass rate for Call Center processes. Implementation barriers encompassed challenges in training material creation, remote training difficulties, and potential issues with new features.

Moving to the OPD segment, the total sample size was 93 individuals, including 50 Front Desk Users, 25 Doctor Secretaries, 12 Admission Counter Users, and 6 Administrative staff members. Fishbone analysis for OPD workflow on the legacy system and user acceptance figures were illustrated in Figures 4.4 and 4.5, respectively. UAT test findings in Figure 4.6 indicated a successful 85% pass rate for OPD processes. Implementation barriers involved the creation of training material, challenges in remote training, and the need for training alignment with implementation. Additionally, technology-related barriers included integration with pre-existing HIS systems and dependency on third-party applications. The advantages of the new MetahOS webform over the pre-existing webform included enhanced analytics, patient call tracking, reduced no-show rates, and improved quality of service monitoring. In the OPD segment,

the implementation of a new Self Check-in portal and Queue Management System aimed to reduce the load on the front office, decrease patient waiting time, and enhance turnaround time for OPD processes.

CONCLUSION

In the rapidly evolving healthcare landscape, projects in health informatics and health IT are often centered around the collection, utilization, and management of electronic medical records. However, the dynamic nature of healthcare can lead to team members being pulled in multiple directions simultaneously, posing a significant challenge for project managers. This research has thoroughly examined the critical aspects that organizations must address to effectively integrate technological solutions, with a particular focus on hospitals.

The identified hindrances in the technological environment include complexity, a lack of infrastructure, and poor interface design. These challenges can impede the seamless adoption of technological solutions within healthcare settings. To overcome these obstacles, fostering increased collaboration between vendors and healthcare professionals is crucial. This approach can facilitate a better understanding of the unique needs and workflows within healthcare organizations, leading to the development of more user-friendly and effective technological solutions. By addressing these challenges head-on, healthcare projects can navigate the intricacies of technology integration and ultimately contribute to improved patient care and operational efficiency.

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