IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 7, April 2024

Revolutionizing Hospital Operations: A Comprehensive Analysis of Hospital Management System Implementation

Khan Anas Waqar¹, Paripurna Tiwari², Anishka Ashtankar³, Khushabu Trivedi⁴

Ajeenkya D Y Patil University, Lohegaon, Pune, Maharashtra, India^{1,2,3}
School of Engineering, Ajeenkya D Y Patil University, Lohegoan, Pune, Maharashtra, India⁴
khan.waqar@adypu.edu.in, paripurna.tiwari@adypu.edu.in, anishka.ashtankar@adypu.edu.in,
khushabu.trivedi@adypu.edu.in

Abstract: Hospital Management System (HMS) technology will transform hospital operations. This summary summarizes HMS implementation's main components, goals, advantages, and drawbacks. Patient registration, appointment scheduling, EMR, billing, inventory management, and analytics are integrated into the HMS. Its main goal is to improve hospital efficiency, automate operations, and centralize information management. Implementing an HMS improves patient care by providing rapid access to precise information, operational efficiency, financial procedures, and data accuracy. The challenges include comprehensive staff training, strong data security, and smooth healthcare system connection. Healthcare organizations are developing digitally, making the hospital administration system essential for patient outcomes and hospital administration.

Keywords: Hospital Management System, healthcare technology, operational efficiency, data security, healthcare administration

REFERENCES

- [1]. Anuj Tiwari, Saransh Mahajan, Vivek Kumar, Priyanka Behki, "Modern Hospital Management System," Researchgate.Net/Publication, 2023
- [2]. K.Nishanthan, S.Mathyvathana, R.Priyanthi, A.Thusara, D.I. De Silva and Dulanji Cooray, "The Hospital Management System," International Journal of Engineering and Management Research, 2022
- [3]. PranjaliAnpan, Roshni Udasi, Susneha Jagtap, Shon Thakre, ChalikaKamble, "International Research Journal of Engineering and Technology (IRIET)", 2020
- [4]. Luciano Trentin, GérsonTontini, "Hospital Management Maturity Models: Literature Review", Base Revista De Administração E Contabilidade Da Unisinos, 2021
- [5]. Lakshya Arora, Feroz Ikbal, "Experiences of Implementing Hospital Management Information System (Hmis) At A Tertiary Care Hospital, India, "Vilakshan Ximb Journal of Management, 2023
- [6]. Kumaran, Dr. Pusphagaran, Kalai Selvi, Christopher, Deepak, "A Study of Advanced Hospital Management System," IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), 2017
- [7]. Ida Herwati, JennylaPuspitaning Ayu, LuthfiyatulMustafidah, ListiyawatiRatna Ningrum, Indah Nur' Aini, Muhasim, LailatulKodriyah, "Evaluation of The Implementation of Hospital Management Information Systems: Literature Review," International Journal of Scientific and Research Publications, 2022
- [8]. Jayasiri K.C.N, Thathsarani WRVK, De Silva D.I.3, and Vidhanaarachchi S, "Design and Implementation of An Automated Hospital Management System with Mern Stack," International Journal of Engineering And Management Research, 2022
- [9]. Sumit Soman, Priyesh Ranjan & P. K. Srivastava, "A Distributed Architecture For Hospital Management Systems With Synchronized Her," CSI Transactions On Ict, 2020

DOI: 10.48175/IJARSCT-17842



IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 7, April 2024

- [10]. Francesco Lubrano, Federico Stirano, Giuseppe Varavallo, Fabrizio Bertone &Olivier Terzo, "Hams: An Integrated Hospital Management System To Improve Information Exchange", Complex, Intelligent And Software Intensive Systems, 2020
- [11]. Hyuktae Kwon, Sunhee An, Ho-Young Lee, Won Chul Cha, Sungwan Kim, Minwoo Cho, And Hyoun-Joong Kong, "Review Of Smart Hospital Services In Real Healthcare Environments," Healthc Inform Res. 2022
- [12]. P. K. Yadav and R. Kumar, "Online Hospital Management System," Ssrn Electronic Journal, 2022
- [13]. K.Nishanthan, S.Mathyvathana, R.Priyanthi, A.Thusara, D.I. De Silva, And Dulanji Cooray, "The Hospital Management System," International Journal of Engineering and Management Research, Vol. 12, No. 5, 2022
- [14]. D. Rizk, H. Hosny, S. Elhorbety, And A.-B. Salem, "Smart Hospital Management Systems Based on Internet of Things: Challenges, Intelligent Solutions, and Functional Requirements," International Journal of Intelligent Computing and Information Sciences, Vol. 0, No. 0, 2021,
- [15]. S. Soman, P. Ranjan, And P. K. Srivastava, "A Distributed Architecture for Hospital Management Systems with Synchronized Ehr," CSI Transactions on ICT, Vol. 8, No. 3, 2020
- [16]. Singh, "IOT Enabled Smart Hospital Management System for Covid-19 Patients," Turkish Journal of Computer and Mathematics, 2021
- [17]. X. Luo and C. Jiang, "Design of Hospital Operation Management System Based on Business-Finance Integration," ComputIntellNeurosci, Vol. 2022

DOI: 10.48175/IJARSCT-17842

