

Abstract

Health Information Systems (HIS) have transformed decision-making processes in hospitals by enabling timely access to accurate patient data and supporting evidence-based practices. This mixed-methods study explores the impact of HIS on decision-making in hospital settings, focusing on how these systems influence clinical decisions, operational management, and patient outcomes. Through a combination of quantitative data on decision-making efficiency and qualitative interviews with healthcare providers, this research provides a comprehensive view of HIS's role in hospital decision-making.

The quantitative component analyzes key metrics such as decision-making speed, error rates, and treatment outcomes before and after the implementation of HIS. Results suggest that HIS significantly enhances clinical decision-making, reducing diagnostic errors and improving patient care coordination. However, the effectiveness of HIS varies based on factors such as system integration, staff training, and user experience, highlighting the need for tailored implementation strategies.

Qualitative interviews with healthcare professionals, including doctors, nurses, and administrators, offer deeper insights into the practical challenges and benefits of HIS in decision-making. These interviews reveal that while HIS facilitates more informed decisions, concerns about system usability, data overload, and workflow disruptions persist. This study concludes by recommending strategies for optimizing HIS, such as ongoing training, user-friendly interfaces, and robust technical support, to ensure their full potential in improving hospital decision-making.