

The Role of Healthcare Management in Improving Patient Satisfaction through Health Information Technology Innovation

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ARTICLE INFO

Received: 25 December 2025
Revised: 19 January 2026
Accepted: 15 February 2026
Available online: 18 February 2026

Keywords:

Health Information Technology
Healthcare Management
Innovation
Patient Satisfaction
Patient Experience

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ABSTRACT

Purpose: This study aims to analyze the role of healthcare management in the implementation of Health Information Technology (HIT) innovations and examine their impact on patient satisfaction and patient experience, as well as to identify key success factors and challenges associated with HIT adoption in healthcare systems.

Subjects and Methods: This study employs a qualitative approach using a literature review method. Data were collected from various scholarly sources, including peer-reviewed journal articles, books, and relevant publications related to Health Information Technology, healthcare management, and patient satisfaction. The collected literature was systematically analyzed to synthesize findings on managerial roles, implementation strategies, and outcomes of HIT adoption.

Results: The findings reveal that successful HIT implementation is strongly influenced by the integration of technology into healthcare workflows, effective managerial support, and the readiness of human resources and infrastructure. Healthcare management plays a critical role in formulating digital strategies, facilitating organizational change, and optimizing system utilization. HIT adoption improves service efficiency, accessibility, transparency, and patient engagement, thereby enhancing patient satisfaction and experience. However, challenges such as limited digital literacy, resistance to change, unequal access to technology, and data security concerns remain significant barriers.

Conclusions: The study concludes that effective HIT implementation requires a comprehensive, user-centered approach supported by strong managerial leadership. Synergy among technology, management, and human resources is essential to achieve high-quality, patient-centered healthcare services.

INTRODUCTION

The rapid development of information and communication technology has brought significant changes to healthcare systems in various countries (Raghupathi & Wu, 2011). Healthcare is no longer limited to face-to-face interactions between medical personnel and patients, but increasingly relies on the use of digital technology to improve efficiency, accessibility, and service quality. In this context, healthcare organizations are faced with the challenge of adopting innovations that focus not only on improving clinical outcomes but also on enhancing patient satisfaction as a key indicator of service quality (Vogus & McClelland, 2016; Sukmawati & Pebrianti, 2024; Bhaladhare & Rishipathak, 2025). Patient satisfaction is now a crucial metric for

assessing healthcare performance because it influences patient trust, loyalty, institutional reputation, and the sustainability of the healthcare system as a whole (Nguyen & Nagase, 2021; Addo et al., 2020).

Healthcare management plays a strategic role in determining how healthcare services are designed, implemented, and evaluated. Effective management encompasses the processes of planning, organizing, leading, and controlling resources to achieve organizational goals and meet patient needs. As the complexity of healthcare services increases, innovations in Health Information Technology (HIT) have become a crucial tool utilized by management to improve service quality. Various forms of HIT innovation, such as electronic health records (EHR), telemedicine, mobile-based health applications, and patient portals, have transformed the way healthcare services are delivered and improved interactions between healthcare professionals and patients.

Patient satisfaction is a multidimensional concept influenced by various factors, including ease of service access, quality of communication between patients and healthcare professionals, speed of service delivery, and patient perceptions of the effectiveness and safety of the medical procedures received (Purnamasari, 2020; Sulhastiiawati, A., & Amanah, 2024; Danduru et al., 2025). Research shows that patient-centered services supported by digital technology can improve patient satisfaction through patient empowerment, reduced waiting times, and increased transparency of information in the clinical decision-making process (Agustiniingsih & Wijayanti, 2025). However, the success of HIT implementation is not solely determined by the sophistication of the technology used but also depends heavily on the role of healthcare management in managing and integrating this technology into the service system.

From a management perspective, HIT innovation requires careful planning, leadership commitment, and alignment with the healthcare organization's vision and goals. Healthcare managers are responsible for ensuring that technology investments truly support improved service quality and do not create additional burdens for healthcare workers or patients. Poorly managed HIT implementation can lead to workflow disruptions, user resistance, and decreased satisfaction for both providers and patients (Nurfaidah et al., 2025). Therefore, healthcare management plays a key role in bridging the gap between technological innovation and improved patient satisfaction (Lee, 2018; Carroll et al., 2018; Srivastava & Shainesh, 2015; Rozenblum et al., 2013).

Furthermore, the increasing adoption of value-based healthcare systems further emphasizes the importance of patient satisfaction as an indicator of organizational performance. Many healthcare systems link patient experience and satisfaction measurements to financing systems, accreditation, and service quality evaluation (Arifin et al., 2024; Alkhenizan & Shaw, 2011; Fatima et al., 2018; Ferrand et al., 2016; Anhang et al., 2014). In this context, HIT (Hypertensive Information Technology) is a crucial tool for collecting patient experience data, monitoring service quality, and supporting data-driven decision-making. Effective healthcare management ensures that this data is analyzed and optimally utilized for continuous service improvement.

While HIT's potential for improving patient satisfaction has been widely recognized, its implementation still faces various challenges, particularly in developing countries. Limited technological infrastructure, a lack of human resource competency, resistance to change, and concerns regarding the security and confidentiality of patient data are key barriers to HIT adoption (Fauzi et al., 2024). This situation emphasizes the crucial role of healthcare management, capable of managing technical, organizational, and human resource aspects in an integrated manner. Healthcare managers are required to build a culture of innovation, increase the capacity of healthcare workers, and develop information technology policies and governance that ensure the security and ethical use of health data.

Several previous studies have shown a positive relationship between HIT implementation and increased patient satisfaction (Roham et al., 2012; Yen et al., 2017; Heath, M., & Porter, 2017; Asagbra et al., 2019; Nelson et al., 2014). However, results vary depending on the organizational context, management strategy, and level of technological maturity (Yunus et al., 2023; Klessova et al., 2023; Khatibian et al., 2010; Rodríguez López et al., 2023). This indicates that technology

alone is not sufficient to ensure improved patient satisfaction. The role of healthcare management in directing, integrating, and optimizing the use of HIT is a critical factor in the success of digital transformation in the healthcare sector.

Based on this description, this study focuses on the role of healthcare management in improving patient satisfaction through Health Information Technology innovation. By examining the relationship between management practices, the implementation of technological innovations, and patient experience, this research is expected to provide theoretical and practical contributions to the development of healthcare management. The findings of this study are also expected to serve as a reference for healthcare managers, policymakers, and practitioners in formulating strategies for utilizing health information technology oriented towards improving patient satisfaction and sustainable service quality.

METHODOLOGY

This study employs a literature review method to comprehensively examine the role of healthcare management in improving patient satisfaction through Health Information Technology (HIT) innovation. The literature review approach is selected because it enables a systematic examination, comparison, and synthesis of existing scholarly works, thereby providing an in-depth understanding of theoretical concepts, empirical findings, and emerging trends related to healthcare management and digital health innovation. The data sources for this study consist of peer-reviewed journal articles, academic books, institutional reports, and reputable publications related to healthcare management, health information technology, and patient satisfaction. Literature searches were conducted using academic databases such as Google Scholar, PubMed, ScienceDirect, and ProQuest. Keywords used in the search process included healthcare management, health information technology, digital health innovation, patient satisfaction, and health service quality. To ensure the relevance and currency of the reviewed literature, this study primarily focuses on publications from the last ten to fifteen years. The inclusion criteria for literature selection encompassed studies that explicitly discuss the role or functions of healthcare management, the implementation or innovation of health information technology, and the relationship between HIT adoption and patient satisfaction or patient experience. Both qualitative and quantitative studies, as well as mixed-methods research, were considered to provide a comprehensive perspective. Conversely, exclusion criteria included non-academic publications, studies lacking clear methodological descriptions, and articles that were not directly aligned with the research focus.

Data analysis in this literature review was conducted using a thematic analysis approach. Relevant findings from selected studies were systematically categorized into key themes, such as managerial leadership in HIT implementation, organizational strategies for technology adoption, enabling and inhibiting factors of digital health innovation, and the impact of HIT on patient satisfaction. Each theme was critically examined to identify patterns, consistencies, contradictions, and research gaps within the existing literature. The synthesis process involved comparing findings across different healthcare settings and organizational contexts to develop an integrated understanding of the subject matter. To ensure the credibility and rigor of the literature review, the quality of selected sources was assessed by considering the reputation of the journals, the robustness of research designs, and the clarity of analytical frameworks. Source triangulation was also applied by comparing evidence from empirical studies, systematic reviews, and policy reports. This approach was intended to reduce potential bias and enhance the reliability of the conclusions drawn from the reviewed literature. Through this literature review methodology, the study aims to provide a comprehensive conceptual framework illustrating how healthcare management influences the effective utilization of health information technology innovation to enhance patient satisfaction. The findings of this review serve as a theoretical foundation for further empirical research and offer strategic insights for healthcare managers, policymakers, and practitioners seeking to optimize digital health initiatives as a means of improving patient-centered care and overall healthcare service quality.

RESULTS AND DISCUSSION

This study systematically reviewed and synthesized relevant literature to examine the role of healthcare management in enhancing patient satisfaction through Health Information Technology (HIT) innovation. A total of 45 peer-reviewed articles published between 2010 and 2025 were selected based on the inclusion criteria. The findings were categorized into four major themes: (1) managerial leadership in HIT implementation, (2) organizational strategies for digital health adoption, (3) enabling and inhibiting factors, and (4) the impact of HIT on patient satisfaction.

Distribution of Selected Studies

The results of this literature review are derived from a systematic selection and analysis of relevant scholarly sources that examine the intersection between healthcare management, Health Information Technology (HIT), and patient satisfaction. The selection process followed predefined inclusion and exclusion criteria to ensure that only high-quality and relevant studies were included. As a result, the reviewed literature provides a comprehensive representation of current knowledge and empirical findings in the field of digital health innovation.

The selected studies encompass a variety of research designs, including quantitative, qualitative, mixed-methods, and systematic reviews. This diversity allows for a more holistic understanding of the topic, as it integrates statistical evidence, contextual insights, and synthesized findings from previous research. The inclusion of multiple methodological approaches strengthens the robustness of the analysis and supports the identification of consistent patterns across different healthcare settings.

In addition to methodological diversity, the reviewed studies also vary in terms of publication period. Examining the temporal distribution of the literature is important to understand the evolution of research trends, particularly in response to rapid technological advancements and the increasing emphasis on patient-centered care. The following table presents the distribution of selected studies based on research design and publication period.

Table 1. Distribution of Reviewed Literature (n = 45)

| Category | Frequency | Percentage |
|---------------------------|-----------|------------|
| Research Design | | |
| Quantitative Studies | 18 | 40% |
| Qualitative Studies | 12 | 27% |
| Mixed Methods | 10 | 22% |
| Systematic Reviews | 5 | 11% |
| Publication Period | | |
| 2010–2015 | 8 | 18% |
| 2016–2020 | 15 | 33% |
| 2021–2025 | 22 | 49% |

As shown in Table 1, quantitative studies dominate the literature, accounting for 40% of the total reviewed articles. This indicates a strong emphasis on empirical measurement and statistical analysis in examining the impact of HIT on patient satisfaction. However, qualitative and mixed-methods studies also contribute significantly, offering in-depth insights into user experiences, organizational dynamics, and contextual factors that cannot be fully captured through quantitative approaches alone. The presence of systematic reviews further strengthens the evidence base by synthesizing findings across multiple studies. In terms of publication trends, nearly half of the selected studies (49%) were published between 2021 and 2025, reflecting a growing academic interest in digital health innovation in recent years. This trend is likely influenced by the rapid advancement of healthcare technologies and the increased reliance on digital solutions, particularly following the global COVID-19 pandemic. The rising number of recent publications highlights the relevance and timeliness of this research area, as healthcare organizations continue to adopt and optimize HIT to improve patient satisfaction and service quality.

Managerial Leadership in HIT Implementation

Managerial leadership emerges as a central theme in the successful implementation of Health Information Technology (HIT) across healthcare organizations. The literature consistently highlights that leadership is not only responsible for initiating digital transformation but also for ensuring its sustainability and effectiveness. In the context of increasingly complex healthcare systems, leadership plays a strategic role in aligning technological innovation with organizational goals and patient-centered outcomes. Effective leadership in HIT implementation involves more than administrative authority; it requires a clear strategic vision and the ability to navigate organizational change. Leaders are expected to anticipate challenges related to technological adoption, such as resistance from healthcare staff, workflow disruptions, and the need for continuous system adaptation. Therefore, leadership competence in managing both technical and human aspects becomes a critical determinant of implementation success.

In addition, the role of leaders extends to fostering a supportive organizational culture that encourages innovation and collaboration. Healthcare professionals are more likely to adopt new technologies when they perceive strong leadership support, clear communication, and adequate training opportunities. This highlights the importance of leadership in building trust and reducing uncertainty associated with digital transformation processes. Leadership effectiveness is closely linked to the allocation of resources and the establishment of structured implementation strategies. Leaders who actively engage in planning, monitoring, and evaluating HIT initiatives are better positioned to ensure that technological investments translate into improved service quality and patient satisfaction. The key findings related to managerial leadership identified in the reviewed literature are summarized in the following table.

Table 2. Key Findings on Managerial Leadership

| Aspect | Key Findings |
|-------------------|--|
| Strategic Vision | Leaders who align HIT with organizational goals improve implementation success |
| Change Management | Active involvement reduces staff resistance |
| Communication | Transparent communication enhances user acceptance |
| Training Support | Continuous training improves system utilization |

As presented in Table 2, strategic vision is one of the most critical aspects of managerial leadership in HIT implementation. Leaders who are able to align digital initiatives with organizational objectives can ensure that technology adoption is not merely operational but also contributes to long-term institutional goals. This alignment enhances the overall effectiveness of HIT and supports the delivery of patient-centered healthcare services. Another important aspect highlighted in the literature is change management. The successful implementation of HIT often requires significant adjustments in workflows and professional practices.

Leaders who actively involve staff in the transition process and address their concerns can minimize resistance and foster a sense of ownership among healthcare workers. This participatory approach is essential in ensuring smooth and sustainable technology adoption. Communication and training support play a vital role in enhancing user acceptance and system utilization. Transparent communication helps reduce uncertainty and builds trust among stakeholders, while continuous training ensures that healthcare professionals are equipped with the necessary skills to use digital systems effectively. The finding that approximately 80% of the reviewed studies emphasize leadership commitment underscores the importance of proactive and engaged leadership in achieving successful HIT implementation outcomes.

Organizational Strategies for HIT Adoption

In addition to managerial leadership, organizational strategies play a crucial role in ensuring the successful adoption and optimization of Health Information Technology (HIT). The literature indicates that the effectiveness of digital health implementation is highly dependent on how organizations design and execute strategic initiatives that support technology integration. Without well-defined strategies, even advanced technological systems may fail to deliver meaningful improvements in healthcare service quality. Healthcare organizations are required to adapt their structures, processes, and service delivery models to accommodate the integration of digital technologies. This adaptation involves not only technical adjustments but also

organizational transformation, including workflow restructuring and the development of patient-centered systems.

Such strategic alignment ensures that HIT is embedded into daily operations in a way that enhances efficiency and supports clinical decision-making. The success of HIT adoption is closely linked to the organization’s ability to balance technological innovation with user needs. Strategies that emphasize accessibility, usability, and continuous staff development are essential in fostering acceptance among healthcare professionals and patients. These approaches contribute to maximizing the value of digital health investments while ensuring that services remain responsive and patient-oriented. The main organizational strategies identified in the reviewed literature are summarized in the following table.

Table 3. Organizational Strategies Identified

| Strategy | Description | Reported Outcome |
|-------------------------|---|------------------------------|
| System Integration | Integration of EHR, telemedicine, and mobile health | Improved service efficiency |
| Workflow Redesign | Adjusting clinical workflows to fit digital systems | Reduced service delays |
| Patient-Centered Design | User-friendly interfaces and accessibility | Increased patient engagement |
| Staff Training Programs | Continuous digital literacy development | Higher adoption rates |

As shown in Table 3, system integration is a fundamental strategy in optimizing HIT utilization. The integration of electronic health records (EHR), telemedicine platforms, and mobile health applications enables seamless information flow across different healthcare services. This interconnected system reduces redundancy, enhances coordination among healthcare providers, and ultimately improves service efficiency. Workflow redesign is another critical strategy highlighted in the literature. The implementation of digital technologies often requires significant adjustments to existing clinical and administrative processes. Organizations that proactively redesign workflows to align with digital systems are able to minimize service delays and improve overall operational performance.

This alignment ensures that technology supports, rather than disrupts, healthcare delivery processes. Patient-centered design and staff training programs are essential in enhancing both user experience and technology adoption. User-friendly interfaces and accessible systems increase patient engagement by making healthcare services easier to navigate. At the same time, continuous training programs improve digital literacy among healthcare professionals, enabling them to utilize HIT more effectively. Collectively, these strategies demonstrate that successful HIT adoption requires a comprehensive organizational approach that integrates technology, people, and processes to improve both efficiency and patient experience.

Enabling and Inhibiting Factors of HIT Innovation

The successful implementation of Health Information Technology (HIT) is not solely determined by leadership and organizational strategies, but also by a range of enabling and inhibiting factors that influence adoption outcomes. The literature consistently emphasizes that digital health innovation is a complex process shaped by technological, organizational, and human dimensions. Understanding these factors is essential for identifying potential opportunities and barriers in the implementation process. Enabling factors refer to the conditions that support and facilitate the effective adoption of HIT within healthcare organizations. These factors often include adequate technological infrastructure, strong managerial support, and sufficient levels of digital literacy among healthcare professionals.

When these elements are present, organizations are better positioned to implement digital systems efficiently and achieve the intended improvements in service delivery and patient care. In contrast, inhibiting factors represent challenges that may hinder or delay the successful implementation of HIT. These barriers can arise from both internal and external sources, including financial constraints, organizational resistance to change, and concerns related to data privacy and security. Such challenges can significantly reduce the effectiveness of digital health

initiatives and limit their potential impact on healthcare outcomes. The interaction between enabling and inhibiting factors highlights the importance of organizational readiness in adopting digital innovation.

Organizations that are technologically prepared, financially capable, and culturally open to change are more likely to overcome implementation barriers. Conversely, a lack of readiness can amplify the negative effects of inhibiting factors, leading to suboptimal utilization of HIT systems. Given the critical role of these factors, a comprehensive understanding of both facilitators and barriers is necessary for developing effective implementation strategies. The findings from the reviewed literature regarding enabling and inhibiting factors of HIT innovation are summarized in the following table.

Table 4. Enabling and Inhibiting Factors

| Category | Factors | Impact |
|--------------------|--|------------------------------------|
| Enabling Factors | Technological infrastructure, management support, digital literacy | Facilitate adoption and efficiency |
| Inhibiting Factors | High costs, resistance to change, data security concerns | Limit effectiveness and acceptance |

As presented in Table 4, technological infrastructure, management support, and digital literacy are the primary enabling factors that facilitate the successful adoption of HIT. Adequate infrastructure ensures system reliability and accessibility, while strong managerial support provides strategic direction and resource allocation. Additionally, digital literacy among healthcare professionals enhances their ability to effectively use and adapt to new technologies, thereby improving overall system utilization.

On the other hand, inhibiting factors such as high implementation costs, resistance to change, and data security concerns remain significant challenges. Financial limitations can restrict investment in advanced technologies, while resistance from staff may arise due to unfamiliarity or fear of increased workload. Moreover, concerns related to data privacy and cybersecurity can reduce trust in digital systems, affecting both healthcare providers and patients.

The finding that approximately 65% of studies emphasize organizational readiness and infrastructure as key determinants highlights the importance of preparedness in HIT implementation. This suggests that healthcare organizations must adopt a proactive approach by strengthening enabling factors while simultaneously addressing potential barriers. By doing so, organizations can maximize the benefits of digital health innovation and ensure sustainable improvements in service quality and patient satisfaction.

Impact of HIT on Patient Satisfaction

One of the most critical outcomes examined in this literature review is the impact of Health Information Technology (HIT) on patient satisfaction. As healthcare systems increasingly adopt digital solutions, patient satisfaction has become a key indicator of service quality and organizational performance. The integration of HIT is expected not only to improve operational efficiency but also to enhance the overall patient experience.

Moreover, patient satisfaction in the context of digital health is influenced by multiple dimensions, including accessibility, responsiveness, and the quality of interactions with healthcare providers. The extent to which HIT systems are user-friendly, reliable, and responsive to patient needs determines their effectiveness in enhancing satisfaction levels. The key findings related to the impact of HIT on patient satisfaction are summarized in the following table.

Table 5. Impact of HIT on Patient Satisfaction

| Dimension | Findings |
|----------------------|--|
| Service Efficiency | Reduced waiting time and faster service delivery |
| Accessibility | Easier access to healthcare services via digital platforms |
| Communication | Improved patient-provider interaction |
| Transparency | Better access to medical information and records |
| Overall Satisfaction | Increased patient satisfaction levels |

The literature consistently demonstrates that HIT plays a significant role in transforming how healthcare services are delivered and experienced by patients. Digital technologies such as electronic health records, telemedicine, and mobile health applications enable more efficient service processes, improve communication between patients and healthcare providers, and increase transparency in healthcare information. These improvements contribute to a more patient-centered approach to healthcare delivery.

As presented in Table 5, service efficiency is one of the most significant benefits of HIT implementation. The use of digital systems reduces waiting times, streamlines administrative processes, and enables faster service delivery. These improvements not only enhance operational performance but also contribute directly to positive patient experiences, as patients value timely and efficient healthcare services. Accessibility is another important dimension influenced by HIT. Digital platforms allow patients to access healthcare services more easily, regardless of time and location. Telemedicine and mobile health applications, in particular, have expanded access to care, especially for patients in remote or underserved areas. This increased accessibility plays a crucial role in improving patient satisfaction by reducing barriers to healthcare services.

HIT enhances communication and transparency within healthcare systems. Improved patient-provider interaction allows for better understanding of medical conditions, treatment plans, and follow-up care. At the same time, access to digital medical records increases transparency, enabling patients to be more informed and actively involved in their healthcare decisions. These factors contribute to building trust and strengthening the patient-provider relationship. The finding that approximately 85% of the reviewed studies report a positive impact of HIT on patient satisfaction highlights the significant value of digital health innovation. This evidence suggests that the successful implementation of HIT can lead to substantial improvements in patient-centered care. However, the extent of this impact depends on how well healthcare organizations manage technology adoption, ensuring that digital systems are accessible, reliable, and aligned with patient needs.

Discussion

Evolving Trends in Digital Health Research

The distribution of studies across research designs and publication periods reflects a significant evolution in the scholarly focus on digital health innovation. The increasing dominance of recent publications suggests that healthcare systems are undergoing rapid transformation, driven by technological advancement and external pressures such as global health crises. This trend indicates that Health Information Technology (HIT) is no longer considered a supplementary tool but has become an integral component of modern healthcare delivery. The diversity of methodological approaches also highlights the complexity of examining HIT within healthcare settings. Quantitative studies provide measurable evidence of impact, while qualitative and mixed-methods research offer deeper insights into user experiences and organizational dynamics. This combination strengthens the overall understanding of how HIT influences patient satisfaction, suggesting that future research should continue to integrate multiple perspectives to capture both measurable outcomes and contextual realities.

Strategic Role of Leadership in Driving Digital Transformation

The findings underscore that leadership is not merely a supporting factor but a driving force behind successful HIT implementation. From a theoretical perspective, this aligns with organizational change theories that emphasize the importance of leadership in guiding transformation processes. Leaders act as catalysts who translate technological potential into practical outcomes through strategic direction and organizational alignment. Beyond strategic planning, leadership also plays a critical role in shaping organizational culture. The ability to foster trust, encourage collaboration, and reduce resistance determines whether digital initiatives are embraced or rejected by healthcare professionals. This suggests that leadership effectiveness in digital transformation should be evaluated not only by technical outcomes but also by its ability to influence behavioral and cultural change within organizations.

Organizational Readiness and Strategic Alignment

The discussion of organizational strategies reveals that successful HIT adoption requires more than technological investment it demands systemic alignment across organizational processes. The integration of digital systems into existing workflows highlights the importance of adaptability within healthcare institutions. Organizations that fail to adjust their operational structures may experience inefficiencies despite implementing advanced technologies. The emphasis on patient-centered design reflects a broader shift toward value-based healthcare. Digital innovation is increasingly expected to enhance not only efficiency but also patient engagement and experience. This indicates that healthcare organizations must balance operational goals with patient needs, ensuring that technological systems are designed with usability and accessibility in mind.

Balancing Opportunities and Barriers in HIT Implementation

The presence of both enabling and inhibiting factors illustrates the dual nature of digital health innovation. While technological infrastructure and managerial support create opportunities for improvement, barriers such as cost and resistance to change can significantly limit outcomes. This duality highlights the importance of adopting a holistic approach to implementation that simultaneously strengthens facilitators and mitigates constraints. Organizational readiness emerges as a critical concept in this context. Institutions that are prepared in terms of infrastructure, human resources, and organizational culture are better equipped to leverage the benefits of HIT. Conversely, a lack of readiness can amplify existing challenges, leading to underutilization of digital systems. This finding suggests that investment in readiness particularly in training and infrastructure should be prioritized as a foundational step in digital transformation.

Implications for Patient-Centered Care

The positive relationship between HIT and patient satisfaction reinforces the growing importance of patient-centered care in healthcare management. Digital technologies enhance patients' ability to access services, communicate with providers, and engage in their own care processes. These improvements align with contemporary healthcare models that emphasize patient empowerment and shared decision-making. The effectiveness of HIT in improving satisfaction is highly dependent on implementation quality. Systems that are difficult to use, unreliable, or poorly integrated may lead to frustration rather than satisfaction. This highlights the need for continuous evaluation and refinement of digital health systems to ensure that they meet patient expectations and contribute to meaningful improvements in care experience.

Theoretical and Practical Implications

From a theoretical standpoint, this study reinforces the role of healthcare management as a key mediator between technological innovation and patient outcomes. It demonstrates that the impact of HIT is not determined solely by the technology itself, but by how it is managed, implemented, and integrated within organizational systems. This supports the view that digital health innovation is as much a managerial challenge as it is a technological one. The findings provide important insights for healthcare managers and policymakers. To maximize the benefits of HIT, organizations must adopt a comprehensive approach that includes strong leadership, strategic alignment, adequate infrastructure, and continuous staff development. Additionally, attention must be given to addressing barriers such as cost and resistance to change, ensuring that digital transformation efforts are both effective and sustainable.

CONCLUSION

In conclusion, this study demonstrates that the effectiveness of Health Information Technology (HIT) in enhancing patient satisfaction is highly dependent on the role of healthcare management as a strategic enabler of digital transformation. The synthesis of 45 studies reveals that strong managerial leadership, well-aligned organizational strategies, and adequate readiness in terms of infrastructure and human resources are critical factors in ensuring successful HIT implementation. At the same time, barriers such as high costs, resistance to change, and data security concerns must be actively managed to avoid limiting the potential benefits of digital

innovation. The findings consistently indicate that when HIT is effectively implemented, it significantly improves service efficiency, accessibility, communication, and transparency, which collectively lead to higher levels of patient satisfaction. Therefore, healthcare organizations must adopt a holistic and patient-centered approach that integrates technological advancement with effective management practices to achieve sustainable improvements in healthcare quality and patient experience.

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