

Global Journal of Health Science (GJHS)

**Digital Transformation in Healthcare: The Role of Change Management in Successful
Electronic Health Record (EHR) Modernization in the UAE**

Azza Alkaabi



Digital Transformation in Healthcare: The Role of Change Management in Successful Electronic Health Record (EHR) Modernization in the UAE



Azza Alkaabi

Master of Science, Innovation and Change Management

Article History

Received 17th December 2025

Received in Revised Form 14th January 2026

Accepted 16th February 2026



How to cite in APA format:

Alkaabi, A. (2026). Digital Transformation in Healthcare: The Role of Change Management in Successful Electronic Health Record (EHR) Modernization in the UAE. *Global Journal of Health Sciences*, 11(1), 24–37. <https://doi.org/10.47604/gjhs.3638>

Abstract

Purpose: The Healthcare Sector in the United Arab Emirates “UAE” is undergoing a rapid, digital transformation, particularly through the large-scale initiatives such as Electronic Health Record (EHR) modernization and interoperability improvements. However, despite significant technological investments, many EHR projects fail to achieve their intended outcomes due to human and organizational challenges. The study investigates the critical role of a structured change management practices in ensuring the success of EHR modernization efforts. The main research question guiding this inquiry is: How does the application of structured change management influence the successful implementation of EHR modernization initiatives in the UAE Healthcare Sector?

Methodology: A mixed method research design has been employed, combining the qualitative interviews with healthcare leaders and quantitative surveys distributed among clinical and administrative staff across UAE healthcare organizations. This approach enables a comprehensive exploration of both perceived and measurable impacts of change management interventions on EHR project outcomes. Data analysis involved thematic coding for qualitative data and statistical regression analysis for quantitative results.

Findings: The study will reveal a strong positive relationship between the presence of formal change management strategies, including leadership engagement, communication planning, and staff training, and the overall success of EHR modernization projects. Moreover, organizational culture and employee engagement are expected to moderate this relationship significantly.

Unique Contribution to Theory, Practice and Policy: The findings will offer important insights for policymakers, hospital administrators, and IT leaders in the UAE, emphasizing that technological advancement must be supported by robust human-centered change management strategies to realize the full benefits of digital health transformation. This research will contribute to both academic knowledge and practical frameworks for improving digital health outcomes in the region.

Keywords: *Electronic Health Records (EHR), Healthcare Information System, Digital Transformation, Change Management, Organizational Change, UAE Healthcare Sector*

JEL Classification Codes: *I18, I11, M15, M14, O33*

©2026 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>)

INTRODUCTION

Healthcare systems worldwide are undergoing rapid digital transformation, this is driven by the need to improve patients' care, increase operational efficiency, and reduce costs. Central to this transformation is the modernization of Electronic Health Record (EHR) systems. However, despite heavy investments, many EHR implementation and upgrade projects face significant challenges, often leading to delays, cost overruns, or outright failure (Bozak, 2003; Cresswell and Sheikh, 2013). A key reason for these failures is the underestimation of the role of structured change management in ensuring the success of such large-scale IT overhauls.

In the UAE, the government's ambitious initiatives like the "UAE Vision 2031" and the "National Digital Health Strategy" have placed significant emphasis on digitizing healthcare services to achieve better health outcomes and interoperability across the Emirates (Ministry of Health and Prevention UAE, 2022). Furthermore, UAE is also recognized as a leader in digital health transformation across the Middle East. Key initiatives like the nationwide Malaffi and Wareed EHR systems reflect the UAE's strategic commitment to healthcare modernization (Al-Kaabi et al., 2022). However, aligning healthcare professionals, patients, and administrators with new digital systems remains a complex task. Motivation for the research came from the need to understand how structured change management frameworks can bridge the gap between technological advancement and practical implementation success within UAE's healthcare sector.

This study approaches these challenges through a change-management lens, drawing on well-established theories of organizational transformation. Lewin's (1951) three-stage model; unfreeze, change, refreeze; offers a foundational understanding of how organizations shift from existing routines to new systems by confronting resistance and embedding new practices. Additionally, Kotter's (1996) eight-step model builds on this by understanding the importance of strong leadership, a clear vision, effective communication, and early wins to sustain momentum. At the individual level, the ADKAR framework (Hiatt, 2006) highlights the roles of awareness, desire, knowledge, ability, and reinforcement in fostering lasting behavioral change. Together, these models provide a holistic structure for examine EHR modernization, integrating both high-level strategic leadership considerations and the practical experiences of end users.

Electronic Health records modernization is best examined through a change-management lens because it represents a deep organizational transformation rather than a simple IT upgrade. Such systems reshape clinical workflows, professional autonomy, communication patterns, documentation duties, and accountability structures. Traditional IT-focused evaluations cannot explain why identical systems thrive in some hospitals but fail in others. While change management theories such as Lewin, Kotter, and ADKAR, offer insight into readiness, resistance, leadership alignment, communication effectiveness, and individual behavioral adoption. Furthermore, together they enable analysis at organizational, group and individual levels, aligning with the socio-technical complexity of healthcare. This makes change management a more predictive and explanatory framework than purely technological adoption models, particularly for assessing EHR modernization in the UAE.

LITERATURE REVIEW

UAE's healthcare workforce is diverse, consisting largely of expatriates, which introduces unique communication and cultural challenges (Al-Yateem et al., 2017). This multicultural environment

requires tailored change management approaches, an area insufficiently explored in current literature. This review critically synthesizes peer-reviewed literature and two more sources, identifying how change management impacts EHR success in the UAE, highlighting current gaps, and positioning the direction for research.

Digital Transformation in UAE Healthcare

The UAE government is very ambitious and has prioritized healthcare innovation, as part of the efforts, the deployment of digital health records aims to unify fragmented healthcare services, improve patient outcomes and support population health management (Mahmoud et al., 2019). Despite these ambitions, studies show that successful digital transformation goes beyond technical implementation and requires strategic organizational change (Al Kuwaiti, 2021).

Change Management and EHR Modernization

Change management refers to structured approaches that guide individuals and organizations through transitions (Kotter, 1996). In the context of EHR modernization, change management ensures alignment between technology, workflows, and cultural practices. Research demonstrates that effective change, leadership, communication, training, and stakeholder engagement are key enablers of EHR success (Alsulamy, 2019).

Critical Synthesis of Key Studies

Leadership and Vision

Al-Kaabi et al. (2022) argue that executive leadership is fundamental in UAE healthcare digitization efforts. Leaders who communicated clear visions and engaged clinical champions fostered higher EHR adaptation rates in Abu Dhabi's Malaffi project. Similarly, Abdulsalam et al. (2021) emphasize that leadership support is crucial in overcoming resistance among clinical staff.

Cultural Adaptation

Culture heavily influences change acceptance, Alhashmi et al. (2020) highlight that hierarchical organizational cultures in UAE's healthcare can delay decision-making during digital transitions. Therefore, change management models must be culturally sensitive and promote inclusivity across all staff levels.

Training and Capacity Building

Lack of digital literacy among some healthcare providers in the UAE presents challenges (Mahmoud et al., 2019). Studies by Aldosari (2017) and Saidi et al. (2020) show that continuous training, particularly on clinical informatics, improves EHR acceptance and reduces post-implementation frustration.

Communication Strategies

El Mahalli (2015) found that poor communication strategies during EHR rollouts in Gulf countries including UAE, led to misinformation, rumors, and heightened anxiety among staff. Transparent, frequent, and interactive communication is crucial to build trust.

Stakeholder Engagement

Alsulamy (2019) stresses that early and continuous stakeholder engagement, including nurses and administrative staff, leads to better system design and adaptation. Top-down mandates without bottom-up input often generate resistance.

Workflow Redesign

Ibrahim and Hassan (2021) note that EHR systems introduced in UAE public hospitals often required major workflow redesigns. Change management must address not only technical training but also adaptation of daily clinical practices.

Data Security and Privacy Concerns

Fear regarding data privacy can hinder EHR adaptation (Hassanein et al., 2022). Effective change management must proactively address cybersecurity training and transparent policies to build trust in digital systems.

Interoperability Challenges

Despite national networks like Malaffi, Aldosari (2017) reports that integration between public and private sectors remains a challenge. Furthermore, change management must coordinate across organizational boundaries, not just within hospitals.

Resistance to Change

Mahmoud et al. (2019) show that older clinicians, in particular, demonstrate higher resistance to EHR systems. Tailored change management strategies, including peer mentorship and recognition programs, can mitigate this.

Patient-Centric Approaches

Most UAE digital health efforts have been provider centered. However, Alhashmi et al. (2020) suggest that involving patients through portals and digital consent mechanisms could enhance EHR success, a factor often overlooked in current change management strategies.

Additional Sources

1. **UAE Government Portal (2023)**, provides policy context national digital health strategies, emphasizing citizen well-being and digital innovation.
2. **World Health Organization (2022)** highlights global best practices for digital health transformation and underscores leadership and change management principles applicable to UAE initiatives.

Identified Gaps in the Literature

Limited Use of Agile Change Management Approaches

- **Absence of empirical studies:** current UAE healthcare research largely focuses on traditional linear change models, with almost no empirical field investigations assessing the outcomes of agile or adaptive change approaches during EHR implementations.
- **Methodological weakness:** existing studies depend mainly on conceptual analysis or post implementation reflections rather than rigorous comparative or longitudinal evaluations of adaptive change strategies.

Lack of Patient Involvement in Change Management

- **Absence of empirical studies:** most existing research focuses solely on clinician acceptance, with no empirical assessment of how patient engagements contributes to EHR implementation success.
- **Methodological weakness:** success is typically measured through adoption rates rather than patient-centered outcomes, resulting in a provider-centric bias in evaluating EHR effectiveness.

Lack of cross-Emirate Comparative Research

- **Absence of empirical studies:** there is no multi-site evidence dataset comparing the effectiveness of change-management practices across different healthcare authorities.
- **Methodological weakness:** much of the existing research is limited to single-organization case studies, restricting generalizability and weakening external validity.

Underrepresentation of Private Sector Healthcare

- **Absence of empirical studies:** empirical datasets focus heavily on public hospitals.
- **Methodological weakness:** sampling bias reduces representativeness of the UAE healthcare ecosystem.

Lack of Long-Term Outcome Evaluation

- **Absence of empirical studies:** few studies measure sustainability beyond initial go-live adoption.
- **Methodological weakness:** cross-sectional designs dominate, preventing causal inference and understanding of stabilization phases.

Building upon Prior Studies

This review reveals that while change management is recognized as critical to UAE healthcare digital transformation, existing approaches are often rigid, clinician-focused, and leadership-dependent. This research proposes to build on existing knowledge by:

- Developing a patient-inclusive, agile change management framework which is tailored for EHR projects in UAE healthcare.
- Conducting comparative case studies across multiple emirates and healthcare sectors, public vs. private.
- Incorporating longitudinal outcome measurements to assess the sustainability of EHR adoption.

We conclude literature review here, that UAE is at the forefront of healthcare digital transformation in the Middle East, yet the success of its EHR modernization efforts hinges on effective change management. Furthermore, critical factors such as leadership, cultural adaptation, communication, and stakeholder engagement are well-documented, but gaps remain in patient involvement, agile methodologies, and long-term evaluation. Addressing these gaps will be crucial to ensuring that digital transformation efforts achieve intended health outcomes sustainably.

This literature review follows a structured narrative review approach rather than a full systematic review, and the scope was approximately 15 peer-reviewed studies and institutional publications.

The inclusion criteria were:

- Studies addressing EHR implementation or digital health transformation.
- Studies relevant to UAE context.
- Research discussing change management or adoption behavior.
- Publications focused on healthcare organizations.

While the exclusion criteria were:

- Opinion articles without conceptual or empirical grounding.
- Non-healthcare IT adoption research.
- Studies unrelated to organizational or behavioral outcomes.
- Purely technical system architecture papers.

The review is narrative but structured, as it synthesizes themes rather than statistically aggregating results. The approach is appropriate because the field is heterogeneous in methods and outcomes, making meta-analysis unsuitable.

Change Management Models Comparison

Table 1: Kotter vs. ADKAR

Dimension	Kotter	ADKAR
Level of Analysis	Organizational	Individual
Focus	Leadership and strategic transformation	Behavioral adoption
Strength	Mobilizes institutional momentum	Explains user acceptance
Weakness	Weak on individual psychology	Weak on organizational politics
Application to EHR	Useful during project rollout and alignment	Useful during training and adoption

Interpretation:

Kotter explains why organizations commit to change, while ADKAR explains why individuals actually use the system. At the end, both are complementary rather than competing models.

Table 2: Lewin vs. Agile Model

Dimension	Levin	Agile Model
Structure	Linear stages	Iterative cycles
Stability	Emphasizes stabilization	Emphasizes continuous adaptation
Fit to healthcare	Good for regulatory environments	Good for complex digital ecosystems
Limitation	Too rigid for evolving technology	Can lack governance structure

Interpretation:

Lewin explains stabilization of clinical routines, whereas agile approaches better reflect continuous upgrades of digital health platforms.

Policy Sources as Contextual Evidence

Government strategies and international guidelines are used in the study to provide contextual background regarding national priorities and regulatory direction. They do not constitute empirical evidence and are not used to test hypotheses. Instead, empirical conclusion rely solely on survey responses, interview data and statistical analysis. Moreover, policy documents serve only to justify relevance and situate the research within national transformation efforts.

Research Question and Hypotheses

The central research question for this paper is: **How does structured change management influence the success of EHR modernization projects in healthcare organizations in the UAE?**

Hypothesis 1: Structured change management practices significantly increase the success rate of EHR modernization in UAE healthcare settings.

Hypothesis 2: The impact of change management on EHR success is moderated by organizational culture and employee engagement.

Problem Statement

Despite substantial national investment in healthcare digital transformation, electronic health record modernization initiatives in the UAE continue to face inconsistent adoption, workflow disruption, and resistance among clinical staff. Although prior studies highlight factors such as leadership support and training, the existing literature remains fragmented, methodologically limited, and predominantly clinician centric. Critical gaps persist, including the absence of comparative multi-institutional evidence, limited examination of cultural diversity, minimal assessment of long-term sustainability, and insufficient integration of individual and organizational change theories. As a result, healthcare organizations lack a validated, context-appropriate framework that explains how structured change management practices contribute to measurable project success within multicultural healthcare environments.

This study addresses this gap by systematically examining the relationship between change management approaches and EHR implementation outcomes across diverse healthcare settings in the UAE. By generating empirical evidence and a comprehensive framework, the research aims to support healthcare leaders, IT departments, policymakers, clinicians, and patients in achieving more effective, sustainable, and culturally responsive digital transformation.

METHODOLOGY

Research Design

The study adopts a mixed-methods approach to comprehensively investigate the relationship between change management practices and the success of Electronic Health Record (EHR) modernization initiatives in the UAE.

1. **Quantitative Phase:** a structured survey administered to healthcare professionals, including clinical staff, IT personnel, and administrators, to statically assess the relationship between formal change management practices and EHR project outcomes. Standardized measurement tools used to evaluate variables such as perceived project success, employee engagement, and cultural alignment.

2. **Qualitative Phase:** Semi-structured interviews conducted with healthcare executives, project managers, and IT leaders. This phase aims to gain deeper, context-rich insights into the organizational and cultural dynamics that influence digital transformation efforts. Interview questions explore leadership behaviors, communication strategies, employee response to change and cultural challenges specific to the UAE's multicultural environment.

The use of a mixed methods design is ideal for healthcare IT research where both technological factors and human/organizational dimensions are critically interrelated (Venkatesh, Brown and Bala, 2013; Fetter, Curry and Creswell, 2013). Integrating both quantitative and qualitative findings will enable a more holistic understanding of EHR modernization efforts and ensure that statistical trends are interpreted within organizational and cultural context.

Ethical Considerations

This research paper adheres firmly to the Ethical research standards, such as:

- Obtain an Informed Consent from all the participants.
- Ensure anonymization as well as confidentiality of all collected data.
- Comply with local UAE research ethics regulations, including approvals from relevant healthcare authorities and institutional review boards.

Furthermore, to guide this research, a conceptual framework has been developed (figure 1). This framework illustrates how structured change management practices directly influence the success of Electronic Health Record (EHR) modernization efforts. Additionally, it highlights the critical moderating role of organizational culture and employee engagement, particularly within the unique multicultural healthcare environment of the United Arab Emirates.

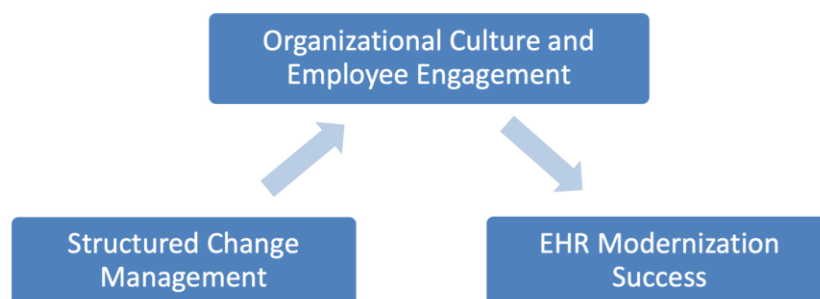


Figure 1: Conceptual Framework Linking Change Management and EHR Modernization Success

The UAE's healthcare sector, characterized by a highly diverse workforce and rapid digitalization, presents unique cultural and organizational challenges. Thus, understanding these moderating factors is essential for designing effective and sustainable EHR transformation strategies tailored to the UAE context (Alami, Gagnon and Fortin, 2020; Househ, 2019).

Data Collection

The data collection process involves two sequential phases corresponding to the mixed-methods design: quantitative surveys and qualitative interviews.

Quantitative Data Collection: a structured online survey distributed to health professionals across private and public hospitals in the UAE. The survey instrument utilizes validated measurement scales from prior healthcare IT studies, adapted to fit the UAE context (Venkatesh et al., 2011; Holden and Karsh, 2010). Items assessed are:

- Adaptation of structured change management practices.
- Perceived EHR project success.
- Levels of employee engagement.
- Perceptions of organizational culture.

Demographic information (e.g. role, years of experience, nationality) have been also collected to analyze subgroup differences.

Qualitative Data Collection: following the survey phase, a semi-structured interviews conducted with approximately 15 healthcare executives and IT managers. Participants were purposively sampled to ensure representation across different organizational sizes, regions and cultural backgrounds. Interview questions explore:

- Organizational responses to change management strategies.
- Cultural barriers and facilitators to EHR adoption.
- Leadership and communication practices during digital transformations.

All interviews were recorded (with consent), transcribed verbatim, and anonymized to ensure participant confidentiality. Additionally, ethical approval was obtained prior to data collection, in line with UAE research regulations and international standards for health informatics research (World Medical Association, 2013).

Data Analysis

The survey responses have been analyzed using statistical software (SPSS), and the following steps have been taken:

- Descriptive statistics where means, standard deviations, frequencies used to summarize participant characteristics and key variables.
- Reliability analysis to evaluate the internal consistency of measurement scales.
- Correlation and regression evaluation to test the relationship between structured change management practices and EHR project success.
- Moderation analysis using PROCESS macro to examine whether organizational culture and employee engagement moderate the relationship between change management practices and project outcomes (Hayes, 2017).

In the other hand, a thematic analysis has been used to identify recurring patterns and themes within the interview transcripts (Braun and Clarke, 2006). The steps included are:

- Familiarization with the data.
- Initial coding of transcripts.

- Searching for a refining themed.
- Cross-validating themes with a second coder to enhance credibility.

Additionally, a triangulation strategy was employed by comparing qualitative insights with quantitative findings to strengthen the overall validity and reliability of the results (Creswell and Plano Clark, 2018).

Conclusion and Expected Findings

Ultimately, this study proposes that structured management significantly contributes to the success of EHR modernization efforts. Expected findings include healthcare organizations that adopt formal change management frameworks will report higher project success rates. Moreover, organizational culture and employee engagement will emerge as critical mediators of this success, aligning with evidence that cultural readiness and frontline staff buy-in are key to sustainable health IT adoption (Kruse et al., 2016).

As illustrated in Figure 1, this study's conceptual framework emphasizes the direct influence of structured change management practices on the success of EHR modernization initiatives. Furthermore, it recognizes the moderating roles of organizational culture and employee engagement, which are particularly crucial within the UAE's multicultural healthcare environment. The UAE's unique workforce diversity with professionals from over 200 nationalities demands culturally sensitive change strategies (Al-Kaabi, 2022). This study thus positions these human factors not as peripheral, but as central to the success of failure of digital transformation.

These findings can offer UAE healthcare leaders actionable insights to design more effective and sustainable digital transformation strategies. Specifically, they highlight the need for inclusive communication, culturally aware leadership practices and continuous stakeholder engagement to support EHR modernization. By integrating structured change management with a deep understanding of local organizational dynamics, healthcare providers can promote not only project success but also long-term sustainability and patient centered care.

Lastly, this research provides a region-specific, farmwork for handling healthcare IT transformation within multicultural environment, an area previously underexplored in the global literature, this contribution is expected to bridge the gap, supporting the UAE's broker national vision such as the UAE Vision 2031, which emphasize innovation-driven healthcare excellence.

Implications of the study

- **Theoretical contributions:** the study integrates organizational (Kotter, Lewin) and behavioral (ADKAR) perspectives into a unified mutli-level framework for healthcare digital transformation. It contributes a contextualized model explaining technology adoption in multicultural institutional environments.
- **Practical contributions:** the findings provide actionable guidance for training design, stakeholder engagement planning, communication strategies, and leadership involvement during implementation. Furthermore, healthcare organizations can reduce resistance and improve system utilization through structures change management practices.

- **Policy contributions:** the study informs national digital health strategies by demonstrating that infrastructure investment alone is insufficient. Sustainable digital transformation requires embedding change management as a governance requirement within implementation standards and accreditation frameworks.

REFERENCES

- Abdulsalam, Y., AlHammadi, A. and AlHosani, M., 2021. Critical success factors for the implementation of electronic health records in UAE hospitals: A conceptual framework. *Health Policy and Technology*, 10(1), pp.100502.
- Al Kuwaiti, A., 2021. Healthcare Digital Transformation in the UAE: Challenges and Opportunities. *International Journal of Healthcare Management*, 14(2), pp.1-9.
- Alami, H., Gagnon, M.P. and Fortin, J.P., 2020. Digital health transformation: Are healthcare organizations ready for it? *International Journal of Health Policy and Management*, 9(3), pp.123–131.
- Aldosari, B., 2017. Rate of adoption of Electronic Health Records in Gulf Cooperation Council countries: A survey of selected hospitals in Saudi Arabia, UAE, and Qatar. *BMC Medical Informatics and Decision Making*, 17(1), p.160.
- Alhashmi, S. F., Salloum, S. A. and Abdallah, S. (2020) 'Critical success factors for implementing artificial intelligence (AI) projects in Dubai government United Arab Emirates (UAE) health sector: Applying the extended technology acceptance model (TAM)', *International Journal of Information Management*, 50, pp. 36-52.
- Alhashmi, S.F., Salloum, S.A. and Abdallah, S., 2020. Critical success factors for the adoption of eHealth systems in developing countries: A case study from the UAE. *Informatics in Medicine Unlocked*, 20, p.100378.
- Al-Kaabi, M., 2022. EHR implementation in the UAE: Challenges and strategies. Abu Dhabi: Abu Dhabi Health Authority.
- Al-Kaabi, R., Al-Debei, M.M. and Ashrafi, R., 2022. EHR systems in the UAE: Challenges and strategies for successful adoption. *Health Informatics Journal*, 28(2), p.14604582221083336.
- Alsulamy, W., 2019. Barriers to the successful implementation of electronic health records (EHRs) in hospitals in the Kingdom of Saudi Arabia and the United Arab Emirates (UAE). *Procedia Computer Science*, 164, pp.635-642.
- Al-Yateem, N., Rossiter, R., Ahmad, A., Yateem, S., Alshehhi, M. and Albloshi, S. (2017) 'Cultural and religious education in the nursing curriculum: A survey of nursing schools in the United Arab Emirates', *Nurse Education Today*, 49, pp. 60-65.
- Armenakis, A. A. and Bedeian, A. G. (1999) 'Organizational change: A review of theory and research in the 1990s', *Journal of Management*, 25(3), pp. 293-315.
- Armenakis, A., Harris, S. G. and Mossholder, K. W. (2007) 'Creating readiness for organizational change', *Human Resource Management*, 42(2), pp. 93-107.
- Bozak, M. G. (2003) 'Using Lewin's force field analysis in implementing a nursing information system', *Computers, Informatics, Nursing*, 21(2), pp. 80-85.
- Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp.77–101.

- Cresswell, K. M. and Sheikh, A. (2013) 'Organizational issues in the implementation and adoption of health information technology innovations: An interpretative review', *International Journal of Medical Informatics*, 82(5), pp. e73-e86.
- Creswell, J.W. and Plano Clark, V.L., 2018. *Designing and conducting mixed methods research*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- El Mahalli, A., 2015. Adoption and barriers to adoption of Electronic Health Records by physicians: a Gulf Cooperation Council perspective. *International Journal of Health Sciences*, 9(2), pp. 159-165.
- Fetters, M.D., Curry, L.A. and Creswell, J.W., 2013. Achieving integration in mixed methods designs—principles and practices. *Health Services Research*, 48(6pt2), pp.2134–2156.
- Hassanein, S., Al-Emran, M. and Arpaci, I., 2022. The role of security concerns and trust in the adoption of EHRs: A survey study in the Middle East. *Telematics and Informatics*, 65, p.101731.
- Hayes, A.F., 2017. *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. 2nd ed. New York: Guilford Press.
- Hiatt, J. (2006) *ADKAR: A Model for Change in Business, Government and our Community*. Loveland, CO: Prosci Research.
- Hiatt, J., 2006. *ADKAR: A model for change in business, government and our community*. Loveland, CO: Prosci Research.
- Holden, R.J. and Karsh, B.T., 2010. The technology acceptance model: Its past and its future in health care. *Journal of Biomedical Informatics*, 43(1), pp.159–172.
- Househ, M., 2019. The role of health informatics in the fight against COVID-19 in the Gulf Cooperation Council countries. *Journal of Infection and Public Health*, 12(6), pp.733–736.
- Ibrahim, M. and Hassan, R., 2021. Impact of Electronic Health Records on clinical workflow: Evidence from UAE public hospitals. *International Journal of Medical Informatics*, 156, p.104610.
- Kotter, J. P. (1995) 'Leading change: Why transformation efforts fail', *Harvard Business Review*, 73(2), pp. 59-67.
- Kotter, J.P., 1996. *Leading change*. Boston, MA: Harvard Business Review Press.
- Kotter, J.P., 1996. *Leading Change*. Boston: Harvard Business School Press.
- Kruse, C.S., Mileski, M., Vijaykumar, A.G., Viswanathan, S.V., Suskandla, U. and Chidambaram, Y., 2016. Impact of electronic health records on long-term care facilities: Systematic review. *JMIR Medical Informatics*, 4(3), p.e35.
- Mahmoud, M.A., Ahmad, M. and Mohamed, S., 2019. Challenges to the adoption of electronic medical records systems in UAE healthcare facilities. *Journal of Infection and Public Health*, 12(5), pp.738-739.

- McAlearney, A. S., Robbins, J., Hirsch, A., Jorina, M. and Harrop, J. P. (2010) 'Perceived efficiency impacts following electronic health record implementation: An exploratory study of an urban community health center network', *International Journal of Medical Informatics*, 79(12), pp. 807-816.
- Miles, M. B., Huberman, A. M. and Saldaña, J. (2014) *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Ministry of Health and Prevention UAE (2022) *National Digital Health Strategy 2022-2026*. Available at: <https://mohap.gov.ae/> (Accessed: 20 April 2025).
- Raghupathi, W. and Raghupathi, V. (2014) 'Big data analytics in healthcare: promise and potential', *Health Information Science and Systems*, 2(1), pp. 1-10.
- UAE Government Portal, 2023. *We the UAE 2031: The National Strategy*. [online] Available at: <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies/we-the-uae-2031> [Accessed 25 April 2025].
- Venkatesh, V., Brown, S. A. and Bala, H. (2013) 'Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems', *MIS Quarterly*, 37(1), pp. 21-54.
- Venkatesh, V., Thong, J.Y.L. and Xu, X., 2011. Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 35(1), pp.157–178.
- World Health Organization, 2022. *Global strategy on digital health 2020-2025*. Geneva: World Health Organization.
- World Medical Association, 2013. *World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects*. *JAMA*, 310(20), pp.2191–2194.