

From Pen to Keyboard: A Qualitative Case Study on Nurses' Experiences of Electronic Medical Record (EMR) Transition in a Long-Term Care Facility in the United Arab Emirates

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Abstracts

Introduction: This qualitative case study explored how nurses in a long-term care facility in the United Arab Emirates experienced the transition from paper-based documentation to an Electronic Medical Record system. As healthcare organizations increasingly adopt digital solutions, understanding nurses' adaptation to technological change is essential for supporting effective documentation, communication, and patient care. **Objective:** The study aimed to describe nurses' transition experiences, including perceived challenges, coping strategies, and the impact of the new system on their daily practice. **Methods:** Twenty-eight nurses participated in the study. Participants were first recruited through purposive sampling, and theoretical sampling was then used to include clinical nurse leads, a nurse informatics coordinator, and a director of clinical operations once initial themes emerged. Data were collected through semi-structured interviews and analyzed using conceptual and relational content analysis. Secondary institutional data, including system reports and audit findings, were integrated to provide additional contextual understanding. **Results:** Six themes captured the transition process, beginning with uncertainty and early system difficulties, followed by the development of coping strategies, changes in communication patterns, and recognition of improved documentation accuracy and long-term value. The integration of secondary data supported these themes, showing gradual improvements in system use and documentation quality over time. **Conclusion:** The study concludes that electronic medical record implementation in long-term care settings requires attention to technical readiness, emotional responses, and the social dynamics of change. Supportive training, leadership engagement, and continuous feedback processes are essential for achieving a smooth and sustainable transition.

Keywords:

Electronic Health Records, Long-Term Care, Nurses, Nursing Informatics, Technology



INTRODUCTION

The transition from paper-based documentation to Electronic Medical Record (EMR) systems represents a major shift in healthcare delivery. These systems are intended to enhance documentation accuracy, communication, and continuity of care, yet their adoption often brings complexity to clinical workflows. Research continues to show that EMR adoption affects not only the technical aspects of documentation but also the communication patterns, workload distribution, and emotional responses of nurses who serve as primary end-users. Although EMR systems are expected to strengthen information exchange, many studies report that communication gaps can emerge during early implementation, often due to unfamiliarity with digital interfaces, documentation burden, and changes in interprofessional workflow.

Recent literature emphasizes that successful EMR integration depends on human readiness as much as technological capability. Globally, EMR adoption has been recognized for its potential to streamline documentation, improve access to information, and support continuity of care. Yet, literature shows that technical features alone do not ensure successful implementation. Human factors such as training, support, engagement, and user experience are critical for long-term integration of EMR systems into everyday nursing practice (Alrasheeday et al., 2023; Köse et al., 2023). Perceived usefulness, interface quality, information accuracy, and training adequacy continue to influence nurses' acceptance of digital documentation systems (Spatar et al., 2019). Work engagement also plays an important role, as active involvement and social support have been shown to strengthen healthcare workers' intention to use EMR systems (Faida et al., 2023). These findings demonstrate that the transition to digital documentation remains a significant organizational change that directly affects communication, coordination, and workflow.

In the Middle Eastern and Southeast Asian contexts, healthcare systems have faced varying challenges in adopting EMRs. While many institutions have invested in technology, barriers such as inadequate infrastructure, low digital literacy, and inconsistent organizational support have slowed uptake (Alhur, 2023; Faida et al., 2023). In the United Arab Emirates, the push toward digital healthcare is in line with national strategic goals, but frontline adaptation, especially in long-term care, requires further exploration. Despite these developments, there is limited qualitative research exploring how nurses in UAE long-term care facilities experience EMR transition and how communication processes are shaped during this period of change.

Long-term care facilities present a distinct challenge for EMR implementation. Compared to acute settings, long-term care involves multidisciplinary collaboration, chronic patient management, and comprehensive documentation protocols. Nurses in these environments are expected to manage not only medical records but also psychosocial documentation, individualized care plans, and interdisciplinary coordination, all of which are impacted by EMR design and rollout.

The long-term care facility where this study was conducted transitioned to an EMR system in September 2023. Although the transition aimed to enhance documentation quality, streamline communication, and support data-driven care, nurses encountered system unfamiliarity, increased documentation time, workflow disruptions, and emotional strain. The researcher, who served as part of the project implementation team, observed how nurses navigated this transition both professionally and personally. These observations revealed a need to explore how nurses made sense of the change, how communication patterns evolved, and what support was required to manage the transition effectively.

The literature suggests that EMR implementation is often experienced as a form of organizational change. Lewin's Change Model provides a theoretical lens to understand the stages of unfreezing, change, and refreezing that staff may undergo (Lewin, 1947). This framework aligns with observed reactions, from initial resistance to eventual adaptation, and supports the need to capture these dynamics qualitatively.

Given the limited empirical literature in the United Arab Emirates and the persistent communication and documentation challenges reported in global research, a focused qualitative inquiry is needed to understand how nurses experience EMR transition in long-term care.

The purpose of this study is to explore how staff nurses describe their transition experiences during the adoption of an electronic medical record system in a long-term care facility in Abu Dhabi. The central research question guiding this inquiry is: How do staff nurses describe their transition experiences when shifting from paper-based documentation to an electronic medical record system?

METHODS

1. Design

This study adopted a qualitative case study design to examine nurses' experiences during the transition from paper-based documentation to an EMR system in a long-term care facility in Abu Dhabi

UAE. The facility is a village-style long-term care center composed of four zones, each containing several small residential units that house four to six patients. It serves a diverse population of individuals requiring prolonged rehabilitation, chronic care management, and complex nursing support. The ongoing EMR implementation at this facility provided a relevant and meaningful context for exploring how nurses navigated the transition within a multidisciplinary, culturally diverse, and team-oriented environment.

The case study format allowed for an in-depth exploration of how staff nurses interpreted and negotiated this organizational change. To enrich and triangulate the findings, the qualitative inquiry was supported by limited quantitative secondary data, such as audit reports and system usage logs, which provided institutional context without shifting the study's primary focus.

The research was conducted within a constructivist paradigm. From this perspective, meaning is co-constructed through social interaction and situated experience; therefore, exploring nurses' narratives was the most appropriate means of understanding how the EMR transition affected communication, workflow, and professional practice. Stake's interpretive case study approach framed the investigation, emphasizing detailed description of the particular case and attention to multiple stakeholder perspectives within the facility.

Reflexivity was practiced throughout the study to account for the investigator's positionality. The primary investigator was part of the facility's EMR implementation team, which offered insider knowledge of the rollout but also risked introducing bias. To mitigate this, the researcher maintained reflexive journals and engaged in regular reviews of coding decisions to ensure interpretations remained grounded in participants' accounts. Member checking with all participants further supported credibility.

Taken together, the constructivist case study design, guided by Stake and complemented by institutional metrics, provided a coherent framework for understanding both the lived experiences of nurses and the organizational patterns that accompanied the EMR transition.

2. Sample Size and Sampling Technique

The study included registered nurses employed at a long-term care facility in Abu Dhabi, United Arab Emirates. A total of twenty-eight participants were recruited through purposive and theoretical sampling. Purposive sampling was used initially to identify twenty-two staff nurses who had directly experienced the transition from paper-based documentation to the electronic medical record system. This approach ensured that participants possessed firsthand knowledge relevant to the study's aim.

As preliminary analysis progressed and early thematic patterns emerged, theoretical sampling was used to select participants who could provide additional depth and perspective. This included four

Clinical Nurse Leads, one Nurse Informatics Coordinator, and one Director of Clinical Operations. Their roles contributed valuable insight into leadership expectations, training processes, and broader organizational dynamics that shaped the transition. Sampling continued until data saturation was reached, which was observed when subsequent interviews no longer introduced new themes or variations in the developing categories.

Inclusion criteria were: (1) registered nurses employed at the facility during the implementation period, (2) direct involvement with electronic documentation as part of their clinical duties, and (3) willingness to participate in a face-to-face interview. Nurses hired after the transition or those who were not engaged in patient documentation were excluded from the study.

Data collection took place at a private long-term care facility in Abu Dhabi from September 2023 to May 2024, covering the implementation phase and the period immediately after system integration.

3. Instruments

Data were collected using a semi-structured interview guide developed specifically for this study. The guide was informed by a review of existing literature on EMR transition, the study objectives, and the context of long-term care practice. It consisted of open-ended questions designed to explore nurses' initial reactions to the transition, challenges encountered, strategies for adaptation, changes in communication, and perceptions of long-term impacts. Key prompts invited participants to describe specific experiences, such as challenges during the early stages of implementation, communication adjustments made while learning the system, and situations that reflected personal or professional adaptation. Sample questions included: "Can you share specific challenges you faced during the transition to EMR, including both professional and personal impacts?" and "Could you narrate a specific incident or scenario that captures your experience with EMR adoption?"

The interview guide underwent content validation through review by three senior members from the facility. These individuals held leadership roles in nursing, informatics, and clinical operations, which positioned them to evaluate the relevance and clarity of the questions within the organizational context. Their feedback led to minor adjustments in question sequencing and wording to improve clarity and flow. Prior to formal data collection, the guide was pilot tested with two nurses who were not included in the final sample. The pilot confirmed that the questions were understandable and appropriately structured, and no substantial modifications were required afterward. The guide remained consistent throughout the study, and no new questions were added during data collection.

Interviews were conducted face to face, audio recorded with participant consent, and supported by field notes that captured nonverbal cues and

contextual observations. Secondary institutional documents, including Medical Chart Review reports, information technology help desk ticket summaries from the transition period, and incident reports related to documentation, were examined to support triangulation and enhance contextual understanding. These documents were not used as primary instruments but provided supplementary insight into the transition process.

4. Data Collection Process

Data collection took place from September 2023 to May 2024 during and shortly after the implementation of the EMR system in the study facility. In-depth, face-to-face interviews were conducted in private meeting rooms within the long-term care facility to ensure comfort and confidentiality. Each interview lasted approximately 30 to 60 minutes. All twenty-eight participants completed one interview each, representing nurses across various roles and levels of experience. All interviews were facilitated by the principal investigator, who was also part of the facility's EMR implementation team. This role was disclosed at the outset of each interview, and the investigator maintained a neutral stance by following the interview guide closely and using reflective notes to monitor potential bias.

Interviews followed a semi-structured format that allowed participants to narrate their experiences while giving room for further probing when new insights emerged. All sessions were conducted in English, which is the primary language used in the facility. With participant permission, interviews were audio recorded using a mobile phone recorder. Recordings were transcribed verbatim by the researcher and anonymized before analysis to protect privacy. Field notes were taken during and immediately after each interview to capture nonverbal expressions, contextual cues, and the researcher's reflections on the interaction.

Data collection and analysis occurred concurrently. As early themes emerged, the interview approach became more focused on clarifying and exploring developing patterns, although no changes were made to the core interview questions. This iterative process supported depth and allowed the incorporation of theoretical sampling later in the study.

In addition to interviews, secondary institutional data were gathered to enrich contextual understanding and support triangulation. These included Medical Chart Audit summaries, IT Help Desk ticket logs from the transition period, incident reports related to EMR documentation, and Patient Satisfaction survey results. All documents were provided with institutional permission, de-identified, and reviewed for patterns relevant to EMR usage, documentation quality, and workflow adaptation.

5. Data Analysis

Data analysis began alongside data collection, following an iterative approach that allowed early insights to guide subsequent interviews and

supported the use of theoretical sampling. All interviews were audio recorded with participant consent, transcribed verbatim by the researcher, and anonymized by replacing names with participant codes. Transcripts, field notes, and secondary documents were stored in password-protected files accessible only to the researcher. Data integrity was maintained through repeated transcript-audio comparisons and documentation of coding decisions in an audit trail.

Qualitative analysis drew on conceptual and relational content analysis within a constructivist orientation and was guided by Stake's (1995) interpretive case study approach. The analytic process began with repeated readings of each transcript to achieve immersion and develop familiarity with the narrative flow. Initial codes were generated manually by identifying key concepts, recurring phrases, and meaningful segments of text that reflected participants' experiences of the EMR transition. Coding was inductive but informed by sensitizing concepts from Lewin's Change Model (Lewin, 1947), which provided a lens for understanding transition-related behaviors and responses.

Coded segments were then organized into conceptual categories that captured broader patterns across participants. Relational content analysis was used to examine how categories connected to one another, which allowed exploration of the interplay between perceived challenges, adaptation strategies, communication changes, and long-term impacts. Themes were refined through constant comparison across transcripts and key informant interviews, ensuring coherence within themes and distinction between them. This process aligns with recommended qualitative analytic procedures for deriving patterned meanings from participant narratives.

Trustworthiness was supported through several strategies. The researcher maintained an audit trail documenting coding decisions, reflections, and analytic memos throughout the study. Member checking was conducted with all participants to verify the accuracy and resonance of preliminary interpretations. Triangulation was achieved by comparing interview data with observations recorded in field notes and with secondary institutional documents, including Medical Chart Audit summaries, IT ticket logs, incident reports, and patient satisfaction data. Saturation was reached when no new concepts or relationships emerged during the final interviews.

Quantitative secondary data were analyzed descriptively to contextualize and enrich the qualitative findings. These sources included Medical Chart Audit results, Incident reports, and trends in IT support requests during the transition period. Numerical summaries such as frequencies and percentages were used to illustrate patterns in documentation completeness, system issues, and user support needs. These data were not used for statistical inference but served to triangulate and

reinforce insights generated from the qualitative analysis.

6. Research Ethics

Ethical approval for this study was obtained from the SBLC Ethics Review Board prior to data collection (ERB-2024-135). All participants received written and verbal information about the purpose and procedures of the study, the voluntary nature of their participation, and their right to withdraw at any time without consequence. Written informed consent was obtained from each participant before the interview began. The researcher’s dual role as a member of the EMR implementation team was disclosed during recruitment and again at the start of each interview to ensure transparency.

Confidentiality was maintained by assigning codes to all participants and removing identifying details from transcripts and written materials. Audio recordings and transcripts were stored in password-protected files accessible only to the researcher. Secondary institutional documents were provided in de-identified form with organizational permission. All procedures adhered to institutional policies and relevant data protection regulations.

RESULTS

Participant Characteristics

Twenty-eight nurses participated in the study, including twenty-two staff nurses, four Clinical Nurse Leads, one Nurse Informatics Coordinator, and one Director of Clinical Operations. Participants represented a range of professional backgrounds, years of nursing experience, and lengths of employment at the long-term care facility. All had experience using paper-based documentation before the transition and were active users of the EMR system during data collection.

Qualitative Findings

Through conceptual and relational content analysis of interview transcripts, six major themes were identified. These themes represent a progression from early emotional responses to adaptation and long-term reflections on the system’s impact. These themes are supported by direct quotes from participants and corroborated with trends in secondary data.

Table 1. Summary of Themes and Descriptions

Theme	Description	Overview
1. Initial Experiences	Describes the emotional and cognitive reactions nurses experienced as the EMR system was introduced, including optimism, anxiety, confusion, and uncertainty.	Participants described mixed feelings during the rollout. While a few welcomed the change, many felt overwhelmed by the technical demands and the disruption to familiar routines.
2. Challenges and EMR Issues	Captures technical, procedural, and workflow difficulties encountered during the transition, including system glitches, slow connectivity, documentation errors, and unfamiliar interfaces.	Nurses consistently reported system limitations and navigation problems that affected efficiency and accuracy.
3. Adaptation and Coping Strategies	Reflects the practical and emotional strategies nurses used to cope with the transition, including peer support, self-learning, and use of personal checklists.	Participants described gradually gaining confidence as they developed workarounds and supported one another.
4. Impacts of EMR	Encompasses perceived changes in workflow, time allocation, patient interaction, and documentation efficiency as nurses adapted to the system.	Participants noted both positive and negative effects as their practice evolved.
5. Interaction with Colleagues	Describes how the transition influenced communication and teamwork, including increased reliance on documentation, peer mentoring, and changes in bedside engagement.	Participants noted the effects on bedside communication and shift handovers
6. Perceived Long-Term Benefits and Future of EMR	Captures nurses’ reflections on the lasting value of the system, including improved continuity, legal protection, and hopes for future enhancements.	Participants recognize the improvements in data access, care continuity, and perceived legal coverage

Theme 1: Initial Experiences

The initial experiences of staff nurses with the EMR system were marked by significant difficulties, emotional reactions, and concerns about time consumption. While some expressed optimism, many reported apprehension, uncertainty, and a sense of being overwhelmed. The change disrupted familiar workflows and created anxiety around documentation accuracy and time pressures.

"Nervous but mostly excited." (Nurse 01)

"Really happy and hopeful... fewer handwriting helps reduce the stress." (Nurse 02)

"I juggle between patient care and pending documentation." (Nurse 12)

"Initially, nurses had to spend more time in the system, but it gradually improved" (CNL 03)

These experiences set the stage for their overall adaptation process and influenced their subsequent attitudes toward the system.

Theme 2: Challenges and EMR Issues

Several challenges and issues were identified during the transition to the EMR system. This includes system issues and network connectivity, documentation errors, technical issues, and system restrictions that affect the smooth implementation and usage of EMR. Many participants noted that system downtime and navigation complexity contributed to frustration and documentation backlogs.

"There are system errors and slow internet connections which cause delays" (CNL 04)

"System restrictions are a hassle sometimes." (Nurse 19)

"The system is not user-friendly." (Nurse 15)

The transition to EMR was fraught with several challenges. This indicates that these were pervasive problems that significantly impacted the staff nurses' ability to use the EMR system effectively.

Theme 3: Adaptation and Coping Strategies

Despite early difficulties, participants developed various strategies to adapt. Peer support, informal mentoring, and self-directed learning were key mechanisms of resilience. Several nurses began to appreciate the benefits of standardized documentation over time, especially when supported by clear protocols.

"I made a handy list with me, to organize my tasks." (Nurse 04)

"There were some difficulties in the beginning, especially when it was first introduced, but later on, it got better" (CNL 01)

"EMR somehow helped me become proficient with computer use." (Nurse 02)

Theme 4: Impacts of EMR

Participants noted significant changes in workflow, time allocation, and documentation habits. While some reported initial inefficiencies, others saw improved legibility and better integration of clinical information. However, the digital system sometimes

interrupted patient-facing time and reduced flexibility in individualized care.

"EMR helped streamline a lot of workflows." (Nurse 13)

"Data is easy to track now." (Nurse 16)

"I believe EMR improves efficiency and increases the effectiveness of healthcare" (DCO)

"At first, I felt like I was prioritizing EMR over patients." (Nurse 05)

"I tend to concentrate on EMR more, causing less time for patient" (Nurse 04)

Theme 5: Interaction with Colleagues

Nurses observed a shift in how they interacted with both patients and colleagues. The presence of screens in clinical encounters sometimes affected communication quality, while collaboration with colleagues became more reliant on documentation rather than verbal handoffs.

"My fellow nurses help me out" (Nurse 04)

"Communication between team members got better." (Nurse 19)

"Challenges and fears are spoken about, and the super users have provided great support to make the staff feel comfortable" (DCO)

Theme 6: Perceived Long-Term Benefits and Future of EMR

Despite early resistance, many participants recognized the system's long-term potential for improving continuity of care, data access, and legal protection. There was consensus that with ongoing training and interface improvements, the system could evolve into a valuable clinical tool.

"In general, EMR is good. With the right routine or system, it is very advantageous" (CNL 02)

"Looking forward to a more enhanced format of EMR." (Nurse 03)

"Addition of features such as medical dictation to further decrease the time spent on documentation" (DCO)

Relational Content Analysis

Relational analysis revealed that these themes were interconnected and unfolded as a trajectory of change rather than isolated experiences. Initial Experiences of confusion and resistance shaped the nature of subsequent Challenges, such as technical frustrations and documentation backlogs. These difficulties, in turn, stimulated the development of Adaptation and Coping Strategies, which not only alleviated barriers but also strengthened Interaction with Colleagues through teamwork and shared problem-solving. As coping strategies matured, they reshaped both Clinical Practice and perceptions of workflow efficiency, gradually reinforcing Perceived Long-Term Benefits. This iterative process highlights how emotional, technical, and organizational dimensions of the transition were relational and mutually reinforcing, ultimately transforming an

initially disruptive process into one viewed as valuable and sustainable.

Key Relationships and Interpretations

Based on the concepts identified in the conceptual content analysis, the following key relationships were explored:

- Initial Experiences ↔ Challenges and EMR Issues

- Initial Experiences ↔ Adaptation and Coping Strategies
- Challenges and EMR Issues ↔ Impacts of EMR
- Adaptation and Coping Strategies ↔ Interaction with Colleagues
- Adaptation and Coping Strategies ↔ Perceived Long-term Benefits and Future of EMR

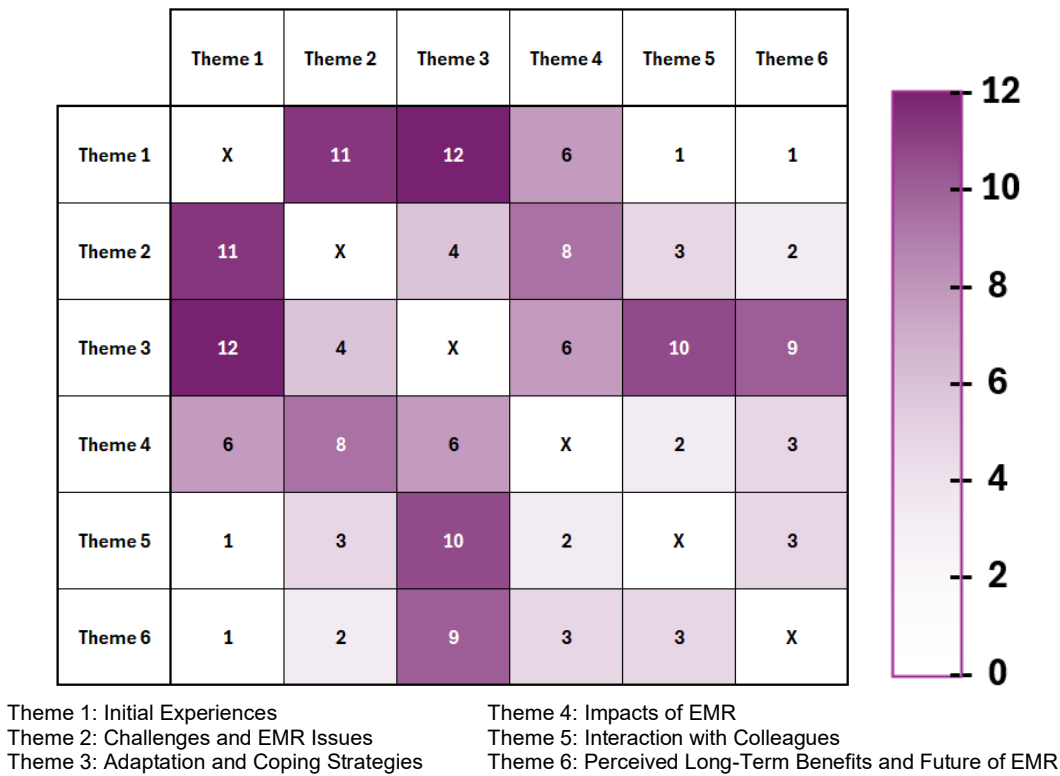


Figure 1. Co-Occurrence Heatmap of Concepts

Integration of Quantitative Findings

Quantitative data from internal system records supported and contextualized the qualitative themes. A spike in IT service desk tickets was recorded during the initial rollout phase, aligning with participants' reports of technical frustrations. Incident reports reflected a temporary increase in documentation-related errors, especially in the first two months. Document audits showed reduced completeness scores in assessment and monitoring modules during the transition period, followed by gradual improvement. Patient satisfaction survey results remained generally stable, though several comments noted nurses appearing "preoccupied with screens" during interactions. These findings complemented the qualitative insights by illustrating institutional-level patterns linked to the transition experience.

- IT Service Desk Tickets (n=198, June 2023–May 2024): Nursing raised 52% of tickets, peaking during rollout. Most issues involved software errors, login problems, and system downtime, aligning with nurses' reports of frustration.
- Incident Reports (n=65, Jan 2023–May 2024): There are 65 EMR-related Incident Reports, with

nursing accounting for nearly half. Most common were incomplete documentation (38.7%) and incorrect feeding regimes (25.8%), reflecting early learning challenges.

- Audit Reports (2022–2024): Conformity scores showed an initial decline but gradual recovery: September 2023 (70.5%), February 2024 (79.4%). This mirrored nurses' accounts of gaining proficiency.
- Patient Satisfaction Surveys (Press Ganey®, 2023–2024): Scores dipped in Q4 2023 (Communication 62.59; Ease of Access 56.69) but recovered in Q1 2024 (Communication 70.39; Empathy 69.5). This trend aligned with nurses' descriptions of initial distractions followed by improved engagement.
- Medical Chart Reviews (Sept 2023–May 2024): Compliance varied: strong in Skin Braden (92.7%), weaker in Morse Fall Risk (49.8%), and very low in Height/Weight (20.8%). This uneven compliance reflected differing ease of adaptation across modules.

Taken together, the qualitative and quantitative findings reveal a dynamic trajectory: nurses initially experienced confusion, anxiety, and technical

frustrations, mirrored by high IT tickets, incident reports, and low audit conformity. Over time, adaptation strategies and peer collaboration facilitated improved workflow and teamwork, while institutional data showed rising audit scores and patient satisfaction. Ultimately, the EMR transition was perceived not merely as a technical change but as a relational process in which challenges, coping strategies, and teamwork collectively shaped acceptance and recognition of long-term benefits.

DISCUSSION

The findings illustrate that the transition from paper-based documentation to EMR system represented a multifaceted process for nurses, marked by emotional adjustment, practical reorientation, and evolving patterns of communication. By interpreting these findings through established change theory and contemporary communication frameworks, the study offers a deeper understanding of how nurses experienced and made sense of digital transformation in a long-term care setting.

Interpretation of Findings in Relation to Theory Lewin's Change Model and the Trajectory of Transition

Lewin's three-stage model provides a useful lens for interpreting the progression of participant experiences. During the unfreezing stage, nurses described uncertainty, apprehension, and emotional disruption as they confronted the need to relinquish familiar paper-based routines. High volume of IT tickets during the transition period indicates the nurses' reliance on technical assistance to navigate the new system, highlighting the initial phase of unfreezing where existing processes and habits were disrupted. These findings align with Abbasi et al. (2023), who identified technical readiness as a crucial factor affecting EHR implementation. Similar technical challenges were noted by Mardi (2022), emphasizing the importance of robust technical infrastructure and support. Despite pre-implementation training, many felt unprepared, reflecting Lewin's premise that destabilizing established behaviors often generates resistance and discomfort.

The change stage was characterized by experimentation, trial-and-error learning, and collaborative problem-solving. Nurses created personal strategies such as checklists, engaged in peer mentoring, and relied increasingly on collective learning, compensating for gaps in formal instruction. These adaptive behaviors support findings by (Jedwab et al., 2022), who noted that informal peer support often bridges the divide between training environments and real-world use of digital systems. Continuous training and support were crucial during the change period. The study findings revealed that

as staff received more training and became more familiar with the EMR system, their comfort and proficiency improved. It agrees to what Lyles et al. (2023) highlighted in their study which is the importance of adapting technology to local contexts and providing in-depth training to facilitate successful EMR adoption. Similarly, Osajiuba et al. (2021) emphasized the role of education, training, and environmental restructuring in improving EMR adoption among intensive care nurses.

In the refreezing stage, participants described improved confidence, normalized workflows, and greater efficiency. Institutional data reinforced these perceptions, indicating stabilization of both individual behaviors and system-level outcomes. Together, these findings show the EMR transition as an iterative and eventually integrative process rather than a simple technical deployment. To maintain the gains achieved during the change phase, sustained support and iterative improvements are essential. Harbi (2021) highlighted the importance of strong governance, stakeholder engagement, and public-private partnerships for sustaining EMR implementation. Continuous training programs, regular audits, and feedback mechanisms ensure that staff remain proficient and that any emerging issues are promptly addressed.

Communication Accommodation Theory (CAT)

Discussed in recent health communication literature (Soliz et al., 2021), posits that individuals adjust their communication behaviors in response to relational and contextual demands. Participants in this study demonstrated such accommodation: they converged by coordinating more through documentation-based handovers and peer collaboration, while divergence was evident when screen-focused tasks reduced bedside dialogue. These shifts illustrate how technology-mediated work requires adaptive communication strategies that align with new clinical routines.

CAT helps explain the relational and communicative adjustments that shaped several themes identified in this study, particularly those involving collaboration, interaction patterns, and perceptions of workflow efficiency.

Contribution to Knowledge

This study contributes new knowledge to the growing literature on EMR transitions in long-term care, a context often underrepresented in digital health studies. Most prior research has focused on acute care or outpatient settings, where workflows, staffing patterns, and documentation requirements differ significantly. By focusing on long-term care, this study offers unique insights into the realities of transitioning within a setting characterized by multidisciplinary documentation, chronic condition management, and psychosocial care demands.

Moreover, the study integrates qualitative insights with quantitative institutional data, something rarely done in EMR adoption research. This

triangulation provides a more holistic understanding of how perceived user experiences correspond to system-level changes. For instance, a nurse's narrative about reduced charting time aligns with improved audit findings, while reported delays in support correlate with early spikes in IT tickets.

This synthesis also emphasizes the importance of tailoring EMR implementation strategies to the local clinical culture. As Faida et al. (2023) and Alrasheeday et al. (2023) point out, behavioral intention to use EMRs is shaped not only by usability and training but also by engagement, leadership visibility, and feedback mechanisms. This study affirms those findings while highlighting how they manifest in the long-term care context.

Limitations

The study has several limitations that should be considered when interpreting the findings. Conducted in a single long-term care facility, the results may not be fully transferable to other clinical settings with different organizational structures or digital infrastructures. Although the sample included 28 participants from various nursing roles, all participants were from one organization, which may limit broader generalizability.

Data were collected through retrospective self-reporting, which introduces the potential for recall bias or socially desirable responses. The use of secondary institutional data improved triangulation, but these metrics did not capture all relevant outcomes such as documentation time, staff retention, or long-term clinical indicators.

Additionally, the researcher's dual role as a member of the EMR implementation team presents a risk of interpretive bias. Reflexive practices, member checking, and an audit trail were used to enhance credibility, yet some degree of influence cannot be entirely ruled out. These limitations highlight the need for continued reflexivity and transparency when conducting research within one's own organization.

Implications for Practice, Management, and Policy

The study underscores that EMR implementation must be understood as both a technical and human process. Several practical implications emerge:

Clinical Practice

Peer mentoring and collaborative learning should be intentionally integrated into EMR rollouts, as these informal supports were instrumental in facilitating adaptation. Digital literacy assessments can help tailor training to staff needs before implementation begins.

Nursing Management

Leaders must remain visible, responsive, and supportive throughout the transition, as leadership engagement strongly shaped nurses' attitudes and sense of readiness. As literature suggests, visible, responsive leadership can significantly influence how staff interpret and respond to organizational change

(Jedwab et al., 2021). Structured communication pathways are needed to prevent early declines in bedside engagement and ensure that screen-based tasks do not inhibit patient-centered communication.

Organizational and Policy Implications

EMR systems should be customized to reflect long-term care documentation workflows, which differ from those in acute care. Structured audits, phased rollouts, and continuous feedback loops can help identify and address emerging challenges.

Policies should consider how digital tools affect communication and teamwork, ensuring that technology enhances rather than displaces therapeutic and interprofessional interactions.

Future Research

Longitudinal studies could examine the sustained effects of EMR adoption on clinical outcomes, staff retention, and workload distribution. Comparative case studies across institutions and cultural contexts would help identify universal versus context-specific determinants of successful digital transitions. Further research into communication dynamics during digital documentation could illuminate how EMR systems reshape relational work in clinical practice.

CONCLUSION

This study aimed to explore the experiences of staff nurses during the transition from paper-based documentation to an Electronic Medical Records (EMR) system in a long-term care facility in Abu Dhabi, United Arab Emirates. By combining in-depth interviews with secondary institutional data, the research uncovered both the emotional and operational dimensions of this transition. Nurses initially experienced resistance and confusion but gradually developed adaptation strategies through self-learning, peer support, and workplace collaboration. Over time, they reported increased confidence and recognition of EMR's benefits for documentation efficiency and patient safety.

Framed within Lewin's Change Model, the findings highlight a complete transformation cycle—beginning with unfreezing entrenched habits, navigating the uncertainties of change, and culminating in the refreezing of new practices. The study also triangulated institutional indicators that showed tangible improvements in documentation conformity, reduced incidents, and higher patient satisfaction.

These insights contribute to the growing field of nursing informatics and digital health, particularly within long-term care settings in non-Western contexts. By centering nurses' lived experiences, the study underscores the importance of ongoing support, tailored training, leadership responsiveness, and emotional readiness in any EMR implementation strategy. The findings offer both theoretical and

practical implications for improving healthcare quality and safety in digitally evolving environments.

Conflict of Interest

The author declares no conflict of interest in the conduct and reporting of this research. The study was undertaken independently, and no external affiliations influenced its design, implementation, or findings.

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