
Registration Officers' Perception Towards The Implementation Of The Electronic Medical Record System At RSAD TK.II Udayana, Denpasar City

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Abstract

The implementation of electronic medical records in all health care facilities is required to implement an electronic-based medical record system, as regulated in the Minister of Health Regulation Number 24 of 2022 concerning Medical Records. The purpose of this study was to determine the perceptions of registration officers regarding the implementation of the electronic medical record system at RSAD Level II Udayana, Denpasar City. This study used a qualitative approach with an in-depth interview method based on the Technology Acceptance Model (TAM) theory, which includes perceptions of ease of use, perceptions of benefits, attitudes toward use, and intentions to use the electronic medical record system. The results showed that the electronic medical record system was considered relatively easy to use after going through the adaptation and training process, and provided benefits in the form of increased work efficiency. Officers' attitudes toward using the system tended to be positive because they felt comfortable and helped in their work, and their intention to continue using the system was also high, driven by policies and developments in digital technology, despite technical obstacles such as internet network disruptions. From this study, it can be concluded that the acceptance of the electronic medical record system is influenced by a combination of ease of use, perceived benefits, and organizational and infrastructure support. Therefore, system quality improvement and ongoing training are needed to optimize implementation.

Keywords: *Electronic Medical Records, Technology Acceptance Model (TAM), Perception of Registration Officers*

INTRODUCTION

Hospitals play a strategic role in improving public health through comprehensive services. With the rapid development of information technology, the healthcare sector is undergoing a digital transformation. One key innovation is the implementation of Electronic Medical Records (EMR), which transforms manual, paper-based record-keeping into a digital system. Based on Minister of Health Regulation Number 24 of 2022, every healthcare facility is required to implement and store electronic medical records to improve service quality, expedite administration, and strengthen inter-unit coordination.

Before the implementation of RME, patient data was stored in physical files in archive folders. This conventional system was inefficient, requiring extensive storage space and requiring lengthy document retrieval times. Through the computerization of RME, patient data management and processing has become much faster, more accurate, and more efficient.

However, the success of EMR relies not only on technological sophistication but also on user acceptance, particularly among registration staff and medical records professionals. Registration staff are the frontline personnel inputting and validating patient data. Positive perceptions from staff will encourage system optimization, while negative perceptions can be a barrier. Staff expectations generally include ease of use, speed of access, system reliability, and adequate training support.

Preliminary studies at several hospitals in Indonesia showed that during the manual system, registration staff perceptions were low due to the lengthy file search time. When the EMR system began to be implemented in mid-2022, several new challenges were encountered. These included network technical issues (*server downtime*), suboptimal system integration with legacy workflows, and challenges for healthcare workers adapting to new work procedures.

If a thorough operational needs analysis is not conducted prior to implementation, these technical and operational constraints will reduce service efficiency. This negative impact is directly

felt by patients, including increased waiting times for healthcare services, potentially reducing the overall quality of hospital services.

To address these technology adoption challenges, theoretical approaches such as the Technology Acceptance Model (TAM) can be applied. The TAM model helps understand users' perceptions, interests, and behavioral intentions toward new technologies, thereby minimizing barriers. The RME implementation process cannot be done instantly; it requires a gradual, ongoing process, both for system development and for users to adapt to new digital workflows.

RESEARCH METHODS

Types of research

This research uses a **qualitative method with a phenomenological approach** to understand social phenomena based on the perspectives and in-depth experiences of informants directly. This method focuses on extracting meaning from subjective experiences that cannot be achieved through quantitative procedures (Subhaktiyasa, 2024).

Through this approach, researchers aim to deeply understand the perceptions of registration officers regarding the implementation of electronic medical records in daily service activities, which include:

- Ease of use of the system.
- Perceived benefits of the system.
- Attitude towards system use.
- Intention to continue using the electronic medical record system.

Place and Time of Research

Research Location:

Research on the perceptions of registration officers regarding the implementation of the electronic medical record system was conducted at RSAD Tk.II Udayana, Denpasar City .

Research Time: This research process took place for two months, namely from March to April 2026 .

RESULTS AND DISCUSSION

Overview, Vision, Mission, and Characteristics of Informants

Research Location:

Udayana Army Hospital, Denpasar, Bali. This hospital has implemented EMR in its registration unit as a digital transformation step to improve efficiency, accuracy, and speed of service.

Vision & Mission:

To become a hospital that is the pride of soldiers, civil servants, families, and the general public in the Bali region by providing professional services, improving facilities and infrastructure, and the quality of human resources (*good clinical & corporate governance*).

Informant Characteristics:

The study involved four registration officers (3 females, 1 male) aged between 30 and 53 years, with work experience ranging from 6 to 11 years. This diversity provides a rich perspective of experience.

Technology Acceptance Model) Dimensional Analysis

Perceived Ease of Use

Convenience:

In general, the RME menu is considered easy to understand and operate by officers, thus speeding up the registration process compared to the manual system.

Adaptation Process:

In the initial transition phase, staff were initially confused and services were slightly hampered (some even requiring up to three months of adaptation). However, through pre-implementation training, vendor mentoring, and daily work experience, staff eventually became accustomed to the system.

Technical Constraints:

The main issue frequently encountered is internet network instability (*slow loading /errors*). If this occurs, officers are forced to temporarily switch to manual forms.

Perceived Usefulness

Time Efficiency:

RME significantly reduces bureaucratic red tape. Officers no longer need to search for physical files or rewrite data, as the system is integrated with Civil Registration (Capil) data (simply enter the National Identification Number/Name) and directly connects to the destination polyclinic.

Data Accuracy:

A structured input format minimizes recording errors. However, this accuracy still depends on the accuracy of human resources, as misclicks (especially for patients with the same name) can still occur due to carelessness.

Attitude Toward Using

Positive Attitude:

Officers feel comfortable and happy using RME because its practicality reduces patient complaints due to lost files which used to frequently occur in manual systems.

Attitude Dynamics:

Officers' attitudes shifted from initial hesitation and discomfort during the transition to full acceptance after experiencing tangible benefits and undergoing training. Internet constraints occasionally triggered criticism (disappointment), but did not diminish their overall acceptance.

Behavioral Intention to Use

Commitment to Sustainability:

Officers have a strong intention to continue using and learning about EMR. This is driven by government regulations (Minister of Health Regulation No. 24 of 2022), the demands of modern developments, and the ease of reporting data to the Health Office and BPJS.

User Expectations:

Officers really hope for an improvement in the quality and stability of the internet network, as well as a faster response from third parties (vendors/IT) when technical problems occur, considering that the IT team is currently not *on standby* in Bali.

CONCLUSIONS

1. Perceived Ease of Use , shows that
2. The electronic medical records system was generally easy to use for registration staff , especially after they had undergone a phase of adaptation to daily use. The system's clear interface and structured workflow facilitated user input and management of patient data. However, technical challenges, such as unstable network connections, persisted, impacting work flow. Overall, all informants found the electronic medical records system to be easy to use.
3. Perceived *Usefulness* demonstrates that the electronic medical records system provides tangible benefits in supporting the work of registration staff. Its use is considered to improve work efficiency, expedite patient care processes, and facilitate access to patient data. Furthermore, its presence also helps reduce reliance on physical documents, making administrative processes more practical. These perceived benefits strengthen the system's acceptance by registration staff.
4. Attitude *Toward Using* , shows that the registration officer displays a positive attitude. in the use of electronic medical records systems. This is evident in the staff's acceptance of the technology and their comfort in operating it on a daily basis. Informants also viewed the implementation of electronic-based systems as an appropriate step in improving the quality of hospital services, thus tending to support their implementation.

Behavioral Intention to Use (IU) , as evidenced by the intensity of use, indicates that all informants have a strong intention to use the electronic medical records system intensively in healthcare activities. This intention is based on the perceived benefits and ease of use. Furthermore, informants also hope that the system can continue to be developed and its quality improved to optimally support their work in the future.

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