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Analysis of Health Workers' Satisfaction with Electronic Medical Records at Cililin Hospital

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Abstract: The use of Electronic Medical Records (RME) is an important part of the process of digitizing health services which requires the active participation of health workers as the main users. This study aims to explore the perception of health workers on the implementation of RME at Cililin Hospital and its relationship with job satisfaction levels. The study used a qualitative method with a phenomenological approach, involving 50 respondents who were purposively selected from a total of 200 health workers. Data was obtained through in-depth interviews and observations, then analyzed using thematic analysis techniques to identify the main themes of the respondents' experiences. The results showed that most health workers showed a positive perception of the use of RME (86.53%) and expressed satisfaction with the system (88%), with a significant relationship between perception and satisfaction (p -value = 0.005). Factors that affect positive perceptions include improving work efficiency, data accuracy and security, and ease of access to information, while the main obstacles are related to the limitations of network infrastructure and the need for continuous training. This study concludes that the perception of health workers plays a crucial role in determining RME acceptance, in accordance with the *Technology Acceptance Model framework*. The theoretical contribution of this research lies in strengthening the study of the acceptance of technology in the health sector, while its practical contribution provides direction for hospital management and policymakers to expand training programs, improve digital infrastructure support, and improve internal communication. The research recommendations emphasize the importance of policies that are responsive to local conditions and the need for follow-up studies with wider hospital coverage to make the results more representative.

Keyword: Electronic Medical Records, perception of health workers, job satisfaction, digital transformation, health services

INTRODUCTION

In today's rapidly growing era of globalization and digitalization, the use of technology in health services is an unavoidable imperative. The health service system is required to improve efficiency, accuracy, and service quality, one of which is through the

implementation of Electronic Medical Records (RME). RME is a digital-based medical recording system that replaces paper-based manual recording, which allows for faster, safer, and more integrated management of patient data (Indonesia, 2022). The implementation of RME has become mandatory regulation in all healthcare facilities in Indonesia since the end of 2023 as part of the national digital transformation strategy (Hossain, 2025). This provision is also strengthened by the issuance of Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2023 concerning Electronic Medical Records, which affirms the obligation of every health service facility to use RME and regulates implementation standards, data security, and system interoperability as the basis for improving the quality of health services (Ministry of Health of the Republic of Indonesia, 2023). However, the success rate of RME implementation is not only determined by the availability of technological infrastructure, but also greatly influenced by the perception and attitude of health workers as the main users of the system. A positive perception will increase job satisfaction and service quality, while a negative perception can cause resistance and obstacles in its use (Dubale, 2023).

The use of RME can directly affect the performance of health workers and the quality of services provided to patients. According to the theory of job satisfaction, healthcare workers will feel satisfied if there is a match between their expectations of the system and the real experience they feel during use. Thus, the perception formed from the experience of using RME is an important factor in determining the level of satisfaction of health workers. If healthcare workers view RME as a system that is useful, easy to use, and supports their work, satisfaction levels tend to increase. On the other hand, if the system is considered complicated, inefficient, or creates additional burdens, then the level of satisfaction will decrease.

International studies show variations in the level of satisfaction of health workers with the use of RME. A study in China reported that 70.7% of healthcare workers were satisfied with the RME system implemented, indicating a relatively high acceptance rate in the country. However, another study at a government hospital in Saudi Arabia found that only 40% of doctors stated that they were satisfied with RME due to various constraints such as training limitations, technical issues, and lack of organizational support (Dubale, 2023). This difference illustrates that the level of satisfaction with RME is strongly influenced by the local context, resource readiness, and organizational culture in each health facility. This condition is also relevant in Indonesia, where the implementation of RME still faces challenges such as limited digital infrastructure, variations in the competencies of health workers, and differences in the recording culture between hospitals (Hossain, 2025).

Research in Indonesia conducted by (Simbolon, 2023) found that 65% of healthcare workers were satisfied with the use of RME in the Hospitals where they worked. Respondents expressed several reasons for satisfaction, including labor savings because there is no need to move physical documents between spaces, more guaranteed data security, and storage space efficiency because data is stored in digital form (*Softcopy*). These results are in line with research (Shania, 2024) which shows that the perception of health workers regarding the convenience and benefits of RME has a significant influence on job satisfaction and technology acceptance. This shows that a well-designed system accompanied by adequate training will increase the acceptance of health workers and strengthen the transformation of digital health services.

Given the importance of perception and satisfaction of health workers in the successful implementation of RME, this study was conducted to analyze the perception of health workers towards the use of RME at Cililin Hospital. Cililin Hospital was chosen because it is a regional hospital that is developing the digitalization of health services, but still faces challenges in the form of limited human resources, IT infrastructure, and socialization of

digitalization policies. This research is expected to provide a deeper understanding of the perception of health workers, which can later be used to formulate strategies to increase acceptance and optimize the use of Electronic Medical Records (RME) in regional hospitals. Thus, the results of this study not only make a theoretical contribution to the literature on the acceptance of technology in the health sector, but also offer practical recommendations to strengthen the sustainable implementation of Electronic Medical Records (RMEs).

METHOD

This study uses a qualitative approach to explore in depth the perception of health workers towards the implementation of Electronic Medical Records (RME) at Cililin Hospital. The qualitative method was chosen because it was able to explore the experience and understanding of health workers related to the process of using Electronic Medical Records (RME) in health services. The design applied is phenomenology, which focuses on interpreting the respondents' real experiences in the context of their daily work.

The research population includes all health workers at Cililin Hospital, including medical record officers and inpatient staff in 2025, with a total of 200 people. The determination of the number of samples was carried out using the *Slovin formula* with a margin of error of 5% or 0.05, with the following formula:

$$n = \frac{N}{1 + N(e)^2}$$

Information:

1. n = number of samples required
2. N = total population (200)
3. e = error rate (0.05)

Based on the population of 200 health workers at Cililin Hospital, the following samples can be found:

$$n = \frac{200}{1 + 200(0,05)} = \frac{200}{1 + 0,05} = \frac{200}{1,5} = 133,33$$

Based on calculations, the ideal minimum sample number is 133 respondents. However, because this study is qualitative and requires an in-depth data collection process, the number of samples was adjusted to 50 respondents. Respondents were selected using the *purposive sampling technique*, which is the selection of informants who are considered to have direct experience with the use of RME and are able to provide relevant and in-depth information.

Data collection was carried out through in-depth interviews and direct observation. Interviews were conducted with semi-structured guidelines that were compiled based on respondents' perception indicators and experience in using RME. All interviews were recorded with the respondents' consent, then transcribed for analysis. Observations were made to see firsthand the interaction of health workers with the RME system, including the obstacles and conveniences they experienced during the work process.

The data analysis process is carried out using a thematic analysis approach which is carried out through several systematic steps. The first stage is to read the interview transcript repeatedly so that the researcher understands the content and context of the data thoroughly. Next, the coding process is carried out by marking the parts of the data that are relevant to the focus of the research. The *coding* results are then compiled and grouped into certain categories which are further developed into the main theme. From these themes, the

researcher compiled a narrative description that describes the perception of health workers towards the application of Electronic Medical Records (RME). To ensure that the data obtained is valid and accountable, triangulation of sources and methods is carried out, coupled with *peer debriefing* and *member checking* with respondents to ensure that the interpretation made is in accordance with the information they convey.

RESULT AND DISCUSSION

Based on the analysis process carried out in the field work practice that has been carried out since the month

Table 1. Frequency Distribution of Research Variables

Variabel		n	%
Perception	Good	43	86,53
	Less	7	14,00
Satisfaction	Satisfied	44	88,00
	Dissatisfied	6	12,00
Total		50	100

Source : Processed by the author 2025

The results of the study shown in Table 1 are found that most of the officers have good perception, namely as many as 44 respondents (88.00%). Meanwhile, the level of satisfaction of inpatient health workers with the use of electronic medical records was relatively satisfied, with a total of 43 respondents (86.53%).

Table 2. The Relationship of Health Workers' Perception to the Use of Electronic Medical Records

Records					Total		p-Value
Healthcare Worker Satisfaction Perception							
	Puas		Dissatisfied				
	n	%	n	%	n	%	
Good	41	95,35	2	4,65	43	100	0.005
Less	3	88,00	4	57,14	7	100	

Source : Processed by the author 2025

In Table 2, it shows that health workers with good perceptions are mostly satisfied with the use of RME, namely 41 respondents (95.35%), while those who are not satisfied are only 2 respondents (4.65%). In the group with less perception, only 3 respondents (42.86%) felt satisfied, while 4 respondents (57.14%) stated that they were dissatisfied.

These results show that perception affects the satisfaction level of health workers. The analysis also showed a significant relationship with the p-Value value = 0.005, which means that the more positive the perception of health workers, the higher their satisfaction with the use of Electronic Medical Records (RME) at Cililin Hospital.

1. Overview and Research Locations

Cililin Hospital is a regional hospital that is a public health referral center in West Bandung Regency. As a mid-level health facility, this hospital has begun to develop a service digitization system, including the implementation of Electronic Medical Records (RME). Digitalization efforts are carried out as a follow-up to the Ministry of Health's policy regarding digital transformation in health services (Indonesia, 2022) However, the implementation of RME at Cililin Hospital still faces a number of obstacles, such as the limitation of technological infrastructure, variations in the ability of health workers to operate the system, and the need for continuous socialization regarding the policy on the use of RME.

2. Informan Profile

The informants of this study consisted of 50 health workers who were selected purposively, including nurses, medical record officers, and medical personnel in inpatient units. All informants have direct experience in the use of RME for at least 6 months. Based on their educational background, most of the informants have a diploma and bachelor's degree in health. The age range of informants is between 25–50 years old, with the majority having more than five years of work experience. This profile illustrates that respondents have sufficient exposure to the dynamics of change from manual to digital systems.

3. Data Presentation

The results of interviews and field observations show that the majority of health workers have a positive perception of the implementation of RME. Of the 50 informants, 43 people (86.53%) stated that this system makes their work easier, while only 7 people (14%) think that there are still obstacles. The level of satisfaction is also high, with 44 people (88%) satisfied with RME, while 6 people (12%) say they are not satisfied.

4. Analysis and Interpretation of Findings

The thematic analysis found three main themes:

- a) **Work efficiency:** Informants experience time and effort savings as data filling becomes faster and more integrated.
- b) **Data security and accuracy:** Most healthcare professionals believe that RMEs are more reliable than manual systems.
- c) **Technical challenges and adaptation:** Obstacles include limited infrastructure, unstable networks, and intensive training needs.

Data interpretation shows that the perception of health workers is not only influenced by technical factors, but also by daily experience and organizational support. Informants who received training and support were more likely to positively assess the implementation of RME, while those who faced technical obstacles without solutions felt less satisfied.

Discussion

The results of the study showed that the majority of health workers at Cililin Hospital had a good perception of the use of RME, namely 43 out of 50 respondents (86.53%). This positive perception reflects the officers' belief that RME provides convenience and efficiency in daily work, such as shortening the time to fill in patient data, improving the accuracy of medical records, and making it easier to access and manage patient information. These findings are in line with the theory *Technology Acceptance Model (TAM)* which states that the perception of ease of use (*perceived ease of use*) and the perception of benefits (*perceived usefulness*) has a significant effect on the acceptance of technology (Venkatesh & V., 2000).

This positive perception is also supported by the results of recent research which emphasizes that a system designed with a user-friendly interface, supported by adequate training, and having adequate facilities, will increase the acceptance of health workers to new technologies, including RMEs (Hossain, 2025; Shania, 2024). In line with that, research conducted by (Gunawan & Yunisa, 2024). It shows that the implementation of RME has a significant influence on the quality of outpatient services and has an impact on increasing the satisfaction of health workers and patients. Another finding from Gunawan & Putri (2022) also confirms that the transition from manual medical records to RME can improve work efficiency and facilitate the retention of medical documents in healthcare facilities. In the context of Cililin Hospital, positive perceptions emerged despite some limitations in facilities and human resources, showing that perceptions are influenced not only by the availability of technology, but also by the direct experience of users and organizational support. In the

context of Cililin Hospital, positive perceptions emerged despite some limitations in facilities and human resources, showing that perceptions are influenced not only by the availability of technology, but also by the direct experience of users and organizational support.

CONCLUSION

The results of a qualitative study on *the Analysis of Health Workers' Perceptions of the Use of Electronic Medical Records (RME) at Cililin Hospital* show that most health workers have a positive view of the implementation of RME. This view is formed from direct experience in using the system which is considered to be able to speed up the recording process, improve the accuracy of medical data, and facilitate access to patient information. The informants also assessed that the existence of RME plays a role in facilitating coordination between service units, minimizing the risk of losing documents, and providing security guarantees in patient data management. However, there are still a small number of health workers who experience obstacles, especially related to limited networks and lack of training. These findings emphasize that the positive perception of health workers is not only influenced by technological infrastructure factors, but also by organizational support, practical experience in using the system, and the readiness of human resources.

Theoretically, this research contributes to the development of literature on the acceptance of technology in the health sector, especially in the framework of *Technology Acceptance Model (TAM)* which emphasizes the importance of the perception of ease of use (*perceived ease of use*) and benefits (*perceived usefulness*) as a determinant of digital system acceptance (Venkatesh & V., 2000). The results of this study broaden the understanding that contextual factors, such as organizational culture and field experience, also influence the acceptance of technology in regional hospitals.

Practically, this research is beneficial for hospital management, local governments, and health policy makers. For hospitals, these findings can be used as a basis for developing an ongoing training strategy, strengthening information technology infrastructure, and improving internal communication related to the implementation of RME. For local governments, this study provides empirical evidence that digital transformation in the health sector needs to be accompanied by policy support and funding that is adaptive to local conditions. Meanwhile, for the community, the effective implementation of RME has the potential to improve the quality of health services that are faster, more accurate, and safer.

This study has several limitations that need to be noted. First, the number of informants is limited to only 50 people due to considerations of the depth of qualitative analysis, so the results of the study have not fully represented all health workers at Cililin Hospital. Second, this research was conducted in the context of one regional hospital, so generalizations to other hospitals need to be done carefully. Third, technical obstacles in the interview process, such as limited informant time, can affect the completeness of the data obtained. This limitation does not reduce the credibility of the study, but it is necessary to take into account the interpretation of the results (Scott, 2022).

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