OFFICER SATISFACTION IN THE IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS (EMR) AT WAJO HEALTH CENTER

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A B S T R A C T

A medical record is a file that contains notes and documents regarding the patient's identity, examination, treatment, procedures and other services that have been provided to the patient. Minister of Health Regulation no. 24 of 2022 requires hospitals and health centers to implement RME. RME user satisfaction is very important to know because high satisfaction will encourage individuals to do better work, be more productive and tend to have positive work behavior. This study aims to determine officer satisfaction in implementing Electronic Medical Records (RME) at the Wajo Community Health Center. The research was conducted using the End User Computing Satisfaction (EUCS) model with a quantitative approach. Data was obtained through distributing questionnaires to RME users, then analyzed using the SPSS version 26 application. The results obtained show that RME user satisfaction with the content dimension (conternt) obtained a mean value of 4.2 or very satisfied category, RME user satisfaction with the accuracy dimension (accuracy) obtained a mean value of 4.12 or was in the satisfied category, RME user satisfaction with The display (format) dimension obtained a mean value of 4.3 or was in the very satisfied category, and user satisfaction with the ease of use dimension obtained a mean value of 4.1 or was in the satisfied category, which means RME is easy to use.

INTRODUCTION

Medical records are a collection of documents containing notes and information related to patient identity, examination results, treatment, medical procedures, and other services received by patients during the treatment period. Medical records function as archives that detail important information related to the “who, what, why, where, when, and how” of the patient's care process (Haryanti, 2022). Another definition states that medical records include facts related to an individual's life and health history, including past and current illnesses, which are recorded by health workers in order to provide optimal health services (Muzuh et al., 2023). The availability of accurate medical record data is an important factor in determining the quality of health services.

Medical record management must be carried out electronically by upholding the principles of data security and confidentiality, in order to improve the quality of health services, provide legal certainty, and guarantee the security, confidentiality, integrity, and availability of medical information. Based on the Regulation of the Minister of Health No. 24 of 2022, all health service providers are required to implement electronic medical records (EMR) no later than December 31, 2023. Effective use of EMR can contribute to increasing the satisfaction of health workers, which ultimately increases productivity and quality of service (Sunarta, 2019).

The effectiveness of the use of electronic medical records (EMR) has a significant impact on the satisfaction of health workers. Optimal implementation of EMR can increase the satisfaction of health workers and encourage improvements in the quality of health services (Pauziah & Purbayanti, 2023). Electronic Medical Records (EMR) are an important innovation that has changed the management of medical records from paper-based to digital systems. EMR includes digital records containing patient health information, which are organized and managed directly by health care providers (Simbolon et al., 2023).

Community Health Centers (Puskesmas) as health service facilities have the responsibility to provide promotive, preventive, curative, and rehabilitative health services, and are required to utilize technology in order to improve the quality of service (Sinta, 2023). One of these innovations is the implementation of EMR, which allows Puskesmas to manage patient medical data more efficiently through an integrated database system.

Healthcare management must be able to address challenges related to the integrity and accuracy of medical data, while providing cost-efficient solutions, increasing access to services, and improving the quality of care (Qureshi et al., 2015). EMR plays an important role in supporting the process of diagnosis, disease evaluation, and planning of treatment, care, and medical interventions for patients. Thus, EMR can improve the quality of services and protect healthcare workers, as well as help achieve better health outcomes for the community (Wirajaya & Dewi, 2020).

However, the effectiveness of using EMR software is not always optimal, because there are various factors that can affect its performance. Therefore, periodic evaluation is needed to identify system deficiencies (Andini et al., 2022). The use of EMR is expected to replace paper-based medical record systems, improve service efficiency, and reduce the need for physical storage of documents. EMR should include demographic, social, and clinical data collected from various sources, including multimedia, to support better health care decision making.

Initial assessment at Wajo Health Center showed that the medical record system still uses manual and computerized methods. The use of manual methods has weaknesses, such as the slow process of converting data into usable information and the high potential for errors. On the other hand, electronic systems also face various challenges, including network constraints that can affect the efficiency of health workers. Based on these problems, this study aims to analyze the relationship between the implementation of Electronic Medical Records (EMR) and the level of satisfaction of health workers at Wajo Health Center. This study will be compiled with the title "Officer Satisfaction in the Implementation of Electronic Medical Records (EMR) at Wajo Health Center in 2024".

METHODOLOGY

Types and Research Designs

The research method applied in this study is a quantitative approach, with data collection techniques including questionnaires, interviews, observations, and using descriptive methods. This approach is designed to evaluate the level of medical staff satisfaction with the implementation of Electronic Medical Record (EMR) at the Wajo Health Center.

This study uses a cross-sectional research design with a survey basis. This survey approach involves sampling from a certain population, where the questionnaire is used as the main instrument for data collection. The cross-sectional approach is carried out by conducting observations or collecting data only in one certain time period (point-in-time approach) (Adiyanta, 2019).

Population and Sample

Population is defined as a generalization area consisting of objects or subjects that have certain characteristics and numbers, which are determined by researchers to be studied and then concluded (Sugiyono, 2019). In this study, the population studied was all officers who used Electronic Medical Records at the Wajo Health Center in 2024. Meanwhile, the sample is a portion of the population that has similar characteristics (Sugiyono, 2019). This study uses a sample calculated based on the Mean formula.

Time and Place of Research

This study was conducted from June to July 2024 at Wajo Health Center.

Research Variables

The variables used in this study refer to the End User Computing Satisfaction (EUCS) model, which consists of five main components. These components include the Content variable, which assesses the relevance and adequacy of information; the Accuracy variable, which evaluates the accuracy and reliability of data; the Format variable, which measures how information is presented to make it easy to understand; the Ease of Use variable, which looks at the level of ease of using the system; and the Timeliness variable, which assesses the delivery of information in a time that suits the user's needs.

Data Collection Technique

Primary data is information collected directly by researchers from the original source. This data can be in the form of verbal communication, movements, or behavior obtained from research subjects who are considered reliable. In the context of this study, the subjects studied were users of

Electronic Medical Records (EMR) at the Wajo Health Center. Primary data collection was carried out through the distribution of questionnaires containing statements related to user satisfaction with the implementation of EMR at the Health Center

On the other hand, secondary data is information collected indirectly from the research object. Secondary data can be obtained through various sources, such as websites or other references relevant to the research topic (Sari & Zefri, 2019). In this study, researchers try to obtain additional information to support primary data by reviewing and analyzing various literature, including books, articles, and journals related to the research topic, to strengthen the theoretical basis used.

Research Instruments

The research instrument adopted the Electronic Medical Record *user satisfaction questionnaire* referring to the *End User Computing Satisfaction* (EUCS) instrument by Doll & Torkzadeh (1988), so that it can assess *user satisfaction* using Electronic Medical Records at the Wajo Health Center. The assessment in the questionnaire is based on the results of the questionnaire that has been filled out by the respondents.

Instrument Validity and Reliability Test

Validity testing is carried out to measure the extent to which the research instrument is able to measure what should be measured and reveal data from the variables studied accurately (Sanaky, 2021). An instrument is considered valid if the calculated r value is greater than or equal to the table r, but is declared invalid if the calculated r value is less than the table r. The questionnaire used in this study was adopted from previous studies, where the level of validity was measured based on a scale: a score of 1-1.79 indicates very unsatisfactory validity; a score of 1.8-2.59 indicates unsatisfactory validity; a score of 2.6-3.39 indicates quite satisfactory validity; a score of 3.4-4.19 indicates satisfactory validity; and a score above 4.19 indicates very satisfactory validity.

Reliability testing, on the other hand, is used to assess the consistency of a measurement instrument, namely the extent to which the measuring instrument is reliable and provides consistent results even though the measurement is repeated (Slamet & Wahyuningsih, 2022). An instrument is declared reliable if it produces the same results in repeated measurements (Ghozali, 2018). The Cronbach's Alpha value is used to measure reliability, with a value <0.50 indicating low reliability, a value of 0.50-0.70 indicating moderate reliability, a value of 0.70-0.90 indicating high reliability, and a value> 0.90 indicating perfect reliability (Cahyani et al., 2016).

In this study, the researcher did not conduct a reliability test on the Electronic Medical Record user satisfaction questionnaire, because the questionnaire was adopted from Islam's research (2021), which had previously been declared reliable.

Data analysis

The questionnaire data were analyzed using a descriptive method presented in narrative and tabular form, and included the calculation of the central measure in the form of an average value (mean). After the researcher calculated the mean value for each statement item in the questionnaire, the mean value was calculated using the following formula:

$$\text{Mean} = \frac{5.\text{S P} + (4.\text{ P}) + (3.\text{ CP}) + (2\text{T P}) + (1.\text{ST P})}{\textit{Number of respondents}}$$

Information :

S P : Very Satisfied
P : Satisfied
CP : Very Satisfied
T P : Not Satisfied
ST P : Very Dissatisfied

The author determines the class interval from the assessment characteristics. The determination of the average satisfaction adopts the calculations that have been done. The assessment characteristics consist of five categories, namely very satisfied, satisfied, dissatisfied, very dissatisfied , quite satisfied.

In order to make it easier to describe research tables , certain criteria are used which refer to the questionnaire scores obtained to determine the range of distance in the first interval to the fifth interval using the following formula:

Range = max score - min score

= 5-1 = 4

Interval Width = Range : number of ranges

= 4 : 5 = 0.8

RESULTS & DISCUSSION

Descriptive Statistical Analysis Results

At this stage, demographic data regarding the characteristics of the respondents were obtained through analysis of the respondents' responses to the questions in the questionnaire. The information collected includes age, gender, education, occupation, and level of user satisfaction. This study had a population of 42 people, with 38 respondents being sampled. The calculation of the number of samples was carried out using the Slovin formula.

Gender

The percentage of respondents' gender in this study is listed in Figure 6.

Figure 1. Percentage of respondent gender

Age

In this study, the age of respondents was grouped into five categories, namely 17-25 years, 26-34 years, 35-43 years, 44-52 years, and 53-61 years. The age grouping aims to reduce the variation of respondents' age data. Information related to the distribution of respondents' ages can be seen in Figure 7.

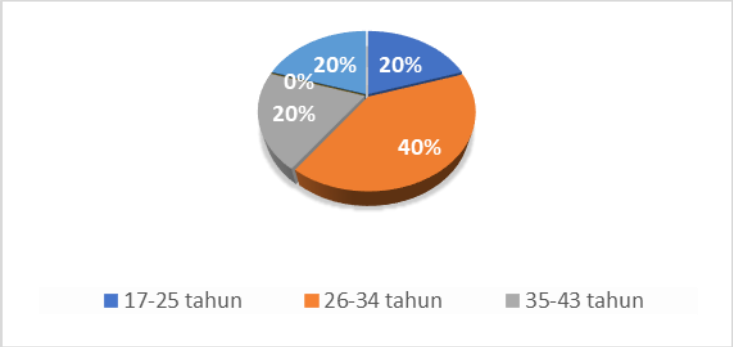

Figure 2. percentage of respondents' ages

Education

This study divides respondents' education into several levels, namely high school, diploma, bachelor's degree, and master's degree. The level of respondents' education in the study is listed in Figure 8.

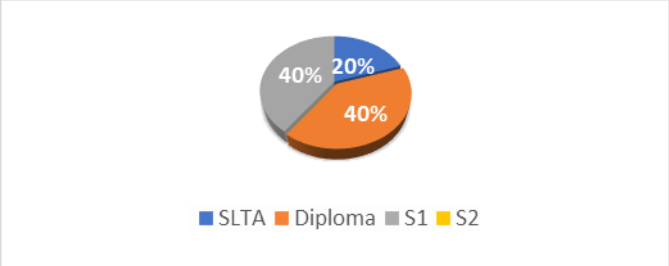

Figure 3. Respondents' education level

Years Of Service

This study divides the respondents' work period into 4 categories, namely <1 Year, 1-5 Years, 6-10 Years, and >10 Years. The respondents' work period in this study is listed in Figure 9.

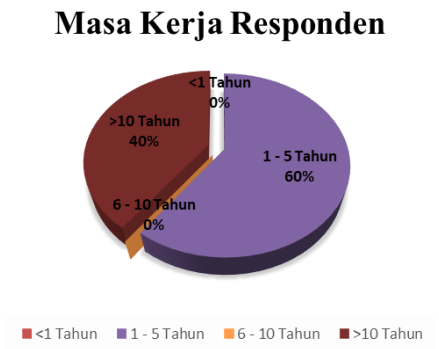

Figure 4. Respondent's work period

The data in Figure 9 shows that the respondents' work period is divided into two categories. The first category is 1-5 years at 60% and the second category is 40%.

Test of Instrument Validity and Reliability

In this study, the EUCS variable consists of 5 sub-variables which are broken down into 17 indicators. The data obtained through the questionnaire were used to conduct validity and reliability tests, and the results showed that the instrument used was valid. This test was conducted based on the perception of end users of the RME system.

Validity Test

Validity testing is used to assess and test the extent to which a measurement instrument is able to measure what should be measured precisely and accurately (Rosita et al., 2021). The validity test process is carried out by correlating each question item to the total score. In this study, the technique used is Pearson's product moment correlation, where the calculated r value is compared with the table r value. Data is considered valid if the calculated r ≥ table r and the significance value (sig.) <0.01. The results of the validity test are shown in the following table.

Table 1. Summary of Validity Test

Variables	Code	r count	r table	Information
Content	C1	0.943	0.811	Valid
	C2	0.926	0.811	Valid
	C3	0.930	0.811	Valid
	C4	0.909	0.811	Valid
Accuracy	A1	0.957	0.811	Valid
	A2	0.926	0.811	Valid
Format	F1	0.957	0.811	Valid
	F2	0.916	0.811	Valid
	F3	0.930	0.811	Valid
Easy of Use	E1	0.957	0.811	Valid
	E2	0.890	0.811	Valid
Timeline	T1	0.971	0.811	Valid
	T2	0.902	0.811	Valid
	T3	0.888	0.811	Valid
User Satisfaction	Y1	0.926	0.811	Valid
	Y2	0.909	0.811	Valid

Description: Declared valid if the calculated r value ≥ r table

Reliability Test

The test used to determine whether the questionnaire used in collecting research data can be said to be reliable or not (Rosita et al., 2021) . The instrument is declared reliable if *the Crobanch's alpha* value is > 0.60. The results of the instrument reliability test are listed in the following table.

Table 2. Reliability Test Results

Cronbach's Alpha	*N of Items*
.986	17

User Satisfaction Analysis

The results of the user satisfaction analysis in this study used the EUCS approach consisting of 5 research variables, namely *content, accuracy, format, ease of use, timeliness.* The results were obtained through the distribution of questionnaires to end users of Electronic Medical Records (EMR) at the Wajo health center. The results of the study are explained further.

Electronic Medical Record User Satisfaction in the *Content* Dimension

The content dimension is used by researchers to assess end-user satisfaction by reviewing the content of Electronic Medical Records (EMDR), which consists of various modules or functions designed to meet specific goals. The results of the analysis of the content dimension in this study are presented in Table 3.

Table 3. Results Of User Satisfaction Analysis Of RME Content Dimensions

No	Question	Answer					Mean Value	Category
		STP	TP	CP	P	SP		
1	In my opinion, Electronic Medical Records provides the right information according to my needs.			6	4	10	4	Satisfied
2	Electronic Medical Records really helps me in completing my daily work.				8	15	4.6	Very satisfied
3	In my opinion, the content of the Electronic Medical Record provides reports according to what I need.			3	4	15	4.4	Very satisfied
4	In my opinion, the content of Electronic Medical Records provides sufficient information.			6	4	10	4	Satisfied
Final score							4.25	Very satisfied

Table 3 shows the results of respondents' responses related to the content dimensions of the Electronic Medical Record (EMDR) system. Based on the results of the study, the first question regarding whether the EMDR provides the right information according to the respondents' needs obtained an average value (mean) of 4, which is included in the satisfied category. In the second question, which asked whether the EMDR helped in completing daily work, an average value of 4.6 was obtained, which is included in the very satisfied category. The third question measuring the suitability of the EMDR content to the respondents' reporting needs produced an average value of 4.4, which is classified in the very satisfied category. Furthermore, the fourth question assessing the adequacy of the information provided by the EMDR obtained an average value of 4, which is included in the satisfied category . Overall, the content dimension received an average value of 4.25, which is included in the very satisfied category. This shows that the majority of respondents are very satisfied with the content presented by the Electronic Medical Record system at the Wajo Health Center.

Electronic Medical Record User Satisfaction in the *Accuracy* Dimension

Accuracy , the accuracy referred to here is the accuracy of the system in processing input and producing information. This study analyzes user satisfaction with the accuracy of Electronic Medical Records at the Wajo Health Center. The results of the study are listed in Table 4

Table 4. Results Of User Satisfaction Analysis On The Accuracy Dimension

No	Question	Answer					Mean Value	Category
		STP	TP	CP	P	SP		
1	I am satisfied with the accuracy of the Electronic Medical Records				8	15	4.6	Very satisfied
2	The ordered output results are in accordance with the ordered input.			3	12	5	4	Satisfied
3	The information displayed by RME can be supporting information for an accurate decision.			6	12		3.6	Quite Satisfied
4	I feel RME is reliable and trustworthy.			3	12	5	4	Satisfied
Final score							4.05	Satisfied

Table 4 shows the results of respondents' responses related to the accuracy dimension in the Electronic Medical Record (EMR) system. Based on the results of the study, the first question measuring the level of respondent satisfaction with the accuracy of the EMR obtained an average value of 4.6, which is categorized as very satisfied . The second question, which asked about the conformity between the output and input given, obtained an average value of 4, in the satisfied category. The third question related to whether the information presented by the EMR can support accurate decision making, obtained an average value of 3.6, which is included in the fairly satisfied category. The fourth question, which evaluates the reliability and level of trust in the EMR, obtained an average value of 4, in the satisfied category. Overall, the accuracy dimension obtained an average value of 4.12, which indicates that respondents were satisfied with the level of accuracy presented by the Electronic Medical Record system at the Wajo Health Center.

Electronic Medical Record User Satisfaction in Display Dimension (*Format*)

The display dimension (*format*) is used to measure end-user satisfaction in assessing the appearance and aesthetics of the system interface. The *format dimension* in this study was analyzed to determine the satisfaction of Wajo health center officers with the Electronic Medical Record *format* . The results of the analysis are listed in Table 5.

Table 5. Results Of User Satisfaction Analysis On RME Format Dimensions

No	Question	Answer					Mean Value	Category
		STP	TP	CP	P	SP		
1	The medical record display has a neat menu structure.			3	4	15	4.4	Very satisfied
2	I think the design of the Electronic Medical Record display is attractive.			6		15	4.2	Very satisfied
3	In my opinion the design of Electronic Medical Records information is clear			3	4	15	4.4	Very satisfied
4	The electronic medical record interface is easy for officers to understand, making it easier for officers to complete their tasks.			3	8	10	4.2	Very satisfied
Final score							4.3	Very satisfied

Table 5 presents the results of the analysis of user satisfaction with the Electronic Medical Record (EMDR) display format. The results show that the first question related to the regularity of the menu structure on the EMR display obtained an average value (mean) of 4.4, which is included in the very satisfied category. The second question regarding the attractive impression of the EMR display design obtained an average value of 4.2, also in the very satisfied category. In the third question regarding the clarity of the information design displayed by the EMR, an average value of 4.4 was obtained, which again fell into the very satisfied category. The fourth question, related to the ease of understanding the EMR interface by officers and its impact on the efficiency of completing tasks, obtained an average value of 4.2, which is included in the very satisfied category. Overall, user satisfaction with the EMR format dimension reached an average value of 4.3, indicating that respondents were very satisfied with the display format provided by the EMR at the Wajo Health Center.

Electronic Medical Record User Satisfaction in the Ease *of Use* dimension

Ease of Use , measures user satisfaction in terms of user convenience or *user friendliness* in using the system such as the process of entering data, processing data and searching for the information needed. The results of the analysis of RME user satisfaction at the Wajo Health Center on *Ease of Use* are listed in Table 6.

Table 6. User Satisfaction With *The Ease Of Use Dimension*

No	Question	Answer					Mean Value	Category
		STP	TP	CP	P	SP		
1	Electronic Medical Records is an efficient system			6	4	15	4	Satisfied
2	I find Electronic Medical Records easy to use				12	10	4.4	Very satisfied
3	It takes a quick time to learn how to use RME			3	8	10	4.2	Very satisfied
4	RME provides clear instructions on its use			6	8	5	3.8	Quite Satisfied
Final score							4.1	Satisfied

The data in Table 6 shows the results of the analysis of user satisfaction of EMR on the dimension *of ease of use* at the Wajo Community Health Center. The results show that the question of Electronic Medical Records is an efficient system, obtained a mean value of 4 or the satisfied category. The second question In my opinion, Electronic Medical Records are easy to use, obtained a mean value of 4.4 or the very satisfied category. The third question Requires a fast time to learn how to use EMR, obtained a mean value of 4.3 or the very satisfied category. The fourth question of EMR provides clear instructions in its use, obtained a mean value of 3.8 or the Quite Satisfied category. Overall, the respondents' answers to the *easy of use variable* obtained a value of 4.1 or the satisfied category.

Electronic Medical Record User Satisfaction in the *Timeliness* Dimension

Timeliness, This variable measures the speed and recency of information (providing fast response time, information that is always up-to *-date* , has *shortcuts* to speed up menu transitions). The results of the timeliness dimension analysis *in* this study are listed in Table 7.

Table 7. RME User Satisfaction With The *Timeliness Dimension*

No	Question	Answer					Mean Value	Category
		STP	TP	CP	P	SP		
1	I get the information I need in a timely manner			3	8	10	4.2	Very satisfied
2	In my opinion, Electronic Medical Records is very responsive.			6	4	10	4	Satisfied
3	In my opinion, Electronic Medical Records provide *up to date* or current information.			3	12	5	4	Satisfied
Final score							4.06	Satisfied

The data in Table 7 shows the results of the analysis of user satisfaction on the timeliness dimension . The *results* show that the first question I get the information I need on time, obtained a mean value of 4.2 or a very satisfied category. The second question I think the Electronic Medical Record is very fast in responding, obtained a mean value of 4 or a satisfied category. And the third question I think the Electronic Medical Record provides *up-to-date* or current information, obtained a mean value of 4 or a satisfied category. Overall, the satisfaction of EMR users at the Wajo health center on the timeliness dimension , obtained a mean value of 4.06 or a satisfied category.

Discussion

Descriptive Analysis Results

Based on the results of descriptive analysis of the respondent profile, the researcher interprets the results of the analysis, namely: Based on the data listed in Figure 4. Shows that the respondents in this study consisted of 60% women and 40% men. Furthermore, the data in Figure 5 shows that the age of respondents in this study was 71-25 years as much as 20%, 26-34 years as much as 40%, 35-43 years as much as 20%, and 53-60 years as much as 20%. While the level of education of respondents

as shown in the Data in Figure 6. consists of 40% with a diploma level of education, 40% with a bachelor's level of education, and 20% with a high school level of education.

Validity and Reliability Test Results

The instrument used by the researcher was created by combining questions from several similar researchers that have been tested for validity and reliability. According to the results of the validity test conducted as listed in Table 5, it shows that 17 questions tested were declared valid. This is evidenced by the calculated r value being greater than the r table.

Furthermore, the results of the reliability test as listed in Table 6 show that *the Crobanch's alpha value* is 0.986 or greater than 0.60. It can be concluded that the research instrument is declared reliable. So that overall the instrument is declared valid and reliable.

Electronic Medical Record User Satisfaction Based On Content Dimension

content dimension is carried out by researchers to measure user satisfaction with all information related to the content *displayed* in electronic medical records.

Based on the research data obtained, it shows that respondents are satisfied with the question Electronic medical records provide the right information according to what I need. Electronic medical records can provide information needed by users at the Wajo Health Center when carrying out their duties.

In addition, the results of the analysis showed that respondents were very satisfied with the question Electronic Medical Records really help me in completing my daily work. Medical record work without EMR is done manually starting from recording, storage to shrinkage and destruction. So, this makes it difficult and takes longer to complete the task. The existence of EMR makes it easier for Wajo health center officers to complete tasks related to patient medical records. According to Rohmah et al., (2020) EMR can improve officer performance and increase their work productivity.

Furthermore, respondents felt very satisfied with the content question of Electronic Medical Records providing reports according to what I need. This shows that EMR can provide information according to what medical record officers need at the Wajo Health Center. Medical Records can provide general information and in the implementation of EMR can provide specific information according to needs.

The results of the analysis show that respondents are satisfied with the statement that the content of the Electronic Medical Record (EMR) provides adequate information. Based on research by Andriani et al. (2022), EMR presents integrated and complete administrative and clinical data of patients, which plays an important role in supporting medical personnel in making decisions related to patient care and services.

Based on the EUCS model of four questions on the *content* dimension , the results of the analysis of user satisfaction with electronic medical records at the Wajo health center showed that respondents were very satisfied. This is in line with research (Putra, 2019) which reported that electronic medical records are very helpful for informants in working, time efficient, and make it easier to search for patient data.

Electronic Medical Record User Satisfaction Based On The Accuracy Dimension (*Accuracy*)

The accuracy dimension was analyzed by researchers to evaluate the level of satisfaction of Electronic Medical Records (EMR) users at the Wajo Health Center related to the accuracy and precision of the information generated by the system. Putra (2019) stated that accuracy measures user satisfaction based on data accuracy, starting from the input process to data processing into relevant information.

The results of the analysis show that respondents are very satisfied with the statement "I am satisfied with the accuracy of the Electronic Medical Record." RME has been proven to provide accurate information to users at the Wajo Health Center. This finding is in line with research by Indrawati et al. (2020), which states that RME can provide accurate information, both related to patient identity, medical data, and medical history. This accuracy is demonstrated through RME's ability to process inputted data according to the medical record number, so that the information produced is precise and accurate for users.

Furthermore, respondents were satisfied with the *output questions* ordered according to the ordered *input* . This indicates that the output produced by RME is in accordance with user expectations. According to Mustakim & Wardoyo, (2019) the output produced by RME is considered

accurate, the data produced can be in the form of patient information including patient biodata, history, complaints, diagnosis, progress notes, surgical notes and other information.

Other analysis results show that respondents are quite satisfied with the statement that the information displayed by RME can function as a supporter in making accurate decisions. This finding shows that officers at the Wajo Health Center still need additional information to support more comprehensive decision making.

In addition, respondents were satisfied with the question I feel RME is reliable and trustworthy. This shows that RME can help officers in completing daily work and provide accurate information.

Based on the EUCS model on the accuracy dimension, respondents showed satisfaction with the level of accuracy of Electronic Medical Records (EMR) at the Wajo Health Center. Research by Indrawati et al. (2020) also revealed that EMR users gave a positive assessment of the accuracy of this system. EMR facilitates officers in carrying out tasks according to the service unit, such as tracking medical record files, finding required documents, and ensuring data entry is correct. In addition, the EMR system is equipped with a warning feature or dialog box that helps validate the accuracy of the choices made by officers.

Electronic Medical Record User Satisfaction Based On Display Dimension (*Format*)

The display dimensions (*Format*) were analyzed by researchers to see how satisfied users were with the interface *design or display of the Electronic Medical Records at Puaskesm Wajo.*

. The results show that respondents are very satisfied with the question The medical record display has a regular menu structure. This shows that RME displays a regular menu.

Furthermore, respondents showed a high level of satisfaction with the statement "In my opinion, the design of the Electronic Medical Record (EMR) display is attractive." This indicates that the format displayed by the EMR is attractive to users at the Wajo Health Center. Research reported by Putra (2019) also stated that the EMR interface design is quite attractive and not boring because of the color variations, which prevent a monotonous impression. However, there is a drawback, namely the absence of a warning when officers do not fill in some items.

On the other hand, respondents were also satisfied with the statement "In my opinion, the design of the Electronic Medical Record information is clear." This shows that the EMR provides a clear information design for users at the Wajo Health Center. In addition, respondents were very satisfied with the statement "The Electronic Medical Record interface is easy for officers to understand, allowing them to complete tasks faster." Medical records must be prepared in writing, complete, and clear, both in physical and electronic form. In simple terms, Electronic Medical Records can be interpreted as individual records where health care providers store information about treatments, medications, and future recommendations in electronic format.

Based on the EUCS model on the format dimension, respondents stated that they were very satisfied with the format displayed in the Electronic Medical Record. The format of each item is in accordance with the needs of the officers and makes it easier to carry out their duties.

Electronic Medical Record User Satisfaction Based On The Ease *Of Use* Dimension

The ease of use dimension was analyzed to assess the level of user satisfaction with the ease of using Electronic Medical Records (EMR) at the Wajo Health Center. The results showed that respondents were satisfied with the statement that EMR is an efficient system. This finding indicates that EMR is an effective system to use. According to Nugroho & Pramudita (2024), EMR plays a central role in improving the efficiency of patient health services. Studies that have been conducted show that EMR makes a significant contribution to efficiency by simplifying administrative processes and data management.

Furthermore, respondents were very satisfied with the statement "I think the Electronic Medical Record is easy to use." This shows that the EMR can be easily operated by medical record officers at the Wajo Health Center. Suibto (2019) noted that this system makes it easier for medical record staff to make monthly reports thanks to the patient's visit history.

Respondents also felt very satisfied with the statement that the use of RME did not take a long time to learn. RME displays features that are easy for users to understand at the Wajo Health Center. On the other hand, respondents stated that they were quite satisfied with the statement that RME provides clear instructions for its use. This finding indicates the need for RME to provide clearer

guidance for users. According to Putra (2019), the Medical Record system is not equipped with guidance for new users or in system error situations, so this is a weakness.

Overall, respondents gave positive responses to the ease of use variable, with the satisfied category, which indicates that officers feel comfortable using RME.

Electronic Medical Record User Satisfaction Based On The *Timeliness* Dimension

The timeliness dimension was analyzed to see user satisfaction in the timeliness of Electronic Medical Records at Wajo Health Center in presenting the required data and information.

The results show that respondents are very satisfied with the question I get the information I need in a timely manner. Electronic medical records provide fast information according to user expectations at the Wajo health center. The results obtained are in line with the research of Mulyana et al. (2023) which reported that EMR provides timely information according to user needs.

Furthermore, respondents were satisfied with the question In my opinion, Electronic Medical Records are very responsive. These results indicate that Electronic Medical Records at the Wajo Health Center provide a fast response. This is in line with the research reported by Landang et al., (2023) that EMR provides a fast and accurate response according to the time expected by the user.

In addition, respondents showed a high level of satisfaction with the statement that Electronic Medical Records (EMR) provide up-to-date information. Research reported by Ikawati (2024) indicates that EMR allows healthcare providers to access and update patient information in real-time, quickly and accurately. This contributes to increased patient comfort and reduced waiting times through increased efficiency in healthcare services.

Overall, RME users at Wajo Health Center were satisfied with the timeliness dimension of RME. The system facilitates quick and easy access to patient medical information, which speeds up the diagnosis and treatment process and improves coordination among medical teams. In addition, RME also helps reduce the risk of human error in recording and managing medical data, and supports sustainable and patient-oriented medical practices by providing comprehensive information on patient health history.

CONCLUSION

Based on the research results obtained, it can be concluded that based on the EUCS model, the results of the analysis of user satisfaction of Electronic Medical Records at the Wajo Health Center on the content dimension (conternt *)* obtained a mean value of 4.2 or a very satisfied category, which means that Electronic Medical Records provide very satisfying information.

Based on the EUCS model, the results of the analysis of user satisfaction with Electronic Medical Records at the Wajo Health Center in the accuracy dimension *obtained* a mean value of 4.12 or was in the satisfactory category, which means that the level of accuracy of the EMR is running well.

Based on the EUCS model, the results of the analysis of satisfaction with Electronic Medical Records at the Wajo Community Health Center in the display dimension (*format*) obtained a mean value of 4.3 or was in the very satisfied category, which means that the display available on the EMR is very good.

Based on the EUCS model, the results of the analysis of satisfaction with Electronic Medical Records at the Wajo Community Health Center on ease *of use* obtained a mean value of 4.1 or was in the satisfied category, which means that EMR is easy to use.

Based on the EUCS model, the results of the analysis of satisfaction with Electronic Medical Records at the Wajo Community Health Center in the timeliness dimension *obtained* a mean value of 4.06 or in the satisfied category, which means that EMR has timeliness in providing the required information.

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REFERENCES

Andini, H., Widodo, A., Aula Rumana, N., & Indawati, L. (2022). Review of User Satisfaction in Using Electronic Medical Records (ER) at Siloam Hospital Balikpapan. *Tambusai Health Journal* , *3* (4), 534–540.

Andriani, R., Wulandari, DS, Margianti, & Siwi, R. (2022). Electronic Medical Records as a Support for Patient Service Management at Gadjah Mada University Hospital. *Imelda Scientific Journal of Health Recording and Information (JIPIKI)* , *7* (1), 96–107. https://doi.org/10.52943/jipiki.v7i1.599

Cahyaharnita, RA (2020). Synchronization of Electronic Medical Record Implementation Guidelines in National E-Health Strategies. *Soepra* , *5* (2), 209. https://doi.org/10.24167/shk.v5i2.2430

Cahyani, NM, Indriyanto, E., & Masripah, S. (2016). *Validity and Reliability Test of Sales and Purchasing Application Implementation. Information System for Education and Professionals, 1(1), 21–34* . *1* (1), 21–34.

Ghozali, I. (2018). *Multivariate analysis application with IBM SPSS 25 program 9th Edition.* Diponegoro University Publishing Agency.

Haryanti, S. (2022). Shrinkage of Medical Record Archives in Hospitals: Case Study of the Ministry of Health's Vertical Hospital. *Indonesian Vocational Journal* , *10* (2). https://doi.org/10.7454/jvi.v10i2.1016

Ikawati, FR (2024). Effectiveness of Using Electronic Medical Records to Improve the Quality of Patient Services in Hospitals. *Ranah Research: Journal of Multidisciplinary Research and Development* , *6* (3), 282–292. https://doi.org/10.38035/rrj.v6i3.819

Indrawati, SD, Nurmawati, I., Muflihatin, I., & Syaifuddin, S. (2020). Evaluation of Electronic Medical Records of the Inpatient Coding Section of KRMT Wongsonegoro Regional Hospital, Semarang City. *J-REMI: Journal of Medical Records and Health Information* , *1* (4), 614–623. https://doi.org/10.25047/j-remi.v1i4.2164

Landang, YS, Pradnyani, PE, Adiningsih, LY, Vergantana, IWSM, & Putri, PCS (2023). Overview of Electronic Medical Record (ER) Implementation with Mmust Method in Outpatient Polyclinic of Bhayangkara Hospital, Denpasar. *The Journal of Management Information and Health Technology* , *1* , 12–20.

Mulyana, M., Situmorang, M., & Fatikasari, S. (2023). Evaluation of Information Systems (Electronic Medical Records) Using the Hot-Fit Method on the Quality of Health Services at Hospital X in 2023. *Warta Dharmawangsa* , *17* (4), 1580–1599. https://doi.org/10.46576/wdw.v17i4.3809

Mustakim, M., & Wardoyo, R. (2019). Survey of Record Information Search Models. *JISKA: Sunan Kalijaga Informatics Journal* , *3* (3), 132–144.

Muzuh, ME, Budiaty, WOS, & Sari, SM (2023). Analysis of the Causes of Misfiling of Medical Record Files in the Filling Room of Bungi Health Center, Baubau City. *Journal of Promotif Preventif* , 6(3), 458-464.

Nugroho, YW, & Pramudita, FA (2024). The Role of Electronic Medical Records in Improving Efficiency, Quality of Health Services, and Safety of Patient Care: Systematic Literature Review Analysis. *Indonesian Health Promotion Publication Media (MPPKI)* , *7* (2), 343–350. https://doi.org/10.56338/mppki.v7i2.4867

Pauziah, A., & Purbayanti, A. (2023). The Relationship Between the Use of Electronic Medical Records and Health Worker Satisfaction. *Babul Ilmi_Jurnal Ilmiah Multi Science Kesehatan* , *15* (1), 108–119.

Minister of Health Regulation No. 24. (2022). Regulation of the Minister of Health of the Republic of Indonesia No. 24 of 2022 concerning Medical Records. *Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022* , *151* (2), 1–19.

Putra, HN (2019). Analysis of Outpatient Electronic Medical Records at Semen Padang Hospital Using the Eucs (End User Computing Satisfaction) Method. *Lentera Kesehatan Aisyiyah* , *2* (2), 147–158.

Qureshi, Q. A., Ahmad, I., & Nawaz, A. (2015). Readiness For E-Heatlh In The Developing. *Journal of Medical Sciences January-June* , *10* (April 2012), 160–163.

Rohmah, AN, Nurmawati, I., Muflihatin, I., & Syaifuddin, S. (2020). Analysis of RME Implementation in the Outpatient Coding Unit of KRMT Wongsonegoro Regional Hospital, Semarang. *J-REMI: Journal of Medical Records and Health Information* , *1* (4)), 431–438. https://doi.org/10.25047/j-remi.v1i4.2137

Sanaky, MM (2021). Analysis of Delay Factors in the Construction Project of the Man 1 Tulehu Dormitory Building, Central Maluku. *Symmetric Journal* , *11* (1), 432–439. https://doi.org/10.31959/js.v11i1.615

Sari, MS, & Zefri, M. (2019). The Influence of Accountability, Knowledge, and Experience of Civil Servants and Community Groups (Pokmas) on the Quality of Village Fund Management in Langkapura District. *Journal of Economics* , *21* (3), 311.

Simbolon, P., Saragih, P., & Pardede, IBY (2023). The Relationship between the Use of Electronic Medical Records and the Satisfaction of Health Workers at Santa Elisabeth Hospital, Medan. *Promotif Preventif* , *6* (4), 558–563. http://journal.unpacti.ac.id/index.php/JPP

Sinta, NS (2023). Quantitative analysis of incomplete filling of patient medical record files at the Wolio Health Center, Baubau City. *Tambusai Health Journal* , 4(2), 2289-2296.

Slamet, R., & Wahyuningsih, S. (2022). Validity and Reliability of the Work Satisfaction Instrument. *Aliansi: Journal of Management and Business* , *17* (2), 51–58. https://doi.org/10.46975/aliansi.v17i2.428

Suibto, OC (2019). Design of a Web-Based Medical Record Information System at RS Keluarga Husada Batam. *Journal of Technology and Open Source* , *2* (2), 74–86. https://doi.org/10.36378/jtos.v2i2.368

Sunarta, S. (2019). The Importance of Job Satisfaction. *Efficiency - Administrative Science Review* , *16* (2), 63–75. https://doi.org/10.21831/efficiency.v16i2.27421

Wirajaya, MKM, & Dewi, NMUK (2020). Analysis of Dharma Kerti Tabanan Hospital Readiness to Implement Electronic Medical Records. *Journal of Vocational Health* , *5* (1), 1. https://doi.org/10.22146/jkesvo.53017