EVALUATION OF ELECTRONIC MEDICAL RECORD (EMR) IMPLEMENTATION AT MELAI HEALTH CENTER

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A B S T R A C T

The implementation of electronic medical records has seen significant growth in Indonesian healthcare facilities. This is further reinforced by Minister of Health Regulation No. 24 of 2022, which mandates the use of electronic medical records (RME) in all healthcare services. The success of RME implementation is closely tied to the practices of RME users and the organization's management in actively supporting its adoption, which plays a crucial role in determining whether RME is effectively integrated into the organization. This study aimed to examine the implementation of e-puskesmas at the Melai Health Center. Qualitative research method with case study design. Data collection methods were carried out through observation and interviews with two research informants, using interview guideline tools. The results of the study in its implementation have used epuskesmas seen from the aspect of organizational work culture using a collaboration system among officers, the aspect of human resources does not yet have medical record officers with a medical record education background and 4 health center officers have attended RME training, the aspect of health center leadership governance does not yet have SOPs regarding medical record activities and aspects of IT infrastructure, namely the availability of facilities and infrastructure is still lacking such as computers and unstable wifi networks that hinder the RME input process. The suggestion is the addition of several units of computers and printers, the addition of wifi with a stronger network capacity if later.

INTRODUCTION

According to the Minister of Health Regulation Number 43 (2019), Community Health Center (Puskesmas) is defined as a health service facility that provides first-level health services, with a primary focus on promotive and preventive efforts in its working area. Services at the Puskesmas will take longer if done manually, so web-based management is needed, such as through the use of e-Puskesmas applications that play a major role in supporting excellent service to patients.(Tarigan & Maksum, 2022).

Information technology in the health sector has developed rapidly in various aspects, including the implementation of electronic medical records. The transition from manual to electronic systems aims primarily to improve the quality of service through sharing information between health care providers, improving patient care documentation, and reducing costs. In general, electronic medical records can reduce costs, increase productivity, and support timely decision-making. Electronic data management is very possible amidst the current advances in information technology. Rapid technological developments also have a positive impact on progress in terms of file or archive management.(Treasure & Budiyanti, 2023).

One way to utilize technology to improve the quality and continuity of health services in line with the objectives of the health center is through the use of Electronic Medical Records (EMR). The development of digital technology in society has driven the transformation of health services towards digitalization, so that medical records need to be managed electronically while still prioritizing the principles of security and confidentiality of data and information. The reason for using an information system is its ability to provide effective public health services, increase the efficiency and productivity of public health operations by utilizing health information sources, the use of information systems is increasingly used in health service facilities such as hospitals, where doctors, nurses, and other health

workers who contribute are one of the key factors in improving the quality of public health(Mayang et al., 2024).

Based on Minister of Health Regulation No. 24,(2022), which states that health service facilities, one of which is a community health center, are required to organize EMR in providing health services. EMR is a document containing patient identity data, examination history, treatment, actions, and other services provided to patients, which are compiled through a special electronic system for managing medical records. Article 3 paragraph (1) states that every health service facility is required to organize Electronic Medical Records.

Electronic Medical Records facilitate fast and efficient access to information, in addition, EMR also provides benefits from economic aspects, ease of access to information, and clinical aspects.(Haryani & Satriadi, 2019).The implementation of EMR helps improve the quality of health services, so that optimal public health conditions are achieved. This electronic medical record will also be integrated with all other subsystems in the health information system in health facilities. In other words, EMR is part of a large ecosystem that includes various health systems in health facilities in one larger system, namely the health information system. The implementation of EMR in health care facilities is carried out by special work units or adjusted to the needs and capacity of each facility.(Haqqi et al., 2020).

Based on research conducted by(Treasure & Budiyanti, 2023), the implementation of electronic medical records in health centers must be in accordance with the needs and readiness of its users, so that the application used can truly support employee performance and function as a tool in decision making.

Based on research conducted by Silvia(2023), it was found that in terms of human resource readiness, the registration officers at Teja Health Center numbered three people. In terms of work culture readiness, Teja Health Center is ready to implement electronic medical records. However, in terms of leadership governance, Teja Health Center does not yet have an SOP related to electronic medical records. In terms of IT infrastructure, the facilities and infrastructure in the registration section of Teja Health Center include three computers that are functioning well, with routine maintenance. If a computer is damaged, it will be repaired or replaced according to policy.

The readiness of human resources for the implementation of RME at the Sleman Health Center is at level II, which indicates that the human resources at the health center are quite ready, although some HR feel that they are ready to implement RME. However, in the field of information technology, human resources are still very limited, and the majority of officers do not yet have an understanding of RME. The organizational work culture is also at level II, which indicates an understanding of the changes in work culture that may occur due to the implementation of RME. There is a tendency to accept and support the implementation of RME. In terms of governance and leadership, the level is also II, which indicates that there is an understanding of the importance of RME in IT management strategy and support, as well as a commitment from decision makers to its implementation. Infrastructure is at level II, indicating that the capacity of information technology is quite ready for the implementation of RME, although it still requires additional devices such as computers in each unit(Nur'aini, A; Dian Budi Santoso, SKM, 2019).

The complexity of the challenges in implementing RME makes it necessary to conduct a readiness assessment before implementation, and this is a crucial step that must be taken first. Implementing RME requires readiness from health workers, including doctors and other medical personnel, as well as patients in dealing with this information system technology. Readiness assessment will help identify processes and determine priority scales, as well as support operational functions to optimize RME implementation.(Sudirahayu & Harjoko, 2017). It is expected that the implementation of RME can be evenly distributed across all health service facilities in Indonesia.

Based on the preliminary study conducted, Melai Health Center already has an e-health center application which includes an electronic medical record form, of course this opens up opportunities to implement electronic medical records, however the implementation of the e-health center has not gone well because not all officers understand the use of e-health centers, unstable networks/error networks and lack of supporting tools in the form of computers as tools to run e-health centers. Through the policy of Minister of Health Regulation No. 24 of 2022 Article 3 paragraph (1) states that every health service facility is required to organize electronic medical records. Meanwhile, Article 45 emphasizes that all health service facilities must implement electronic medical records in accordance with the provisions of this ministerial regulation, no later than December 31, 2023.

Considering the background above, the researcher is interested in raising the title "Evaluation of the Implementation of Electronic Medical Records at the Melai Health Center in 2024".

METHODOLOGY

The research method used in this study is phenomenology. Phenomenological research is a type of qualitative research that focuses on deeper observation and listening to individual explanations and understandings of their experiences. In this study, the emphasis is placed on finding, learning, and conveying the meaning of phenomena or events that occur and their relationship to ordinary people in a particular context. The subjects of the study consisted of four people, namely one medical records officer, two patient registration officers, and one person in charge of the e-health center application, which in the application contains an electronic medical record form as triangulation. While the object of research refers to the target or thing studied in this study. The object of this study is to evaluate the use of electronic medical records. The place where this research was carried out was the place where the research was carried out at the Melai Health Center located on Jl. La Buke, Melai Village, Murhum District, Baubau City, Southeast Sulawesi Province. The time of this research was conducted from March to June 2024.Data collection techniques in this study include observation, interviews, and documentation studies. The instruments used in this study are observation checklists, interview guidelines, and recording devices. Data analysis is carried out through the process of data reduction, data presentation, and drawing conclusions..

RESULTS & DISCUSSION

Based on the results of research at the Melai Health Center, related to the evaluation of the implementation of electronic medical records at the Melai Health Center, the researcher found the following results:

Organizational Work Culture
The influence of organizational work culture on the success of implementing electronic medical records in community health centers

It is known that the influence of organizational work culture on the success of the implementation of electronic medical records is related to one of the work cultures of the Melai Health Center, namely the letter I, which means innovative towards changing from conventional medical records to electronic medical records. This is supported by the results of interviews conducted directly with the officers, namely as follows:

"Especially for the Melai Health Center, its work culture is indirectly related to the name Melai points is the letter I (Innovative). This innovative work culture is one of the changes from the use o usually use paper/manual to electronic medical records."

This is further strengthened by the statement of the person in charge of the e-health center application when triangulating sources was carried out, namely as follows:

"For the work culture, previously we were accustomed and comfortable with paper-based medical records, but we had to adapt to things related to computerization, so we are required to always be able to innovate, namely we must be ready to accept changes/developments in the era, one form of which is the use of electronic medical records as is currently being implemented."

(Source Triangulation)

The meaning of the statement from the person in charge of the e-health center application above is that the work culture that was previously accustomed to using paper-based medical records, but with the development of the times, officers are required to be accustomed to computer-based electronic medical records.

Implementation of electronic medical records influences changes in work culture in community health centers

The implementation of electronic medical records affects changes in work culture in health centers, namely a work culture where previously many officers were indifferent to electronic developments, but have begun to get used to using computers. This is evidenced by the statement of the health center staff as follows:

> *"With the implementation of electronic medical records, indirectly, all officers at this health center must be able to innovate by implementing EMR, even though there are one or two people who feel hampered or do not agree, but they must still implement it."*
>
> *(Respondent A)*

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"The change in work culture is more towards cooperation, because previously, people were still working alone because they were used to and understood the old work, so with the emergence of this electronic medical record, everyone is just starting to learn from the beginning again, especially since there are still many who are not very proficient in using computers, so they often get help and have more discussions with other friends."*
>
> (Source Triangulation)

In an interview with the person in charge above, he explained that work culture greatly influences the implementation of electronic medical records. This can be seen from health center officers who were previously accustomed to their old jobs and then switched to electronic medical records, making officers work together because there are still many officers who are not yet proficient in using computers, so they need skilled officers so that electronic medical records run well. The influence of the implementation of electronic medical records on the efficiency and quality of health services in health centers

The impact of implementing electronic medical records on the efficiency and quality of health services in health centers is faster and there are no more lost medical record files, but for officers who are no longer young, it is difficult to use electronic medical records unless assisted by other officers who are able to use computers. This is evidenced by the statement of the health center staff as follows:

> *"I think it has a big impact because you don't have to write it down anymore, you don't have to look for medical record files on the shelves which sometimes get lost so there is no previous history if it's lost, the service is also faster, but for those who are older it's a bit difficult because we have to accompany them and input them."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"It is very clear how the implementation of electronic medical records affects the quality of the service itself, because all medical records are already in the system so there is no such thing as lost files so indirectly it has improved the quality of health center services."*
>
> (Source Triangulation)

In the interview with the person in charge above, he explained that the quality of service was increasing and there were no more medical record files that were lost/not found.

The results of the study at the Melai Health Center found that work culture greatly influences the implementation of electronic medical records, this is proven by a work culture that helps each other or collaborates with each other. Officers who are able to use computers and also understand how to input electronic medical records help other officers who have difficulty in running the electronic medical records. The organizational culture is more directed at changing the system at the Health Center, which previously used manual or conventional medical records, now switching to electronic

medical records (EMR). In essence, the implementation of EMR in health centers aims to create a more effective and efficient work system, as well as facilitate patient services.

In line with research conducted by Silvia(2023),which states that the organizational work culture, medical record officers at the Teja Health Center are in a condition that will be ready if RME is implemented in accordance with Permenkes No. 24 of 2022 concerning the description of the electronic medical record system that will run, cooperation between medical record officers at the Teja Health Center is very good because officers share knowledge when they have difficulty in running medical records, officer communication is also good, they ask each other if they have difficulty operating the computer, and there is also support from the Head of the Health Center and all staff related to the implementation of RME.

This is supported(Riyanti et al., 2023), from the cultural side, the speed of service to patients is important so that patients do not wait too long, and patient history can be accessed more easily in the implementation of electronic medical records. Organizational Work Culture that is not supported by the existence of a workflow on the implementation of electronic medical records will cause patients to wait long and search for patient history will be difficult.

Human Resources

The level of readiness of health workers in community health centers in implementing electronic medical records in terms of knowledge and skills

The readiness of health workers in health centers in implementing electronic medical records in terms of knowledge and skills of each officer has different levels of readiness, which can be seen from each individual, some are completely ready to some are not at all ready because the level of curiosity of each person is different. This is evidenced by the statement of the health center staff, namely as follows:

> *"For each individual, their readiness is different, some are ready, some are half-hearted, and some feel that it is not enough at all because the level of curiosity about new things varies from person to person."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"If this readiness is different for each person, but again all health workers in health centers must be ready for the implementation of this electronic medical record, plus there are many things that need to be learned in using electronic medical records, especially the many features in it."*
>
> (Source Triangulation)

In the interview with the person in charge above, he explained that each person's readiness is different, but everyone must be ready for the implementation of RME because there are many things that need to be learned in it and also the features available in the e-health center application. The existing RM officers have attended training/workshops/seminars and similar activities related to the implementation of electronic medical records.

The training/workshop/seminar related to the use of electronic medical records has been attended by 4 officers from the Melai Health Center, but then the officer added that those from medical record education itself do not yet exist at the Melai Health Center. This is proven by the statement of the health center staff as follows:

> *"Incidentally, this has been implemented yesterday at LAPKESDA in February, if I'm not mistaken, 4 people participated yesterday, but there were no basic medical records at this health center."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"We have already conducted the training yesterday around February, around 4 people participated in the training, but those whose school is in medical records are not yet in this health center, so only officers in this health center participated in the training."*
>
> (Source Triangulation)

In the interview with the person in charge above, he explained that 4 health center officers had participated in a training program for the use of electronic medical records. Challenges faced by health workers in the transition from conventional medical record systems to electronic systems in health centers

The challenges faced in the transition from conventional medical record systems to electronic medical record systems are from human resources, facilities and infrastructure, unstable networks. This is evidenced by the statement of the health center staff as follows:

> *"If the challenges faced are already many, first of all, human resources, then infrastructure, both in terms of facilities and infrastructure, then the network that currently only uses wifi which is sometimes dead, if for the location of the health center which is also in the mountains so that it also hinders the network which is sometimes lost, there is something called age factor because if the age is getting older then it is enough to just give up (it is difficult to keep up with the development of the times)"*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"This one definitely has many challenges, such as human resources not yet fully willing to use electronic medical records, the tools used, such as computers, are still lacking here, and the network often disappears and reappears, which is a challenge."*
>
> (Source Triangulation)

In an interview with the person in charge above, he explained that the challenges in dealing with electronic medical records are that human resources are not yet fully willing to use electronic medical records, there are not enough computers and the network is intermittent/unstable.

Based on research conducted at the Melai Health Center, Human Resources (HR) is a component that plays an important role in the implementation of electronic medical records. This can be seen from the first step taken by the Melai Health Center by sending health center officers to attend electronic medical record training held by the Baubau City Health Office. Then the person in charge or officers who attended the training were tasked with entering basic health center data (master data) into the electronic medical record application, in this case the e-health center application, and also conducting socialization to all other Melai Health Center staff.

In line with research conducted by(Captain et al., 2023), Human resources as users of e-health centers are an important factor in determining the success of the implementation and development of e-health centers. Therefore, efforts are needed to improve the capacity of human resources and management that is planned in a mature and comprehensive manner according to needs. This improvement must be carried out gradually and sustainably, both through formal and non-formal education channels, as well as the development of competency standards needed to support the development and implementation of e-health centers. According to(Hidayat & Sari, 2017),level of experience with information systems, training, organizational culture, and user participation influence user involvement. According to(Sudirahayu & Harjoko, 2017), officers need appreciation, a conducive work environment, and the right skills to run SAP as a tool to support the optimization of local government tasks.

Leadership Governance

Health center leadership can increase participation and collaboration between staff in the electronic medical record implementation process.

The leadership of the health center can increase participation and collaboration between staff in the process of implementing electronic medical records is the important role of leaders in providing

motivational support, suggestions, and rewards without giving sanctions because officers already have an important role and responsibility for electronic medical records. This is evidenced by the statement of the health center staff as follows:

> *"As I said earlier, how important is the role of this leadership in giving us advice to continue inputting in the electronic medical record application, giving us support, and giving rewards without having to give us sanctions because we already have our respective roles and responsibilities."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"The leadership must give us rewards, such as giving us holidays without any sanctions."*
>
> (Source Triangulation)

In the interview with the person in charge above, he explained that the readiness of human resources for the implementation of medical records must be ready because it is a mandate from the law that health centers must use electronic medical records. The leadership and governance structure influences decision making in the implementation of electronic medical records in health centers.

The leadership and governance structure that influences decision-making in the implementation of electronic medical records in health centers is a system of participation and cooperation in the decision-making process. This is evidenced by the statement of the health center staff as follows:

> *"The leadership structure that uses a system of participation and automatic cooperation in the decision-making process uses a consensus system where we are called to hold discussions and get results that have been approved by all health center staff."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"decision making is done during internal health center meetings, so during the meeting staff express their opinions and complaints while using electronic medical records. After the staff express their opinions, the head of the health center makes a decision and tries to resolve staff complaints"*
>
> (Source Triangulation)

In the interview with the person in charge above, he explained that decision making in the implementation of electronic medical records was done by holding an internal health center meeting to find out the opinions and complaints of staff while using electronic medical records, which in fact, after the meeting was held, the head of the health center made a decision and immediately sought a solution to resolve complaints from health center staff while implementing electronic medical records.

Based on the results of interviews conducted, the Melai Health Center does not yet have an SOP on electronic medical records or a special SOP related to medical record activities at the health center. The Melai Health Center has received training on electronic medical records from the Baubau City Health Office. The Head of the Melai Health Center appoints a person in charge of medical records who is willing to apply electronic medical records. Budget planning at the Melai Health Center must be carried out in order to support the implementation of electronic medical records due to the still limited number of computers and printers and an unstable network. Support from the leadership plays an important role in the success of the implementation of EMR. This can be seen from the results of the study, where users stated that they would follow the provisions if the leadership requires the use of EMR and direct data entry via computer. Another factor that can motivate users in implementing EMR is the existence of awards or rewards.

Based on research conductedby Silvia(2023), statethat the readiness of electronic medical records in the aspect of leadership governance by having SOPs is very important as a guideline in carrying out work to minimize errors in providing services if it has been implemented and implemented properly. The readiness of the officer's leadership governance has been shown by the readiness in implementing RME. Effective leadership governance has rules that must be obeyed by officers. One policy that can be implemented is the recommendation to run electronic medical records, which can be socialized to officers through education. Leadership governance that is not supported by the existence of Standard Operating Procedures (SOPs) on electronic Medical Records as a guideline in carrying out electronic Medical Record work will have an impact on work management, causing the work carried out to be unstructured and there is no basis for carrying out its work. According to(M.Muzuh et al., 2023), states that Standard Operating Procedures (SOP) are a series of guidelines or stages used to carry out certain routine work processes, so that every work process carried out must be in accordance with and consistent based on the SOP that has been created.

IT Infrastructure

Factors influencing the success or failure of electronic medical record implementation in community health centers

Factors that influence the success or failure of implementing electronic medical records in health centers are that there are still officers who are not willing to implement an electronic medical record system, facilities and infrastructure such as computers are still lacking and the wifi network is often unstable because the health center is located in the mountains. This is evidenced by the statement of the health center staff as follows:

> *"As I mentioned earlier, it is a human factor, there are still those who do not want to implement an electronic medical record system, the facilities and infrastructure starting from computers, networks and locations."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"Emm, the factors are like the lack of computers, the network is not supportive enough. Because it must always be inputted every day using the internet network"*
>
> (Source Triangulation)

In the interview with the person in charge above, he explained that the readiness of human resources for the implementation of medical records must be ready because it is a mandate from the law that health centers must use electronic medical records.

IT infrastructure affects the implementation of electronic medical records. The IT infrastructure in the health center currently still lacks computers and the wifi network is unstable (often down). This is evidenced by the statement of the health center staff as follows:

> *"For IT infrastructure, there is currently a shortage of computers and the WiFi network often disappears and reappears."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"Computers are still lacking because there are only a few computer units here, and the network also doesn't support it, so sometimes input is often late."*
>
> (Source Triangulation)

In an interview with the person in charge above, he explained that the number of computers was still lacking and the network did not support electronic medical record activities, so this often caused delays in inputting electronic medical records. The Health Center has software, hardware and a

computer network or software used for EMR as well as facilities and infrastructure provided for the implementation of electronic medical records.

The health center has software, hardware and computer networks or software used for EMR as well as facilities and infrastructure provided for the implementation of electronic medical records, there are already computers and printers but the number is still limited and. This is evidenced by the statement of the health center staff as follows:

> *"There is already an e-health center, the facilities and infrastructure are also available, such as computers and printers, but the number is limited."*
>
> (Respondent A)

In line with the statement of the health center staff above, the same thing was conveyed by the person in charge of the e-health center application in the interview conducted, namely as follows:

> *"There is already e-health center software that we can access via the web. There are also computers and printers at the health center that we use for electronic medical records."*
>
> (Source Triangulation)

In an interview with the person in charge above, he explained that the health center already has software called e-health center which is accessed via the web, has computers and the reliability and security of IT infrastructure in maintaining the confidentiality of patient data in the use of electronic medical records at the health center.

The reliability and security of IT infrastructure in maintaining the confidentiality of patient data in the use of electronic medical records, namely vendors offering e-health center applications who are responsible for the security of data contained in the electronic medical records.. This is proven by the statement of the health center staff as follows:

> *"There is a vendor who taught us yesterday who monitors security, so it seems like it will be safe."*
>
> (Respondent A)

The same thing was conveyed by the person in charge of the e-health center application in an interview, namely as follows:

> *"Incidentally, this e-health center application is not the health center application itself but collaborates with a vendor whose data security can be guaranteed."*
>
> (Source Triangulation)

In an interview with the person in charge above, he explained that there is a vendor who works with the health service who can guarantee the security of patient medical record data in electronic form.

Based on the interview results above, it was found that the Melai Health Center has a computer device or system consisting of two components, namely hardware, which includes a computer machine, and software which is a program that processes it. Electronic medical record software (e-health center) is included in the application software category. The obstacles to the implementation of electronic medical records at the Melai Health Center are the lack of computers, the internet network (wifi) which is often unstable (down) so that it hinders input into electronic medical records. The Melai Health Center does not have a generator that can be used as a supporting tool if there is a power outage.

This is in accordance with the theorywhich states that to support the innovation of information systems to be developed, such as SIMRS, technical readiness is required, namely the capabilities of hardware and software. In addition to relying on human resources, an information system also relies on hardware, software, databases, and networks to perform input, processing, output, storage, and control activities that change data resources into information products.(Cordylia Amelinda Jeannette Sulistya, 2023).Based on these results, it is in line with research Cordylia Amelinda Jeannette Sulistya (2023), that inadequate computer constraints will impact the readiness of infrastructure needs in the implementation of electronic medical records physical components that must be prepared in infrastructure readiness are servers, computers, personal computers (PCs), dial-up modems, wireless

hardware, printers, scanners, and others as needed. Technical components that must be prepared include software, networks, interfaces, back ups, and backup power supplies(Faida & Ali, 2021).

CONCLUSION

In the Organizational Work Culture at the Melai Health Center, namely a work culture that helps each other or collaborates with each other. Organizational culture focuses more on changing the system in the health center, which previously used manual or conventional medical records, now switching to RME. In human resources, there are no officers with D3 medical record competencies. 4 officers have participated in electronic medical record training organized by the Baubau City Health Office. There are still some officers who are not yet fluent in using computers and e-health center applications, but officers work together and help each other when other officers do not understand how to use the electronic medical record application. In leadership governance that supports the implementation of electronic medical records, awareness, participation and cooperation between officers are very necessary because the features contained in electronic medical records are interrelated with each other so that good collaboration is needed to improve services using electronic medical records. The motivation given by the leadership influences the implementation of electronic medical records. The Melai Health Center does not yet have an SOP on electronic medical records. The Melai Health Center is still in the implementation stage of electronic medical records. In the IT infrastructure of Melai Health Center, there are 2 computers that can be used properly, there is a wifi network but it is unstable because the location of the health center is on a plateau and does not have a generator. Melai Health Center has implemented RME but for data security it is the responsibility of the vendor.

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REFERENCES

Cordylia Amelinda Jeannette Sulistya, R. (2023). Literature Review: Tinjauan Kesiapan Penerapan Rekam Medis Elektronik Dalam Sistem Informasi Manajemen Di Rumah Sakit Literature Review: Review of Readiness for Application of Electronic Medical Records in Management Information Systems in Hospitals. *Indonesian Journal of Health Information Management (IJHIM)*, *1*(2), 7. https://ijhim.stikesmhk.ac.id/ojsdata/article/view/12/9

Faida, E. W., & Ali, A. (2021). Analisis Kesiapan Implementasi Rekam Medis Elektronik dengan Pendekatan DOQ-IT (Doctor's Office Quality-Information Technology). *Jurnal Manajemen Informasi Kesehatan Indonesia*, *9*(1), 67. https://doi.org/10.33560/jmiki.v9i1.315

Haqqi, A., Aini, N. N., & Wicaksono, A. P. (2020). Analisis Faktor Penyebab Keterlambatan Pengembalian Berkas Rekam Medis Rawat Inap di RS Universitas Airlangga. *J-REMI : Jurnal Rekam Medik Dan Informasi Kesehatan*, *1*(4), 492–501. https://doi.org/10.25047/j-remi.v1i4.2158

Haryani, D. S., & Satriadi, S. (2019). Penerapan E-Puskesmas Pada Puskesmas Tanjungpinang. *Jurnal Penelitan Ekonomi Dan Bisnis*, *4*(2), 153–165. https://doi.org/10.33633/jpeb.v4i2.2566

Hidayat, A. R., & Sari, W. E. (2017). Analisis Kesiapan (Readiness Assessment) Penerapan Electronic Medical Record di Klinik Rawat Inap PKU Muhammadiyah Pakem. *Indonesian Journal On Medical Science*, *4*(1), 147–155.

Kapitan, R., Farich, A., & Perdana, A. A. (2023). Analisis Kesiapan Penerapan Rekam Medis Elektronik RSUD Bandar Negara Husada Provinsi Lampung Tahun 2023. *Jurnal Kebijakan Kesehatan Indonesia*, *12*(4), 205. https://doi.org/10.22146/jkki.89841

Khasanah, L., & Budiyanti, N. (2023). Kesiapan Penerapan Rekam Medis Elektronik di Puskesmas Wilayah Kota Cirebon Tahun 2021. *Jurnal Informasi Kesehatan ...*, *9*(2), 192–201. https://ojs.poltekkes-malang.ac.id/index.php/JIKI/article/download/3836/652

M.Muzuh, Budiaty, W. O. S., & Sari, S. M. (2023). Analisis Penyebab Terjadinya Misfile Berkas Rekam Medis di Ruang Filling Puskesmas Bungi Kota Baubau. *Jurnal Promotif Preventif*, *6*(3), 458–464. http://journal.unpacti.ac.id/index.php/JPP

Mayang, S., Amirudin, A., & Lestari, S. L. (2024). Perancangan Sistem Informasi Retensi dan Penyusutan Berkas Rekam Medis di Rumah Sakit. *Jurnal Sains Dan Kesehatan*, *3*(1), 35–43. https://doi.org/10.57151/jsika.v3i1.370

Nur'aini, A ; Dian Budi Santoso,S.K.M., M. P. . (2019). *Kesiapan Penerapan Rekam Medis Elektronik Di Puskesmas Sleman*. 1–139.

Permenkes No. 24. (2022). Peraturan Menteri Kesehatan RI No 24 tahun 2022 tentang Rekam Medis. *Peraturan Menteri Kesehatan Republik Indonesia Nomor 24 Tahun 2022*, *151*(2), 1–19.

Permenkes Nomor 43. (2019). Peraturan Menteri Kesehatan RI No 43 tahun 2019 tentang Puskesmas. *Peraturan Menteri Kesehatan RI No 43 Tahun 2019 Tentang Puskesmas*.

Riyanti, R., Arfan, A., & Zuana, E. (2023). Analisis kesiapan penerapan rekam medis elektronik: Sebuah studi kualitatif. *Holistik Jurnal Kesehatan*, *17*(6), 507–521. https://doi.org/10.33024/hjk.v17i6.12867

Silvia. (2023). *Elektronik Di Unit Rekam Medis Puskesmas Teja Pamekasan Menggunakan Metode Doq-It Elektronik Di Unit Rekam Medis Puskesmas Teja*.

Sudirahayu, I., & Harjoko, A. (2017). Analisis Kesiapan Penerapan Rekam Medis Elektronik Menggunakan DOQ-IT di RSUD Dr. H. Abdul Moeloek Lampung. *Journal of Information Systems for Public Health*, *1*(3). https://doi.org/10.22146/jisph.6536

Tarigan, S. F. N., & Maksum, T. S. (2022). Pemanfaatan Layanan Sistem Informasi E-Puskesmas Dengan Menggunakan Metode Pieces. *Jambura Health and Sport Journal*, *4*(1), 29–36. https://doi.org/10.37311/jhsj.v4i1.13446