

Overview Of Readiness To Implement Electronic Medical Records At RSU Imelda Indonesia In 2023 Follows Up On Minister Of Health Regulation Number 24 Of 2022

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ABSTRACT

RSU Imelda Indonesian workers plan to switch to electronic medical records, this needs to be done a readiness assessment. According to PERMENKES No.24 of 2022 states that every health service facility is required to carry out electronic medical records. Electronic medical records are the use of information technology devices for collecting, storing, managing, and accessing data stored in patient medical records in hospitals in a management system, the purpose of this study is to determine the readiness of RSU Imelda Indonesia in implementing electronic medical records. This type of research is descriptive research with a qualitative approach, the subjects in this study are medical record officers and information technology (IT) officers. The results of the study are reviewed from the Man factor, there are already officers who are responsible for processing electronic medical records as well, namely IT officers and also IT Support officers who can handle if there is a long time server system in the implementation of electronic medical records. In the Methode factor, there is no planning related to making policies and procedures regarding the application of electronic medical records. On the Money factor there is already a budget but for the budget scheme it has not yet been drawn up. In the Machine factor, facilities and infrastructure are sufficient, but it is necessary to increase the speed of the internet network in the hospital. In non-technical facilities, training and socialization have been carried out to officers related to the use of electronic medical records

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INTRODUCTION

Seeing the current development of science and technology where obtaining or receiving accurate information whose realization will be used for the running of company functions or will be used as a reference to assist leaders in making decisions. The rapid development of technology has also caused online changes to provide excellent information and services efficiently in terms of time, cost and energy. The use of various aspects is not only humans who are starting to be replaced but also several management systems, one of which is the health management system (Maulana et al., 2022).

On September 12, 2022, the government through the Ministry of Health issued Minister of Health Regulation No. 24 of 2022 concerning Medical Records. In this regulation, the Ministry of Health (Kemenkes) states in Article 3 that every health service facility must hold electronic medical records, health service facilities as referred to consist of practicum places for doctors, dentists, and other health workers, puskesmas, clinics, hospitals, pharmacies, health laboratories, halls, and other health service facilities determined by the minister. Article 7 states that the implementation of electronic medical records is carried out from the time the patient enters until the patient is discharged, referred, or dies and article 45 states that all health care facilities must maintain electronic medical records in accordance with the provisions in this Ministerial Regulation no later than December 31, 2023 (Permenkes RI, 2022). With this policy, health service facilities are expected to be able to improve the medical record management system that has not been implemented optimally. One of the points highlighted in the Minister of Health Regulation Number 24 of 2022 is

the obligation to manage RME. The purpose of this appeal from the Ministry of Health is that the implementation of medical records can be regulated in a way based on information systems so that later it can advance the quality of health services, bear the safety and confidentiality of databases, create digital-based medical record management (Neng Sari Rubiyanti, 2023).

Based on the results of previous research (Maha Wirajaya & Made Umi Kartika Dewi, 2020) at Dharma Kerti Hospital Tabanan for the period of February 2020 from the results of research that Dharma Kerti Hospital Tabanan is quite ready to implement RME. Quantitatively, judging from the organizational culture, the hospital is quite ready at 68.57%. Judging from governance, which is 71.43% and seen from hospital human resources, which is 57.14%. In addition, judging from the infrastructure, which is 58.57%. Qualitatively, there are still some shortcomings, namely no training, no SOPs, leaders have not formed a special team and do not have adequate IT. Based on the results of research (Avianti, 2023) at Lukas Bangkalan Hospital, judging from the 5M method, namely from the Man factor, all medical record officers totaled 7 people, officers had never attended training related to electronic medical records. From the Money factor, there is already a budget needed but has not been compiled in detail. In the Material factor, there are obstacles faced, namely: cannot change the primary diagnosis, there is no notification when one patient has been registered at the poly, and in the emergency room registration section, there are only two choices for gender column items. Machine factors need to add infrastructure such as computers. Methods factor there is no planning related to making policies and procedures regarding the application of electronic medical records. Based on an initial survey conducted by researchers through observations at RSU Imelda Indonesia. The author found that filling in medical records is still in manual form and is not in accordance with Minister of Health Regulation Number 24 of 2022 and there are still illegible records of health workers in medical records.

METHOD

The type of research used is descriptive research with a qualitative approach. Descriptive research is research to see a picture of phenomena that occur in a particular population. Meanwhile, qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior (Anggreni, 2022). The informants in this study were 1 information technology (IT) officer and 3 medical record officers at RSU Imelda Indonesia. Data collection techniques in this study are interviews, observations and documentation used in collecting data.

Data Processing Techniques. Collecting (data collection) is the collection of data needed in this study is carried out by observation and interview Editing is the examination of data from research data to correct existing errors so that valid and accountable data can be obtained. The editing done in this study is to check the form filling (interview) whether the answers are clear and consistent. Presentation of data is the making of reports on the results of research that has been done so that it can be understood and analyzed with the desired purpose. The presentation of data in this study is narrative. In this study, data analysis was carried out in a qualitative descriptive manner, namely by describing the data that has been collected and processed into analysis results to see the Readiness Picture of Electronic Medical Record Implementation at RSU Imelda Indonesian Workers in 2023 Following up on Minister of Health Regulation Number 24 of 2022.

RESULTS AND DISCUSSION

Research Results

The respondents in this study were medical records officers and information technology (IT) expert officers. The characteristics of these respondents can be seen from the educational qualifications and length of work at RSU Imelda Indonesia, can be seen from the following table:

Table 1. Characteristics of Respondents at RSU Imelda Indonesia

No	Respondent	Gender	Age	Recent Education	Department	Length of Work
1	Mr.A	Man	33 Years	D-III Medical Records	Head of medical records	6 Years
2	Mr.O	Man	24 Years	D-III Medical Records	Medical records officer	5 Years
3	Mrs.A	Woman	24 Years	D-III Medical Records	Medical records officer	5 Years
4	Mr.D	Man	25 Years	S.Kom	IT Officer	5 Years

Based on table 1, it is known that 3 medical record officers who were respondents in this study already had medical record education qualifications and 1 Information technology (IT) expert officer who had educational qualifications in the computer field.

Application of Electronic Medical Records

The results of interviews obtained from 4 informants, namely information technology officers and medical record officers at RSU Imelda Indonesia, namely:

1. Man Factor (Human Resources)

Is there a dedicated team in the process of implementing electronic medical records?

"sudah dek kita ada petugas IT yang menjadi tim penerapan rekam medis elektronik." (Answer 1)

"Ada dek dan itu petugas IT di rumah sakit yang menjadi tim khusus nya dek " (Answer 2)

"Ia dek ada itu petugas IT." (Answer 3)

"ada dek tim khusus nya utamanya itu ada tim IT yaitu saya sendiri dek biasanya itu yang menghendel jaringan, service komputer dan seperti formulir rekam medis itu atau yang manualnya dari orang rekam medis dek jadi nanti programmer nya tinggal ngembangkan saja menggunakan sistem" (Answer 4)

Is there a special team on duty if there are problems in the use of electronic medical records?

"Pasti ada dek apabila terjadi error aplikasi itu y pasti ada tim khusus itu nanti petugasnya ahli IT langsung dek." (Answer 1)

"ada dek untuk tim khususnya ada dan ahli IT dek yang menangani." (Answer 2)

"ada dek disini kita ada ahli IT yang menangani." (Answer 3)

"ada, ada petugasnya dek ada namanya IT support jadi nanti mereka ini kalau ada kendala mereka bikin laporan misalnya kendalanya long time system server nya bermasalah jadi memang teknis nya yang benar-benar yang menghendel itu lah dia, ada nanti petugasnya dek." (Answer 4)

2. Method Factor (Method)

Are SOPs available on electronic medical records?

"nah ini kalau SOP dek ini abang kurang tau ada apa gak karena ini dia belum kita sah kan nanti boleh tanya sama petugas IT aja dek." (Answer 1)

"untuk SOP rekam medis elektronik setau kk masih belum dek karena saat ini kita masih menggunakan yang manual saja untuk SOP." (Answer 2)

"Untuk SOP masih belum kita buat dek." (Answer 3)

"SOP nya sama seperti manual juga cuma bedanya klo elektronik dia lebih kebanyakan ke regulasinya misalkan penggunaan tanda tangan elektronik itu ada SOP nya dek dan untuk saat ini masih belum di buat." (Answer 4)

3. Money Factor

Is there a budget available for equipment purchases and maintenance in electronic medical records?

"kalau untuk anggaran dek saat ini sudah ada " (Answer 1)

"kalau saat ini sudah ada anggarannya dek" (Answer 2)

"untuk anggaran nya dek saat ini sudah tersedia." (Answer 3)

"saat ini anggaran sudah ada namun untuk skema anggaran yang dibutuhkan belum disusun secara detail." (Answer 4)

4. **Machine Factor**

Is there the availability of tools such as laptops or computers, network availability and applications in the implementation of electronic medical records?

"kalau untuk komputer dek ini pasti sudah semua ruangan ada, untuk jaringan komputer pun sudah ada dan untuk aplikasi nya kita akan menggunakan aplikasi rekam medis elektronik dek." (Answer 1)

"kalau untuk kesediaan komputer dek sudah ada, jaringan komputer pun ada, kalau aplikasi sudah ada itu menggunakan rekam medis elektronik namanya dek." (Answer 2)

"untuk komputer nya sudah ada kalau untuk aplikasinya kita menggunakan aplikasi rekam medis elektronik dan jaringan pun kita sudah ada di rumah sakit ini." (Answer 3)

"semua sarana dan prasarana nya sudah ada, aplikasinya pun sudah ada cuman tinggal pemanfaatan saja dek." (Answer 4)

Are the supporting tools provided sufficient in the use of electronic medical records?

"kalau untuk jumlah nya dek nanti coba di tanya sama petugas IT aja dek abang kurang tau juga sudah cukup atau tidak." (Answer 1)

"untuk alat penunjang nya dek sudah ada coba tanya aja sama petugas IT karena mereka yang lebih paham soal itu dek" (Answer 2)

"itu nanti coba tanyakan saja sama petugas IT ya dek karena abang kurang tau." (Answer 3)

"kalau untuk komputer sudah sih dek tapi seperti kalau untuk kecepatan internetnya itu perlu ditambah lagi dek." (Answer 4)

5. **Non Technical Facilities**

Has socialization been carried out to human resources who will use or run electronic medical records?

"sudah dek, sudah di sosialisasikan dan saat ini kita dan petugas lainnya masih belajar menggunakan rekam medis elektronik." (Answer 1)

"sudah dek kemarin sudah di sosialisasikan dan saat ini kita masih belajar menggunakan rekam medis elektronik." (Answer 2)

"sudah di sosialisasikan dek dan saat ini kami para petugas saat ini masih belajar menggunakan rekam medis elektronik." (Answer 3)

"semua unit yang terlibat sudah di sosialisasikan dan saat ini masih training atau belajar menggunakan tapi sudah ada pemanfaatannya dek." (Answer 4)

Observations

Observations made at RSUD Imelda Indonesia are related to the Methode factor. Currently, RSUD Imelda Indonesia still does not have a Standard Operating Procedure (SOP) for electronic medical records because electronic medical records have not been authorized for use and currently still use a manual system.

Observations made at RSUD Imelda Indonesia are related to the current Machine factor for facilities and infrastructure is sufficient and each service unit has a computer, for the network it is available and for medical record applications it is available on several computers already installed electronic medical record applications.

Man Factor (SDM)

Based on the results of interviews with medical record officers and information technology officers at RSUD Imelda Indonesia, information was obtained that in the process of implementing electronic medical records, there is a special team, namely information technology officers who are

responsible for planning, processing, and maintaining all aspects of information technology in the application of electronic medical records at RSU Imelda Indonesia and when problems occur such as *long time system servers* In the use of electronic medical records, it already has a special team in handling this, namely *IT support*.

Based on the regulation of the Minister of Health number 24 of 2022, article 13 states that the activities of organizing electronic medical records as referred to in paragraph (1) letter a, letter b, and letter d to letter h are carried out by health workers and can coordinate with other work units. This affects the importance of human resources in managing and operating electronic medical records in hospitals.

Method Factor (Method)

Based on observations and interviews with medical record officers and information technology officers at RSU Imelda Indonesia, information was obtained that currently RSU Imelda Indonesia does not have policies and procedures in the form of SOPs on electronic medical records because currently the use of electronic medical records is still not fixed and is still 70% running and on December 31, 2023 RSU Imelda Indonesia held the entire use of electronic medical records 100%

Based on the regulation of the Minister of Health number 24 of 2022, article 7 paragraph (2) states that health service facilities must standardize operational procedures for the implementation of electronic medical records as referred to in paragraph (1) tailored to the needs and resources of each health service facility by referring to the guidelines for electronic medical records. It also aims to ensure the completeness, security, and confidentiality of electronic medical records and maintain optimal quality of health services.

Money Factor

Based on the results of observations and interviews with medical record officers and information technology (IT) officers at RSU Imelda Indonesia, information on the provision of budget in the process of implementing electronic medical records is still not agreed or agreed on how much the target budget is in meeting the needs of electronic medical records. Based on Minister of Health Regulation 24 of 2022 article 20, it is stated that the storage of medical records must ensure the security, integrity, confidentiality, and availability of electronic medical record data. In the case of storage stated can be:

1. Server
2. Cloud computing systems that are certified in accordance with the provisions of laws and regulations and or
3. Other digital-based medical storage based on technological developments and certified information

In storing electronic medical records, it must also have a backup data (*backup system*) which of course requires a lot of money considering the cost of purchasing a server requires large costs and also on server maintenance.

Machine Factor

Based on the results of observations and interviews with medical record officers and information technology officers at RSU Imelda Indonesia, information was obtained on the provision of facilities and infrastructure in the process of organizing electronic medical records are now available in every room unit such as computers that function as electronic storage of information about health status and health services obtained by patients throughout their lives, An internet network that functions to access information such as searching for patient data and electronic medical record applications is also available. In the supporting tools that have been

provided such as computers, as many as 85 computers are available and in the provision of internet networks, it is necessary to increase the speed of the internet network.

Based on the regulation of the Minister of Health number 24 of 2022 article 13 paragraph (1), the activities of organizing electronic medical records consist of at least the following:

- a. Patient registration
- b. Distribution of electronic medical record data
- c. Filling in clinical information
- d. Electronic medical record information processing
- e. Data decay for financing klian
- f. Electronic medical record storage
- g. Electronic medical record quality guarantor
- h. Transfer of the contents of electronic medical records

Hal tersebut diatas berpengaruh pada penyediaan sarana dan prasarana seperti penyediaan komputer, jaringan internet dan aplikasi rekam medis elektronik dalam melaksanakan segala kegiatan pelayanan di rumah sakit berbasis elektronik di RSUD Imelda Indonesia.

Non Technical Facilities

Based on the results of observations and interviews with medical record officers and information technology officers at RSUD Imelda Indonesia, information has been obtained that socialization has been carried out to health workers related to the use of electronic medical records and currently health workers at RSUD Imelda Indonesia are still in the process of training and learning in using electronic medical record applications in order to improve quality in digital transformation to make it easier to access data and Ease in distributing data and ease of use of electronic medical record applications.

Based on the regulation of the Minister of Health number 24 of 2022, guidance and supervision in implementing electronic medical records are directed to guarantee and improve the quality of electronic medical record services, guidance and supervision as referred to in paragraph (1) can be carried out through:

- a. Socialization
- b. Monitoring and evaluation
- c. Technical guidance

This is so that every health worker who carries out service activities at RSUD Imelda Indonesia already understands the use of electronic medical record applications and can manage the application.

CONCLUSION

The readiness to implement electronic medical records in terms of the Man (Human Resources) factor is quite ready because it was found that in the process of organizing electronic medical records at RSUD Imelda Indonesia, there is already a special team responsible for managing and operating electronic medical records, namely IT officers and there are also IT Support officers in case of problems such as long time server systems in the implementation of electronic medical records. The readiness to implement electronic medical records in terms of the current Methode factor of RSUD Imelda Indonesia still has not made Standard Operating Procedures (SOPs) related to policies on electronic medical records. The readiness to implement electronic medical records in terms of the Money factor is currently ready and exists, but the budget scheme needed has not yet been prepared. The readiness to implement electronic medical records in terms of the Machine factor is quite ready to provide computers at RSUD Imelda Indonesia, currently numbering 85 computers for the availability of existing internet networks, but it is necessary to increase network speed. The

readiness to implement electronic medical records in terms of Non-Technical facilities is quite ready because currently at RSU Imelda Indonesia socialization has been carried out to health service workers in the use of electronic medical record applications.

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