

ANALYSIS OF ELECTRONIC MEDICAL RECORD TECHNOLOGY READINESS REVIEWED FROM SOP AND HUMAN RESOURCE READINESS IN OUTPATIENT AND INPATIENT INSTALLATIONS AT KORPRI CLINIC, SUKABUMI DISTRICT

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ABSTRACT

Minister of Health Regulation No. 24 of 2022 requires all health facilities, including private practice health services, to use electronic medical records. The Indonesian Ministry of Health has given all health facilities no later than December 31 2023 to migrate to the electronic medical record system. To explore the implementation of electronic medical record technology. To explore the application of electronic medical records in terms of SOP. To explore the readiness of human resources in implementing electronic medical records To explore the readiness of infrastructure in implementing electronic medical records To explore nursing care in inpatient clinics The research method used by researchers in this research is descriptive qualitative research. Qualitative research data analysis is the process of systematically searching and collecting data obtained from interviews, field notes, and documentation. Data collection through interviews, observation and document review Availability of SOP related to RME Completeness of SOP components (procedures, responsibilities, equipment, etc.) Socialization and implementation of RME SOP. Officer competency (understanding of ESDM, operational capabilities, etc.) Availability of trained human resources Motivation and management support. Electronic medical records of satisfaction with services and barriers to RME operations. exploring infrastructure readiness for administering electronic medical records. To find out about nursing care in inpatient clinics. The conclusion from the analysis of the readiness of ESDM at the Korpri Clinic is that it is ready for use but there must be special training and guidance provided by the clinic. Suggestions for increasing EMR readiness are creating a basic budget for upgrading devices such as laptops and internet networks to support RME's success.

Keywords: Electronic Medical Records (RME) Readiness; human resources readiness; medical records management; Standard Operating Procedures (SOP) readiness

BACKGROUND

In the current era of digital and information technology, the use of electronic medical records has become a growing trend in various health care systems. Electronic medical records enable efficient and organized storage and management of patient medical information.

Minister of Health Regulation No. 24 of 2022 requires all health facilities, including private practice health services, to use electronic medical records. The Indonesian Ministry of Health has given all health facilities no later than December 31 2023 to migrate to the electronic medical record system.

Based on the research results of Dehy, et al, (2019) in a journal entitled "Analysis of Completeness of Outpatient Medical Records at Ganesha Hospital in Gianyar City in 2019". Completeness of administrative data is not yet completely complete, namely the identity of nurses is 85.3%, while completeness of clinical data on anesthesia is 43%. Supported by writing from Lily Widjaya and Siswati, (2019) in a journal entitled "Descriptive Study of Completeness of Medical Record Documents". The results of the completeness of administrative data are not yet completely complete, namely the doctor's identities are 78%, while the completeness of the clinical data is almost complete, the nursing records are 90%.

RESEARCH PURPOSES

- a. To explore the implementation of electronic medical record technology.
- b. To explore the application of electronic medical records in terms of SOP.
- c. To explore HR readiness in implementing electronic medical records
- d. To explore the readiness of infrastructure for implementing electronic medical records
- e. To explore nursing care in inpatient clinics

METHODS

The research method used by researchers in this research is descriptive qualitative research. Qualitative research data analysis is the process of systematically searching and collecting data obtained from interviews, field notes and documentation. Data collection through interviews, observation and document review.

RESULTS

There is no availability of SOPs related to RME. Completeness of SOP components (procedures, responsibilities, equipment, etc.) Socialization and implementation of RME SOPs must be carried out as soon as possible to facilitate accurate service and service procedures. Officer competency is maximum and fast for implementation (understanding of ESDM, ability operations, etc.) Availability of trained human resources Motivation and management support. Electronic medical records of satisfaction with services and barriers to RME operations. exploring infrastructure readiness for administering electronic medical records. To implement comprehensive and focused nursing care so that caring or service to patients can be maximized

To Explore the Implementation of Electronic Medical Record Technology

Based on the results of the interview, it was explained that the Korpri Clinic, Sukabumi Regency, has been using electronic medical records, namely the Olexa application, since January 2024 and has been implemented for patients starting from asking for complaints, measuring vital signs, weight, height and the features are already available, but In terms of satisfaction with medical record users, informant 6 expressed that he was not satisfied because it was still new and there were problems in terms of the internet network, while the other 6 informants reported that they were quite satisfied. However, in general, the use of electronic medical records was very helpful, such as faster and easier access to data, reducing potential recording errors, increasing the security and confidentiality of patient data, making it easier to share data between medical personnel.

The results of the research above are in line with the study conducted by Sabrina Almas Fadhillah at the Brebes Regional Hospital for the use of electronic medical records at the Brebes Regional Hospital which is also considered very helpful and increases service efficiency, however at the Korpri Clinic there are still problems related to the unstable internet network, whereas at the Brebes Regional Hospital this is the case. not a problem.

According to Minister of Health Regulation NO. 24 of 2022 explains the purpose of electronic medical records to improve the quality of health services, provide legal certainty in the administration and management of medical records, guarantee the security,

confidentiality, integrity and availability of medical record data and realize the implementation and management of medical records on a digital and integrated basis. In general, the implementation of electronic medical records at the Sukabumi Regency Korpri Clinic is in line with the objectives set out in Minister of Health Regulation NO. 24 of 2022, especially in terms of improving service quality, ensuring data security and confidentiality, and facilitating data access. However, it is still necessary to pay attention to obstacles related to the internet network in order to support the goal of implementing integrated electronic medical records.

Based on Minister of Health Regulation Number 24 of 2022, every health service facility, including clinics, is required to support and maintain electronic medical records. This electronic medical record will then be stored on the SATUSEHAT platform, allowing medical records to be accessed from one health facility to another. Sukabumi Regency Korpri Clinic has implemented electronic medical records since January 2024, in accordance with the mandate of Minister of Health Regulation Number 24 of 2022 which requires every health service facility to maintain electronic medical records, although there is a slight problem with the unstable internet network, which causes delays in services from medical staff.

Based on the discussion above, it is recommended that clinic management ensure the availability and stability of an adequate internet network. Investment in reliable information technology infrastructure will support the effectiveness of the use of the electronic medical record system as a whole. With continuous improvement and development, this system can provide more optimal benefits for medical personnel and patients.

To Explore the Implementation of Electronic Medical Records in View of the SOP

Based on the interview results, electronic medical record data is stored on the clinic's internal server which can only be accessed by authorized medical staff so that patient data is safely maintained, but there are a few obstacles because there is no SOP.

The results of the research above are in line with a study conducted by Anton Susanto (2016) at the PKU Muhammadiyah Hospital in Surakarta, showing that electronic medical record data can only be accessed by authorized staff and storing electronic medical record data on a server has a positive impact on data security and patient privacy, however. The hospital has clear SOPs.

According to PERMENPAN No. 35 of 2012, Standard Operating Procedures (SOP) are a series of standardized written instructions regarding various processes for carrying out organizational activities, how and when they must be carried out, where and by whom they are carried out. There are no clear and standard written guidelines regarding the implementation of various activities and processes in the clinic. This can lead to inconsistencies, inefficiencies, and potential errors in the execution of tasks. The existence of a comprehensive SOP is very important for the Korpri Clinic to ensure effectiveness, efficiency and compliance in carrying out all activities and processes at the clinic.

Based on the discussion above, the researcher believes that the Korpri Clinic needs to immediately develop and implement a comprehensive SOP for managing electronic medical record data. This SOP will ensure effectiveness, efficiency and compliance in carrying out all activities and processes related to electronic medical record data at the clinic.

To explore human resource readiness in implementing electronic medical records

Based on the discussion above, the researcher concluded that the Sukabumi Regency Korpri Clinic in implementing electronic medical records in terms of human resources, the researcher concluded that all informants had sufficient skills and knowledge because they had been provided with special training held at the Sukabumi Regency Korpri Clinic by Olexa, however not yet routinely held and still needs evaluation.

The results of the research above are in line with the study conducted by Sri Lestari (2010) at RSUD Dr. Gondo Suwarno Ungaran results show that human resources at RSUD Dr. Gondo

Suwarno Ungaran has sufficient understanding and skill in using the electronic medical record system because training is always held regularly and continuously to improve the competency of officers. However, other research conducted by Luh Gede Suci Ariani (2023) at UPTD Puskesmas III, North Denpasar District Health Service, shows that human resources at UPTD Puskesmas III, North Denpasar District Health Service do not yet have adequate knowledge and skills in using electronic medical records, so there is a need for them. more intensive and sustainable training to improve officer competency.

In the Minister of Health regulation guidelines Number 269/MENKES/PER/III/2008 it is explained that in the event that there are limited Medical Recorder and Health Information personnel at Health Service Facilities, the activities for administering Electronic Medical Records as intended in paragraph (2) can be carried out by other Health Personnel. who received training in Electronic Medical Record services. Sukabumi Regency Korpri Clinic has attempted to implement electronic medical records in accordance with the Minister of Health's regulations, but still requires adjustments and improvements, especially in terms of providing trained medical recorders and health information personnel as well as regular evaluation and development of staff competency. The limited number of medical recording and health information personnel who are trained in using electronic medical record systems will certainly result in less than optimal services.

Based on the discussion above, it is recommended that the Sukabumi Regency Korpri Clinic provide more routine training and regular evaluations to increase the competency of officers in using electronic medical records.

To explore the readiness of infrastructure for implementing electronic medical records at the Korpri Clinic

Based on the results of the research, it explains that the implementation of electronic medical records is seen from the readiness of facilities and infrastructure in implementing electronic medical records, that according to all the information for facilities and infrastructure is already available, such as laptops and printers, but there are no spares yet and there are also other obstacles in the other facilities section, namely network loading problems. and 5 other informants reported that there were problems due to sudden power outages.

The results of the research above are in line with a study conducted by Rizky Anindia (2016) at the Jetis Health Center, Yogyakarta City, which stated that hardware such as computers was available but there was no spare equipment, however at the Korpri Clinic there were still other obstacles such as unstable network problems and sudden power outages. Meanwhile, at the Jetis Health Center in Yogyakarta City, there is no problem.

Based on Minister of Health Regulation Number 24 of 2022 in CHAPTER 1 article 1 paragraph 5, a Health Service Facility is a tool and/or place used to provide health service efforts, whether promotive, preventive, curative or rehabilitative, carried out by the government, regional government, and/or the community. . Inadequate facilities and infrastructure can hamper the services of medical staff to patients. Clinics should optimize the implementation of electronic medical records, requiring increased readiness of infrastructure such as providing backup power sources and backup hardware devices.

To explore nursing care in inpatient clinics

Based on the research results, it is clear that for the application of electronic medical records, for the inpatient department, the patient assessment process has been carried out starting from asking about the patient's complaints, what the patient's health history is, such as drug allergies, then the informant (nurse) looks directly at the patient to provide direct nursing care and also input into the electronic medical record system. The informant revealed that when medical therapy is not successful, the informant will arrange other nursing care therapies such as warm compresses to treat pain or installing bladders and relaxation distraction techniques. To evaluate the success of nursing care indicators using soap subjective objective evaluation

planning analysis. According to inpatient clinic informants, when obtaining feedback from patients and families regarding satisfaction, they usually use direct interviews and use the available suggestion box so that feedback can occur for evaluation.

The results of the research above are in line with a study conducted by Mustika Rini (2019) at RSIA Bunda Aliyah explaining that the implementation of electronic medical records has made it easier to provide nursing care directly and integrated with the system. However, other research conducted by Zaky Much (2019) at the Darul Arqam Clinic in Garut showed that evaluation of the success of nursing care was carried out using the SOAP (Subjective, Objective, Analysis) method and feedback from patients and families regarding service satisfaction was obtained through direct interviews and suggestion boxes. . This is in line with research at the Korpri Clinic, Sukabumi Regency

In the Nursing Care guidelines according to Minister of Health Regulation No. 26 of 2019, nurses can carry out complementary and alternative nursing according to competency. Evaluation of the success of nursing care indicators has used soap evaluation but it is not optimal because it is not comprehensive, only one process is carried out. It is recommended that medical staff carry out a thorough evaluation of the soap so that service is more optimal.

Based on the discussion above, it is recommended that medical staff look at the application and spend less time interacting with patients directly, this can cause a loss of nurses' warmth, attention and empathy towards patients. To prevent this, it is important for nurses to interact with patients for a longer period of time, so that concern and empathy for patients is maintained. The use of applications should not make nurses neglect direct contact and adequate interaction with patients. A balance between the use of technology and personal attention to patients must be maintained. Nurses need to ensure that the use of applications does not reduce the quality and intensity of interactions and empathy provided to patients. Nurses must continue to provide warm attention and concern to patients.

DISCUSSION

Analyze the gap between SOP and HR readiness. There is no detailed SOP. HR is ready to use RME but there are still obstacles. Factors that influence ESDM readiness include the electricity internet network and no laptop backup. Strategies to increase ESDM readiness must have a special budget for maintenance and upkeep of devices such as laptops and other internet supports so that they remain ready to use. Effective.

The use of Electronic Medical Records (RME) is expected to improve and strengthen the benefits of medical records. The use of RME is primarily for patient service purposes, including clinical (medical) and administrative services. Information generated from RME is also useful for education, drafting regulations, research, community health management, policy support, and to support referral health services (Sudra, 2021).

Research from Purwanti, et al, (2000) in a journal entitled "Descriptive Study of Completeness of Medical Record Documents". The results of administrative data completeness were 100% complete, while clinical data completeness was not completely complete for anesthesia at 26.2%. In the journal entitled "Evaluation of Completeness and Accuracy of Electronic Medical Records at Kulonprogo Community Health Centers" Laili Rahmatul Ilmi (2017) conducted research aimed at evaluating the completeness and accuracy of RME in Kulonprogo. The results of the completeness research show that administrative data is 70% complete and accurate, demographic data is 80% complete and accurate because before the patient receives the examination, patient verification is carried out based on the method of payment. Vital sign data is incomplete (60%), diagnosis data is quite complete (50%) and the diagnosis code refers to ICD-IO but has not been checked regarding the accuracy of the code (Ilmi, 2017).

CONCLUSION

The conclusion from the analysis of the readiness of ESDM at the Korpri Clinic is that it is ready for use but there must be special training and guidance provided by the clinic. Suggestions for increasing EMR readiness are creating a basic budget for upgrading devices such as laptops and internet networks to support RME's success.

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CONFLICT OF INTEREST

No potential conflicts of interest were reported by the authors.

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