



# HANDLING OF MEDICAL RECORD DOCUMENTS IN FACING DATA DIGITIZATION AT MITRA SEHAT SITUBONDO HOSPITAL

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#### **Abstract**

Hospitals as health service providers are responsible for ensuring the storage of medical records in accordance with regulations, both in conventional and electronic form. At Mitra Sehat Situbondo Hospital, the process of transitioning from conventional to electronic medical records is ongoing, but has not yet been fully implemented. Some of the obstacles faced include delays in digitalization and no clear operational procedures (SOP). This research aims to evaluate the management of medical records in support of digitalization, using a qualitative descriptive approach involving observation and interviews. The research results show that the use of RME at Mitra Sehat Hospital has only been implemented in outpatient settings, while scanning and digitizing medical records is not yet optimal. Digitalization of conventional medical record files is carried out through a scanning and retention process to reduce the accumulation of files in the filing unit. Storage efficiency and security of physical documents that indicate damage, loss and natural factors can be maintained with digital files. Through this research, it is hoped that Mitra Sehat Hospital can design features that support media transfer to ensure consistent medical records and ensure an efficient data migration process.

Keywords: Data Digitization, Medical Records, Management

## Introduction

Minister of Health Regulation Number 3 of 2020 paragraph 1 concerning Hospitals as health institutions that provide comprehensive medical care to individuals with outpatient, inpatient and emergency facilities [1]. In carrying out its operations as a health service provider, hospitals must guarantee the storage of medical records according to the rules, both conventional medical records and electronic medical records [2]. Electronic medical records are a type of modern medical record created using an electronic system to increase the efficiency of services in health facilities. This system allows doctors and nurses to access patient data quickly and accurately, and this system guarantees that patient data is safe and reduces the possibility of errors [3]. The earliest possible time to create a medical record is immediately after service provision. The medical records department is responsible for the implementation of the medical records management system. Medical records in Indonesia are conventionally stored in paper form, but along with advances in modern information technology, many hospitals and other health facilities are starting to transition to computerized records. Today, people can use computerized information systems, to replace time-consuming manual data administration thanks

to RME. Apart from saving time and energy, proper data management to produce useful health information can also increase precision [4].

In the era of digitalization, medical record files are not reused. As a result, the patient's medical history will be stored in the application, which reduces the number of files required [5]. If medical records are used, digitalization management is a great option to use. Digitalization management includes more complex and varied matters, such as the implementation of electronic medical records and the use of SIMRS. Digitalization in the media transition process uses a scanner machine to convert paper medical records into digital-based electronic medical records in implementing Electronic Medical Records.

In the data digitization process, in this case the data distribution unit is filing, where previously existing conventional document files need to be digitized into electronic data. And the handling of conventional data that has been digitized is immediately retained, so that there is no accumulation of data that is no longer needed.

At Mitra Sehat Hospital, electronic medical records are being transitioned, where it is necessary to immediately digitize medical data from conventional files, this is due to the accumulation of conventional files that are still in the filing room. The aim of this study is to determine how medical record document processing supports digitalization.

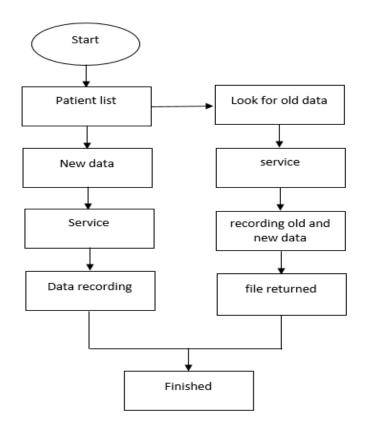
## Method

The research design used is qualitative descriptive research using interviews and observation of activities in the field. Observations are used to identify how medical record documents are handled in the face of data digitization. Meanwhile, interviews were carried out by interviewing 1 filing officer and 1 head of medical records by asking several questions related to the practice of storing and managing medical records at Mitra Sehat Situbondo Hospital.

## **Results**

Mitra Sehat Situbondo Hospital has started implementing Electronic Medical Records (RME) in outpatient settings, both polyclinics and emergency rooms, since early May 2024. Currently, the hospital remains in the hybrid phase, using a combination of conventional medical records and electronic medical records [6], and there is no SOP (Standard Operating Procedure) that specifically regulates how to handle the digitization of medical record data at Mitra Sehat Hospital. Apart from that, the process of digitizing or scanning medical records has not yet been fully implemented because Mitra Sehat Hospital has not implemented RME for all active patients. The use of electronic medical records replaces manual recording systems, thereby minimizing errors and speeding up the medical service process. The transition from manual to electronic medical records is unlikely to take time quickly. Suboptimal use of electronic medical records (RME) can be caused by various things, including: Human resources, finances, equipment, etc. [7].

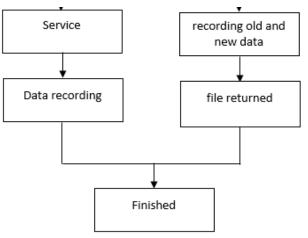
The following is a flowchart that shows the process flow for handling patient data:



Picture 1 (process of handling patient data, 2024)

This flowchart is designed to ensure that both new and old data are recorded properly, to support continuity of patient care. This process emphasizes the importance of comprehensive medical records for accurate and complete patient data management. Recording and returning files ensures that all patient information is stored properly and can be accessed in the future.

Through the flowchart above, researchers provide an overview of recording old and new data, as well as returning files in the process of transitioning from conventional medical records to data digitization.



Picture 2 (Medical record retention process, 2024)

Figure 1 shows the recording of RME services which involves recording new services and digitizing old service data by medical officers in accordance with applicable regulations for retention purposes.

Figure 2 shows the medical record retention process including identification, scanning, storing, securing and managing important documents in digital form.

These steps not only meet regulatory requirements, but also help hospitals manage medical data more efficiently. Other files that are not related to service and are due for retention must be immediately processed for retention to avoid accumulation of conventional files in the filing unit. Old recording data will be entered into data digitization for retention in the right order, namely by checking and scanning important documents such as resumes, admission and discharge reports, operation reports, baby identification, consent reports, and death reports to provide fast and safe access to patient information Information systems can help with the retention and media transfer of medical record documents. Currently, development of a media transfer application system is underway, which allows the application to scan medical record documents directly, then save them into a database. The data stored in the database is available as reports and can be reprinted at any time if necessary. With digital files, storage efficiency can increase, and the physical security of documents can be stored from damage, loss and natural factors such as disasters and pests [8].

From the results of interviews and respondents' answers, at Mitra Sehat Hospital, the transition process from conventional medical records to digitalization has not been fully implemented. This delay was caused by the ongoing testing phase and the Standard Operating Procedures (SOP) for transferring medical record media regarding the transition from conventional to digitized medical records had not yet been prepared. Hospital Standard Operational Process (SOP) which functions as a patient safety guide to obtain optimal health care and services [9]. At Mitra Sehat Hospital, there are still many active files that have not been digitized because obstacles are still found in the implementation process.

In the current RME design process, Mitra Sehat Hospital is expected to have the ability to develop features that support media transfer to ensure the continuity of medical records and ensure an effective data migration process. Readiness to use electronic medical records in Indonesia has met the minimum infrastructure requirements for digitizing medical record data and information system software has also been used in health service facilities to support the implementation of national health insurance [10].

Since the introduction of RME, data management resulting from the transfer of digital medical record documents must be carried out by hospitals, in this case carried out by Mitra Sehat Situbondo Hospital because until now there has been no inpatient manual medical record media transferred to RME. This management of transferring medical record media allows hospitals, especially medical record personnel, to sort documents without having to reopen old documents, making it easier to search and retrieve patient information. Media transfer data management can begin after the scanning process, and the scan results are indexed or grouped. This grouping can be based on RM number or date. Manual medical record documents must be immediately recorded electronically to ensure that all important patient information is not lost [6]. In the current digital era, innovation is needed to store, manage and maintain patient medical records in health facilities and services. So that the retention process of important documents can be carried out regularly in accordance with the regulations stipulated in the law regarding digitalization.

## **Discussion**

Digitalization of medical records reduces the number of files and increases storage efficiency [5]. Digitalization management involves implementing RME and using the Hospital Management Information System (SIMRS). The data digitization process uses a scanner to convert paper medical records into electronic ones. This digitization reduces the accumulation of files and makes it easier to retain conventional data that has been digitized. Mitra Sehat Situbondo Hospital is switching to electronic medical records due to the accumulation of conventional files in the filing room. Mitra Sehat Hospital Situbondo has started implementing RME in outpatient installations and emergency rooms since May 2024. Currently, hospitals use a hybrid system, a combination of conventional and electronic medical records [6]. There is no SOP that regulates the digitization of medical record data at Mitra Sehat Hospital. Digitalization is not yet complete because RME has not been implemented for all active patients. Kendala penggunaan RME termasuk sumber daya manusia, keuangan, dan peralatan [7].

Data digitization includes identifying, scanning, storing, securing and managing important documents in digital form. These steps meet regulatory requirements and help hospitals manage medical data more efficiently. The retention process is carried out to avoid the accumulation of conventional files in the filing unit. Conventional data that has been digitized needs to be immediately retained to avoid accumulation of unnecessary data. Obstacles in the transition from conventional medical records to digitalization at Mitra Sehat Hospital include the ongoing testing phase and the SOP related to the transition not yet being prepared. In the RME design process, Mitra Sehat Hospital is expected to be able to develop features that support media transfer to ensure continuity of medical records. The infrastructure for digitizing medical record data meets the minimum requirements, and information system software has been used in health service facilities to support the implementation of national health insurance [10].

Digitization of medical records requires a carefully structured approach to ensure that existing data can be integrated correctly and efficiently into the RME system. Therefore, supporting the digitization of medical records is critical to the successful implementation of RME [11].

## Conclusion

The conclusions of this research were drawn based on research conducted at Mitra Sehat Hospital in Situbondo, which had not yet fully implemented RME. There are several obstacles in the ongoing process of transitioning from conventional to electronic medical records, including delays in digitization and the absence of clear SOPs. This research aims to evaluate the management of medical records in support of digitalization, using a qualitative descriptive approach by conducting interviews and making observations. The results show that the use of RME at Mitra Sehat Hospital has only been implemented in outpatient settings, while scanning and digitizing medical records has not been optimal. Through this research, it is hoped that at Mitra Sehat Hospital the use of data digitization can replace manual systems, increase efficiency and reduce errors, although it still requires adequate time and resources.

## References

- [1] Kemenkes RI, "Peraturan Menteri Kesehatan Nomor 30 Tahun 2019 tentang Klasifikasi dan Perizinan Rumah Sakit," no. 3, pp. 1–80, 2019.
- [2] R. D. Putri and D. Mulyanti, "Tantangan SIMRS dalam Penerapan Rekam Medis Elektronik Berdasarkan Permenkes 24 Tahun 2022: Literature Review," *J. Med. Nusant.*, vol. 1, no. 1, pp. 18–27, 2023.
- [3] D. W. Lestari and E. Gunawan, "TINJAUAN MANAJEMEN DIGITALISASI DALAM IMPLEMENTASI REKAM MEDIS ELETRONIK DI RUMAH SAKIT AMC BANDUNG," *Media Bina Ilm.*, vol. 18, no. 11, pp. 3013–3020, 2024.
- [4] A. Azzahra, "IMPLEMENTASI PENGGUNAAN REKAM MEDIS ELEKTORNIK RAWAT JALAN DALAM MASA PERALIHAN REKAM MEDIS KONVENSIONAL MENUJU REKAM MEDIS ELEKTRONIK DI RUMAH SAKIT GOTONG ROYONG SURABAYA." STIKES Yayasan RS Dr. Soetomo Surabaya, 2023.
- [5] F. R. Ikawati, R. D. Prisusanti, A. J. Rusdi, I. Kesehatan, and J. Timur, "EFEKTIVITAS RETENSI DAN PEMUSNAHAN BERKAS REKAM MEDIS DALAM MENGHADAPI ERA DIGITALISASI DATA DI PUSKESMAS BARENG MALANG The Effectiveness of Retention and Destruction of Medical Record Files in Facing The Era of Data Digitization at Bareng Public Health C," *J. Ilmu Kesehat.*, pp. 89–95, 2022.
- [6] P. Asgiani, R. Y. Sari, E. Purwanti, and Y. Suryaningsih, "Manajemen Rekam Medis dalam Mendukung Alih Media Medis Rekam Elektronik di RSUD Nyi Ageng Serang," *J. Pengabdi. Masy. Bangsa*, vol. 1, no. 11, pp. 2971–2975, 2024, doi: 10.59837/jpmba.v1i11.614.
- [7] N. S. Bariyah, R. Ningtyas, and C. T. Setiawan, "Gambaran Kemampuan Sumber Daya Manusia Dalam Menerapkan Rekam Medis Elektronik Rawat Jalan Di Rumah Sakit Ibu Dan Anak Ummu Hani Purbalingga," *J. Kesehat. Tambusai*, vol. 4, no. 3, pp. 4219–4228, 2023.
- [8] K. P. Ningsih, E. Purwanti, I. Sevtiyani, S. Santoso, and M. R. Ma'arif, "Pelatihan Migrasi Data Rekam Medis Manual Ke Elektronik," *Link*, vol. 18, no. 1, pp. 43–48, 2022, doi: 10.31983/link.v18i1.8433.
- [9] A. R. Taufiq, "Penerapan Standar Operasional Prosedur (Sop) Dan Akuntabilitas Kinerja Rumah Sakit," *J. Profita*, vol. 12, no. 1, p. 56, 2019, doi: 10.22441/profita.2019.v12.01.005.
- [10] P. Kesdam and V. I. Banjarmasin, "Perkembangan Rekam Medis Elektronik di Indonesia: Literature Review Research On Electronic Medical Records in Indonesia: Literature Review Hastin Atas Asih, Indrayadi," *Jurnalpromotif Prev.*, vol. 6, no. 1, pp. 182–198, 2023, [Online]. Available: http://journal.unpacti.ac.id/index.php/JPP
- [11] B.- Wahab, A. Sembiring, A. Apriana, and E. Sembiring, "Pendampingan Digitalisasi Berkas Rekam Medis Guna Mendukung Keberhasilan Implementasi Rekam Medis Elektronik Di Rsup Haji Adamalik Medan," *J. Pengabdi. Masy. Putri Hijau*, vol. 4, no. 2, pp. 79–82, 2024, doi: 10.36656/jpmph.v4i2.1712.