

ANALYSIS OF ELECTRONIC MEDICAL RECORD IMPLEMENTATION IN OUTPATIENT SERVICES

Nurmala Sari¹, Wa ode Sitti Budiatty^{2}, Rika Setyowati³*

^{1,2,3}*Politeknik Baubau, Kota Baubau, Indonesia*

ARTICLE INFORMATION

Received: 3 October 2025
Revised: 11 November 2025
Accepted: 15 December 2025
DOI:

KEYWORDS

Keywords: Electronic Medical Records;
HOTFIT; Community Health Center;
Outpatient Services; Medical Records

CORRESPONDING AUTHOR

Nama : Wa Ode Sitti Budiatty
Address: Politeknik Baubau
E-mail : de2usman.725@gmail.com

A B S T R A C T

Electronic Medical Records (EMR) are digital systems for recording patient data that aim to improve the quality and efficiency of healthcare services. Kadolomoko Community Health Center has implemented EMR in outpatient services; however, several challenges remain, including incomplete EMR standard operating procedures, network disruptions, and hybrid use of electronic and manual records in certain conditions. This study aimed to analyze the implementation of EMR in outpatient services at Kadolomoko Community Health Center. This study used a qualitative descriptive method with the Human, Organization, Technology, and Net Benefit (HOT-FIT) approach. The informants included the Head of the Medical Records Unit, medical record officers, a physician, and a pharmacist. Data were collected through interviews, observation, and documentation. The results showed that in the human aspect, officers were able to operate the EMR and experienced benefits in data entry and retrieval, although further training was needed. In the organization aspect, management support and inter-unit coordination were available, but specific EMR SOPs had not been fully established. In the technology aspect, computers, printers, internet networks, and the E-Puskesmas system were available, although network, electricity, and occasional system errors remained obstacles. In terms of net benefit, EMR provided benefits including faster services, easier retrieval of patient histories, improved work efficiency, and reduced recording errors. In conclusion, EMR implementation at Kadolomoko Community Health Center was fairly good, but improvements in SOPs, technological infrastructure, and staff competency are still required.

INTRODUCTION

Community Health Center (Puskesmas) is a level health service facility first to organize and coordinate promotive, preventive, curative, rehabilitative, and palliative health services with an emphasis on promotive and preventive efforts in its service area. Puskesmas becomes the first point of contact for the public with health services, therefore it is required to provide quality services, be responsible for patient safety, and play a key role in the implementation of primary health care in Indonesia (Peraturan Menteri Kesehatan RI No 43 Tahun 2019).

According to Regulation of the Minister of Health of the Republic of Indonesia No. 24 of 2022 on Medical records, medical records are documents that contain patient identity, examination results, diagnosis, treatment, medical actions, and other health services provided to the patient. Medical records function as the main information source about the patient's health status and as a communication tool among health workers to ensure continuity of care. In addition, medical records have legal value because they can be used as evidence in audit processes, accreditation, and health financing claims. Medical records are also an important data source for the development of science, research, planning, and evaluation of health service quality (Permenkes No. 24 2022).

Electronic Medical Records (EMR) or Electronic Medical Record is a form of medical record medical records that are created, stored, managed, and communicated using a digital-based electronic system. EMR contains standardized patient health data and information, enabling rapid, accurate, and secure storage and exchange of information between health service units. The implementation of EMR in health service facilities, including Puskesmas, aims to support improved health service quality, accelerate access to medical information for health workers, and enhance the integration of health data within the national health information system (Permenkes No. 24 2022).

The implementation of Electronic Medical Records is not only related to the use of technology, but also requires readiness of human resources and organization. The study by Meilani, Nugraheni, and Suprawita on the implementation of Electronic Medical Records on outpatient service quality shows that EMR implementation has a positive impact on service quality, especially in terms of system quality,

information quality, service quality, and user satisfaction. The study results indicate that EMR can improve service speed and accuracy of medical documentation, although technical challenges such as network disturbances and system errors were still found (Meilani, Nugraheni, and Suprawita 2025).

The HOT-FIT (Human, Organization, Technology, and Net Benefit) approach can be used to evaluate health information system implementation because it assesses the alignment between human, organizational, technological, and benefit aspects. The human aspect relates to the capability and user satisfaction in using the system, the organization aspect relates to management support, policies, and organizational environment, while the technology aspect relates to system quality, information, and technology services. These four aspects can provide an overview of the benefits obtained from applying the information system (Amrullah 2025).

Previous research conducted by Wa Ode Sitti Budiatty. (2022) demonstrates that medical record management requires adequate systems, procedures, and facilities to ensure patient information is managed systematically and remains easily retrievable. Although that study focused on the manual or physical management of medical record files, its findings are relevant to the implementation of Electronic Medical Records (EMR), as successful health information management still relies on the readiness of supporting systems and infrastructure. These aspects are particularly critical in the implementation of EMR, given that the processes of recording, storing, processing, and providing patient information are carried out via electronic systems.

Based on observations at Kadolomoko Health Center, it is known that in the medical records section there were seven staff, consisting of five medical records graduates and two non-medical records staff. Observations show that EMR implementation has been underway in outpatient services including general clinic, MBTS/child clinic, dental clinic, maternal and child health clinic, and counseling clinic. However, EMR deployment still requires system strengthening and SOP refinement to make its implementation more optimal and standardized.

In addition, the EMR-specific SOP at Kadolomoko Health Center has not been comprehensively prepared as it is still in the refinement stage. In the pharmacy unit, EMR implementation is also relatively new. Another challenge found is the use of electronic signatures on general consent and informed consent, which is not yet optimal, so services in certain conditions still use a hybrid system, a combination of electronic and manual systems.

This condition shows that although EMR has been implemented at Puskesmas Kadolomoko, there are still several aspects that need to be evaluated so that its implementation can run optimally. Therefore, this study was conducted to analyze the implementation of Electronic Medical Records in outpatient services at Kadolomoko Health Center using the Human, Organization, Technology, and Net Benefit (HOT-FIT). The study results are expected to become evaluation material for community health centers (Puskesmas) to improve the quality of RME implementation and to support improving the efficiency and quality of health services.

METHODOLOGY

This study uses a qualitative descriptive method with a Human, approach, Organization, Technology, and Net Benefit (HOT-FIT). This approach is used to analyze the implementation of RME based on the human, organization, technology, and benefits resulting from the use of the system. The research was conducted at the Kadolomoko Community Health Center (Puskesmas).

The research informants are parties who directly involved in the use and management of RME, namely the person in charge of medical records, medical records officers, doctors, and pharmacy officers.

Data collection was carried out through interviews, observation, and documentation. Interviews were conducted using an interview guide covering four HOT-FIT aspects. Observation was carried out on the officers' ability to operate the system, the workflow of using RME, the availability of devices, networks, servers, system security, and ease of using the system.

Data analysis was carried out descriptively by grouping the research results based on the four HOT-FIT aspects, namely human, organization, technology, and net benefit.

RESULTS & DISCUSSION

A. Results of the Human Aspect

The research results show that the implementation of Electronic Medical Records (RME) in the human aspect at the Kadolomoko Community Health Center (Puskesmas) has been running quite well. Most health workers have been able to use RME in the outpatient service process, starting

from registration, recording services, to data entry via the E-Puskesmas application. Each officer also has a user account in the form of a username and password, so access to the system can be tailored to each user. These conditions indicate that users already have basic skills to operate RME and adapt to changes in the recording system from manual to electronic.

Users' ability to operate RME is one of the important factors because the success of implementing an information system is determined not only by the availability of technology, but also by the readiness of human resources. Based on the research results, officers feel that using RME can facilitate the process of entering and searching patient data, making the work more efficient. However, the system usage capability has not yet been fully evenly distributed because there are still limitations in technical training and the adaptation process in certain units that relatively recently implemented RME.

Nevertheless, user readiness is not yet entirely uniform. There are still limitations in technical training and the adaptation process at certain units that are relatively new to using RME. These conditions indicate that staff capabilities are influenced not only by the availability of the system, but also by experience, understanding, and opportunities for training. Therefore, the implementation of the RME system must be accompanied by continuous improvement in user competencies.

Tabel 1. Checklist Observasi Aspek Human

No.	Checklist Observasi	Ya	Tidak	Keterangan
1	Officers capable to use EMR	✓		
2	Staff able to input and search patient data	✓		
3	Each officer has username/password	✓		
4	Training still needed to be enhanced	✓		

Based on observations regarding the Human aspect, staff at the Kadolomoko Community Health Center have demonstrated the ability to operate the Electronic Medical Record (EMR) system in outpatient services. This ability is evidenced by their ability to enter patient data and search for patient data and medical histories using the E-Puskesmas application. In addition, each staff member has a user account consisting of a username and password, which serves as the authentication mechanism for accessing the EMR system.

These findings are in line with Siswati *et al.* (2024), which states that readiness of human resources are one of the challenges in implementing RME, especially related to computer skills and limitations in training. Husni Abdul Muchlis. (2024) also shows that ongoing training and support for users play a role in improving the success of implementing an electronic system. Thus, although users' abilities at the Kadolomoko Community Health Center (Puskesmas) are already quite good, improving competence through training and technical mentoring is still required to ensure that the use of RME can be carried out optimally and sustainably.

Thus, the human aspect in EMR implementation at Kadolomoko Health Center can be characterized as fairly good. Staff are already able to adapt to the electronic system, but periodic training, technical mentoring, and evaluation of user abilities are still needed. Training should not only focus on how to operate the application but also include account security, accuracy of data input, data correction, use of electronic signatures, electronic signatures, and procedures to be followed when the system experiences disruptions.

B. Results of the Organization Aspect

In the organization aspect, the research results show the existence of management support for the implementation of RME at the Kadolomoko Community Health Center (Puskesmas). This support is demonstrated through the implementation of E-Puskesmas in outpatient services, the provision of access accounts for officers, and the availability of supporting facilities in the form of computers and an internet network. Task division in the medical records unit has also been

available, so that the implementation of medical record management can be carried out according to each officer's responsibilities.

Although organizational support has been available, the study found that specific SOPs for the use of RME have not been compiled thoroughly. This condition causes the implementation of RME in some situations to still use a hybrid system, namely a combination of electronic and manual recording. When a system disruption occurs, officers use temporary manual recording and perform re-entry after the system or network returns to normal. This indicates that the organization has alternative mechanisms to maintain service continuity, but does not yet fully have standards operational standards that regulate the entire process in detail.

However, the study findings indicate that specific SOPs for the use of RME have not yet been fully developed. This situation poses one of the organizational challenges because not all processes involving the use of RME have specific operational guidelines. Under certain circumstances, particularly when system disruptions occur, staff still use temporary manual record-keeping and re-enter the data once the system is operational again. Thus, the Community Health Center has an alternative mechanism to maintain service continuity, but this mechanism has not yet been fully incorporated into the RME-specific SOP.

The use of a hybrid system also indicates that the digitization of medical records at the Kadolomoko Community Health Center has not yet been fully implemented electronically. This situation is partly due to the suboptimal use of electronic signatures on general consent and informed consent forms. Therefore, the development of standard operating procedures (SOPs) is necessary not only to regulate the use of the system under normal conditions but also to establish procedures in the event of network, server, or power outages, or when certain features cannot yet be used optimally.

Tabel 2. Checklist Observasi Aspect Organization

No.	Checklist Observasi	Ya	Tidak	Keterangan
1	There is support management	✓		
2	Task division is available	✓		
3	RME SOPs are not yet complete	✓		
4	When the system has problems using manual recording	✓		
5	Re-input performed after the system returns to normal	✓		

Based on observations regarding the "Organization" aspect, it was found that there is management support for the implementation of Electronic Medical Records (EMR) at the Kadolomoko Community Health Center. This support is reflected in the use of the E-Puskesmas application for outpatient services, the provision of access accounts for staff, the availability of computers and an internet connection as supporting infrastructure, and the division of tasks within the medical records unit. These conditions indicate that the organization has provided the necessary resource support and work arrangements to facilitate the implementation of EMR.

However, the implementation of RME still faces challenges in terms of policies and procedures, particularly regarding the completeness of Standard Operating Procedures (SOPs). When a system disruption occurs, staff keep records manually as a temporary measure to maintain service continuity. Once the system is back online, the data that was manually recorded is then re-entered into the RME system. This situation indicates that the organization has implemented an alternative mechanism to address system disruptions and ensure service continuity; however, this mechanism has not yet been fully incorporated into the RME-specific SOPs.

In addition, the implementation of RME in some service processes is still carried out in a hybrid manner, combining electronic and manual processes. This situation is primarily related to the use of electronic signatures on general consent and informed consent documents, which is not yet functioning optimally. Thus, although organizational support for RME implementation is in place,

standardization of procedures and optimization of digital processes still need to be strengthened to support a more consistent and comprehensive implementation of RME.

In the implementation of an information system, organizational support is needed to ensure that the use of technology can run according to service goals. This study's results align with Wati *et al.* (2024), which show that organizational readiness, management support, and availability of technical guidelines are factors influencing the success of RME implementation. Therefore, the conditions at Puskesmas Kadolomoko indicate that the organizational aspect already supports RME implementation, but it still needs to be strengthened through the development of SOPs, monitoring, and periodic evaluation so that system implementation at each unit can operate uniformly.

Research by Sri Siswati^{1*}, Syafrawati². (2025) also shows that the organizational aspect has a strong relationship with the success of health information system implementation. Leadership support, internal communication, and regulatory readiness become important factors in improving the effectiveness of RME use in primary health care. This shows that RME implementation requires organizational commitment not only in providing facilities but also in policy support and supervision.

At Kadolomoko Health Center, organizational support is actually quite visible. However still requires SOP improvement that governs all RME processes. The SOP should cover registration, data entry, data verification, data correction, use of electronic signatures, account security, processes during network outages, temporary manual documents, and re-entry after the system returns to normal.

In addition to SOP development, the organization also needs to conduct monitoring and evaluation on a regular basis periodically. Monitoring is needed to assess staff compliance with SOP and identify problems in RME implementation. Monitoring results can be used as a basis for system improvements and the development of training programs for staff.

Thus, the organization aspect at Kadolomoko Health Center can be considered already supporting the implementation of RME, but not yet fully optimal. Strengthening internal policy, the completion of SOPs, improved coordination between units, as well as monitoring and evaluation are required so that the implementation of RME becomes more standardized and sustainable.

C. Technology Aspect

The study results show that the technology aspect in the implementation of RME at Puskesmas Kadolomoko has supported the implementation of outpatient services. Supporting facilities such as computers or laptops, printers, internet network, and the E-Puskesmas application are available. The system is also equipped with authentication mechanisms through username and password to restrict user access to patient data.

From the ease-of-use perspective, informants assess that the RME system is relatively easy to use and assist in performing tasks. The ease helps staff in inputting and searching patient data. However, obstacles such as internet network and server disruptions were found that can hinder service processes at certain times. Although these disruptions do not occur continuously, this condition forces staff to use manual recording temporarily to keep services running.

This condition shows that technology quality is not only determined by the availability of devices and applications, but also network stability and technical support when disruptions occur. In addition, the suboptimal implementation of electronic signatures causes some service processes to still be performed in a hybrid manner. Thus, the available technology can already support services, but has not fully been able to support comprehensive RME implementation.

In addition to network and server issues, the implementation of electronic signatures for general consent and informed consent has not yet been fully optimized; as a result, under certain circumstances, service processes are still conducted using a hybrid approach. This situation indicates that the transition from manual medical records to an electronic system at the Kadolomoko Community Health Center is still in the development phase, and not all processes can yet be conducted electronically.

Tabel 3. Checklist Observasi Aspect Teckhnology

No.	Checklist Observasi	Ya	Tidak	Keterangan
1	Computer/Laptop available	✓		

No.	Checklist Observasi	Ya	Tidak	Keterangan
2	Printers available	✓		
3	Internet network available	✓		
4	E-Health Center available/used	✓		
5	User-friendly system used	✓		
6	Disruptions still occur network	✓		
7	Still occurring system disruptions/errors	✓		
8	Electronic signatures not optimal	✓		

Based on observations regarding the Technology aspect, the Electronic Medical Record (EMR) system is relatively easy for staff to use in supporting service delivery. This ease of use is evident in the staff's ability to enter and retrieve patient data through the system. However, technical challenges have been encountered during implementation, such as internet connection issues, server problems, and system errors, which have the potential to disrupt the smooth flow of service delivery. When the system experiences disruptions, staff members keep records manually as a temporary measure to ensure that service delivery can continue.

In addition to these technical challenges, the use of electronic signatures has not yet been fully optimized, particularly for general consent and informed consent documents. As a result, some service stages are still carried out using a hybrid mechanism that is, a combination of electronic and manual processes. This indicates that, although RME technology has supported service delivery, further optimization of system infrastructure and the utilization of electronic features are still needed to support a more effective and comprehensive implementation of RME.

Meilani et al. (2025) study also shows that the implementation of RME provides a positive impact on the quality of outpatient services, especially in terms of system quality, information quality, service quality, and user satisfaction. However, the study also found technical constraints in the form of network disruptions and system errors. This condition is similar to Puskesmas Kadolomoko, because technology disruptions are still one of the obstacles in implementing RME.

Furthermore, Selo. (2023) research on the readiness to implement RME at Puskesmas shows that technology readiness is an important part that needs to be considered before and during the implementation of RME. Adequate availability of devices and networks is needed so that the system can be used sustainably. These findings reinforce the research results at Puskesmas Kadolomoko that the existence of the E-Puskesmas application must be supported by stable infrastructure.

The network problems found at Puskesmas Kadolomoko are an issue that is important because healthcare services require the availability of information quickly. When the network experiences disruption, staff cannot access the system optimally, so the service process may be delayed.

Besides the network, the use of electronic signatures also needs to be considered. A sign electronic signature is an important part of the document digitization process. If this feature cannot be used optimally, then certain documents still have to be processed manually. This condition causes the goal of implementing RME to create a fully electronic service system to not yet be achieved to the maximum extent.

Besides the network, the use of electronic signatures also needs to be considered. A sign electronic signature is an important part of the document digitization process. If this feature cannot be used optimally, then certain documents still have to be carried out manually. This condition causes the goal of implementing RME for creating a fully electronic service system cannot be achieved yet maximum.

Therefore, improvement of the technology aspect can be done through enhancement of internet network stability, maintenance of computers and supporting devices, provision of backup power

sources, improvement of technical support, optimization of electronic signatures, as well as strengthening security and data backup.

Thus, the technology aspect at Kadolomoko Health Centre has already supported the implementation of RME, but still requires infrastructure reinforcement. Technological improvements will help reduce the use of hybrid systems and improve service continuity.

D. Net-Benefit Aspect

In terms of net benefit, the implementation of RME provides positive benefits for outpatient services at Puskesmas Kadolomoko. Benefits include easier patient data search, faster documentation, improved work efficiency, and reduced risk of lost or misplaced medical records. Data integration through E-Puskesmas also supports cross-unit information exchange so the service process can be done faster than manual systems.

These benefits indicate that the RME implementation has brought changes to staff work processes. Patient data that previously required searching through physical files can be obtained through the electronic system. This not only saves work time but also supports the availability of patient information when needed in the service process. With data integration, staff in different units can access information as needed without relying entirely on physical files.

In the HOT-FIT approach, net benefit is the final result of the alignment between the human, organization, and technology aspects. System benefits can be seen through increased efficiency, documentation quality, service speed, and user satisfaction. If all three components can operate in balance, the benefits obtained from implementing the information system will become more optimal.

Tabel 4. Checklist Observasi Aspect Net Benefit

No.	Checklist Observasi	Ya	Tidak	Keterangan
1	RME accelerates service	✓		
2	RME facilitates patient data searching	✓		
3	RME increases work efficiency	✓		
4	RME increases service documentation	✓		
5	RME reduces recording errors	✓		
6	RME reduces the risk lost/misplaced files	✓		
7	RME supports the information exchange between units	✓		

Based on the results of the observation, the implementation of Electronic Medical Records (EMR) provides a contribution to improving the effectiveness and efficiency of providing outpatient services. The implementation of EMR provides convenience in the process of searching and tracing patient data, speeds up the implementation of service documentation, and supports the management of patient information in a more structured manner. In addition, the implementation of an electronic system can reduce reliance on physical medical record documents, so the risk of file loss or misplacement can be minimized. Data integration through the E-Puskesmas application also supports the process of information exchange and availability between service units, so patient information can be accessed according to needs to support the service process

This study's results align with Juliansyah. (2024) explaining that the implementation of EMR can save service time, improve the quality of healthcare services, and increase patient satisfaction because the service process becomes faster and integrated.

Meilani et al. (2025) also shows that the implementation of RME contributes positively to the quality of outpatient service, especially in efficiency and medical service documentation. This reinforces the findings at Kadolomoko Health Centre that the use of RME can improve the efficiency of service processes and documentation.

In addition, Diastri & Kurniawan. (2025) in a systematic review regarding the implementation of RME in outpatient services shows that the use of RME can support efficiency and accuracy of

service. The findings are in line with the Kadolomoko Health Centre conditions because patient data can be searched more quickly and service documentation becomes more structured.

In this study, the benefits of RME cannot yet be said to be maximal because there are still obstacles in organizational and technological aspects. Incomplete SOPs, network disruptions, system errors, and suboptimal use of electronic signatures cause service in certain conditions to still use a hybrid system.

This shows that net benefit heavily depends on the success of the three other aspects. If staff capability is good but the system frequently experiences interruptions, the benefits of RME will decrease. Similarly, if technology is good but SOPs are unclear, system use may not be uniform.

Therefore, the benefits of RME at Kadolomoko Health Centre can be improved by simultaneously improving the human, organization, and technology aspects. Staff training will improve user capability, SOP development will improve organizational consistency, while upgrading the network and system will improve technology quality.

Thus, the implementation of RME has yielded a positive net benefit for Kadolomoko Health Centre. The benefits are mainly evident in faster service, easier data retrieval, increased work efficiency, improved documentation, and reduced risk of lost records. However, these benefits can still be enhanced if all processes service can be performed electronically and supported by a stable system.

CONCLUSION

Based on the results of research regarding the Analysis of the Implementation of Electronic Medical Records at Outpatient Services at Puskesmas Kadolomoko using the Human, Organization, Technology, and Net Benefit (HOT-FIT) approach, it can be concluded that the implementation of Electronic Medical Records (EMR) at Puskesmas Kadolomoko has been underway and provides benefits to outpatient services, but it is not yet fully optimal.

most staff have been able to use the E-Puskesmas application in supporting services, especially in the processes of registration, data entry, searching, and management of patient data. The use of EMR provides convenience for staff in obtaining patient information. However, staff technical capability has not yet been fully evenly distributed, so training, mentoring, and competency improvement are still required on an ongoing basis.

Puskesmas Kadolomoko has provided support for the implementation of EMR through provision of facilities, provision of user accounts, task division, and the implementation of E-Puskesmas in services. However, specific EMR SOPs are still at the refinement stage, so standardization of workflow and the implementation of EMR in each unit still needs to be strengthened. In addition, the use of electronic signatures in some service documents has not been optimal, so some processes are still carried out in a hybrid manner.

Puskesmas Kadolomoko has supporting devices in the form of computers, laptops, printers, an internet network, and the E-Puskesmas application. The system is also equipped with user accounts in the form of a username and password as part of access security. However, obstacles have still been found in the form of network disruptions, system errors, and the still not optimal use of electronic signatures. These obstacles cause that, in certain conditions, services still require manual recording.

the implementation of EMR has provided positive benefits in the form of ease of searching for data of patients, faster service, improved work efficiency, easier information management, and reduced risk of medical record files being misplaced or lost. Even so, these benefits have not been fully maximized because they are still influenced by obstacles in the aspects of human resources, organization, and technology.

Overall, the implementation of EMR at Puskesmas Kadolomoko has supported the process of digitizing outpatient services, but it still requires strengthening staff competence, completion of EMR SOPs, improving network and infrastructure stability, optimizing electronic signatures, as well as regular monitoring and evaluation. Improvements in these four HOT-FIT aspects are expected to increase the effectiveness of EMR implementation and support the improvement of quality and efficiency of outpatient services at Puskesmas Kadolomoko.

REFERENCES

Amrullah, Seno Arif. 2025. "Factors Influencing the Implementation of Electronic Medical Records (EMR) Using the Human , Organization , and Technology Fit (HOT-Fit) Approach." (24):10–17.

- Diastri, Anggraina, and Rico Kurniawan. 2025. "Tinjauan Sistematis Terhadap Implementasi Rekam Medis Elektronik Pada Pelayanan Rawat Jalan." 6(3):205–11. doi:10.25047/j-remi.v6i3.5891.
- Husni Abdul Muchlis. 2024. "Model Sukses Implementasi Rekam Medis Elektronik Di Puskesmas Jakarta." 12(1):31–41. doi:10.47007/inohim.v12i01.561.
- Juliansyah, Rasyid. 2024. "Implementation of EMR System in Indonesian Health Facilities : Benefits and Constraints."
- Meilani, Helsa, Sri Wahyuningsih Nugraheni, and Budi Suprawita. 2025. "Amelinda Helsa Meilani, 2 Sri Wahyuningsih Nugraheni*, 3 Budi Suprawita." 15(2):158–64.
- Ode, Wa, Sitti Budiatty, and Sumpia Latambu. 2022. "Perancangan Tracer / Out Guide Berkas Rekam Medis Di Puskesmas Design of Tracer / Out Guide for Medical Record Files at Health Center." 1(1):16–26.
- Peraturan Menteri Kesehatan RI No 43 Tahun. 2019. "Peraturan Menteri Kesehatan RI No 43 Tahun 2019 Tentang Puskesmas." *Peraturan Menteri Kesehatan RI No 43 Tahun 2019 Tentang Puskesmas* Nomor 65(879):2004–6.
- 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.
- Selo, Puskesmas. 2023. "Analisis Tingkat Kesiapan Penerapan Rekam Medis Elektronik Di Puskesmas Wilayah Kabupaten Boyolali." 11(2).
- Siswati, Sri, Tuty Ernawati, and Muthia Khairunnisa. 2024. "Analisis Tantangan Kesiapan Implementasi Rekam Medis Elektronik Di Puskesmas Kota Padang." *Jurnal Kesehatan Vokasional* 9(1):1. doi:10.22146/jkesvo.92719.
- Sri Siswati1*, Syafrawati2, Muthia Khairunnisa3. 2025. "Implementation Using HOT-FIT Method at Public Health Centers in Padang City." 11(1):64–73.
- Wati, Retna, Prita Devy Igiyany, and Julia Pertiwi. 2024. "Elektronik Di Puskesmas Baki." 8(April):663–70.