Analysis of Differences in Timeliness of Providing Outpatient Medical Record Documents in the Terminal Digit Filling Filing System at Hospital

Ikhwan[1], Musparlin Halid[2]

[1]*Correspondence author: musparlinhalid@gmail.com*

[1] Department of Medical Record and Health Information, Politeknik Medica Farma Husada Mataram, Indonesia

[2] Politeknik Medica Farma Husada Mataram, Indonesia

I N D E X I N G	A B S T R A C T
Keywords: Filing System; Terminal Digit Filing; Straight Numerical Filing.	Filling a system document of the medical record is used to arrange a bundle of the medical history in a share of filing. The research intends to analyze different time rapidity of supplying the Medical Record Document (MRD) manner take care of the filing system of Terminal Digit Filing (TDF) and the Straight Numerical Filing (SNF). This research is an analytic observational study with a cross-sectional approach by analyzing the difference in the timeliness of providing outpatient medical record documents to the TDF system at Patut Patuh Patju (Tripat) Hospital and SNF at Siti Hajar Mataram Hospital. The study was conducted from January to May 2022. The study population was old patients taken care of in the Tripat Hospital and Siti Hajar Mataram Hospital. The research sample was 90 MRDs in the Tripat Hospital and 87 MRDs in the Siti Hajar Mataram Hospital taken with systematic random sampling. The instrument used an observation sheet and the time of providing MRD, both in the TDF and SNF systems. The data was quantitative data obtained from the time service for supplying MRD. Analysis of research used experiment of Independent Sample t-test. The experiment statistic used the aid of the SPSS Version 20 software. The result indicated different supplying time rapidly of documents of the medical record manner taking care of system juxtaposition of terminal digit filing and straight numerical filing (P-Value = 0,043).
Kata kunci: *Sistem Pengarsipan;* *Pengarsipan Digit Terminal;* *Pengarsipan Numerik Lurus.*	*Mengisi dokumen sistem rekam medis digunakan untuk mengatur bundel riwayat medis dalam bagian pengarsipan. Penelitian ini bermaksud untuk menganalisis kecepatan waktu yang berbeda dalam memasok Dokumen Rekam Medis (MRD) cara mengurus sistem pengarsipan Terminal Digit Filing (TDF) dan Straight Numerical Filing (SNF). Penelitian ini merupakan studi observasional analitik dengan pendekatan cross sectional dengan menganalisis perbedaan ketepatan waktu pemberian dokumen rekam medis rawat jalan kepada sistem TDF di RsBau Patuh Patju (Tripat) dan SNF di RS Siti Hajar Mataram. Penelitian dilakukan pada bulan Januari hingga Mei 2022. Populasi penelitian adalah pasien usia lanjut yang dirawat di RS Tripat dan RS Siti Hajar Mataram. Sampel penelitian sebanyak 90 MRD di RS Tripat dan 87 MRD di RS Siti Hajar Mataram yang diambil dengan pengambilan sampel acak sistematis. Instrumen ini menggunakan lembar observasi dan waktu pemberian MRD, baik dalam sistem TDF maupun SNF. Data tersebut adalah data kuantitatif yang diperoleh dari layanan waktu untuk memasok MRD. Analisis penelitian yang digunakan percobaan uji-t Sampel Independen. Statistik percobaan menggunakan bantuan perangkat lunak SPSS Versi 20. Hasilnya menunjukkan waktu penyediaan yang berbeda dengan cepat dari dokumen dengan cara rekam medis yang mengurus penjajaran sistem pengarsipan digit terminal dan pengarsipan numerik lurus (P-Value = 0,043).*

INTRODUCTION

Filing is a system of structuring medical records in a unique sequence so that referrals and retrieval are easy and fast. Medical record documents stored in storage racks are not stacked but are arranged parallel to the others (Ernawati et al., 2013). Filing medical record documents follow the order of medical record numbers in 3 ways. First, the filing system is based on direct numbers or Straight Numerical Filing (SNF), a natural number filing system for storing medical record documents by aligning the medical record folders based on the direct order of the medical record number on the storage shelf (Ritonga & Sari, 2019).

Second is the Final Number System or Terminal Digit Filing (TDF). The filing system with the final number system or TDF is a medical record document storage system that aligns the order of the medical record document folders based on the sequence of medical record numbers in the final two digits of the group. A storage rack is first prepared by dividing it into 100 (sections) to run this system according to the last 2 numbers, starting from sections 00;01;02, and so on until section 99. Then, how to store it in each section is filled with a folder of recorded documents of medical record numbers with the same 2 final group digits as the first digit (Primary Digit) as a benchmark. Then successively behind it, based on the 2 middle group numbers as the second digit (Secondary Digit) and the next benchmark on the 2 final group numbers as the third digit (Tertiary Digit) (Handiwidjojo, 2009).

Third, the Middle Digit Filing System (MDF) is a medical record document storage system that aligns medical record document folders based on the sequence of medical record numbers in the 2 middle group digits. The advantages and disadvantages of this system are the same as TDF. Still, the difference is that the number in the middle becomes the first number, and the pair of numbers located on the far left becomes the second number. The number on the right becomes the third, aligning the medical record folders/documents based on the order. The medical record number in the middle group has 2 digits. Health service facilities are required to keep the patient's Medical Record Document (MRD). Outpatient, inpatient, and emergency MRD are stored with specific methods and aligned according to the Standard Operating Procedures (SOP) that the hospital has set (Andria & Sugiarti, 2015).

The difference between SNF and TDF is viewed from their respective advantages. SNF will be straightforward and easy to train officers carrying out storage work if several documents are taken with consecutive numbers from the shelf for educational, research, or deactivated purposes (Halid & Maryam, 2016). While TDF, which is the addition of the number of medical record documents, is always evenly distributed to 100 groups (sections) in the storage rack. Storage officers will not be forced to jostle in one place where medical records must be stored on shelves (Riyanto et al., 2012). Medical record officers can be given responsibility for a certain number of sections. For example, four medical record officers are assigned 25% of the whole section. The work will be divided equally, considering that each officer, on average, works on almost the same number of medical records every day, so that easy to remember the location of medical record documents. Inactive medical records can be retrieved from the storage rack of each section. When a new medical history is added to that section, each section is controlled, and empty shelves can be avoided. Maintaining the number of medical records helps facilitate planning of storage equipment (number of shelves) and errors in storing (misfiles) can be prevented. The storage officer only pays attention to 2 numbers in entering medical records into the rack to avoid errors in reading numbers (Nurripdah & Sonia, 2021).

MRD Filing is a system that organizes medical record files in storage cabinets. Filing is essential because if the medical record file is put in a cupboard, it will be challenging to look for it again (Ningsih et al., 2021). There are three MRD filing systems: Straight Numerical Filing (SNF), Middle Digit Filing (MDF), and Terminal Digit Filing (TDF). Almost all hospitals in Mataram use TDF (Ningsih et al., 2020). However, the Siti Hajar Mataram Hospital uses SNF while the Patut Patuh Patju Hospital (Tripat Hospital) uses TDF.

The extended MRD can affect the quality of a hospital or health service. The time of providing medical record documents starts from the patient registering until the medical record is provided or found by the officer. The standard time for delivering MRD outpatient services is < 10 minutes. Based on observations made, researchers found differences in the timeliness of providing outpatient medical record documents at TDF at Tripat Hospital:

1. Informant 1, starting from registration until the file reaches the poly, took 14 minutes.
2. Informant 2, starting from registration until the file reaches the poly, took 16 minutes.
3. Informant 3, starting from registration until the file reaches the poly, took 15 minutes.
4. Informant 4, starting from registration until the file reaches the poly, took 14 minutes.
5. Informant 5, starting from registration until the file reaches the polyclinic, takes 15 minutes.

Meanwhile, the filling of SNF RSI Siti Hajar Mataram, the timeliness of providing MRD is also more than the maximum time limit:

1. Informant 1, starting from registration until the file reaches the poly, took 13 minutes.
2. Informant 2, starting from registration until the file reaches the poly, took 13 minutes.
3. Informant 3, starting from registration until the file reaches the polyclinic, took 13 minutes.
4. Informant 4 from registration until the file reaches the poly takes 14 minutes

These reports encouraged the researchers to study differences in the timeliness of providing outpatient medical record documents at TDF at Tripat Hospital and SNF filling at Siti Hajar Hospital Mataram. The purpose of this study was to determine the time of providing medical record documents at TDF at Tripat Hospital; to find out when to provide medical record documents at SNF at Siti Hajar Hospital Mataram; to find out the difference in the timeliness of giving medical record documents using the SNF and TDF filling systems and determining the causes of the inaccuracy.

RESEARCH METHOD

The study's design was cross-sectional; research by observing and measuring at once began in January to May 2022 at Tripat Hospital and Siti Hajar Mataram Hospital. The research variable in this study was the time of providing medical record documents. Figure 1 shows the research design carried out.
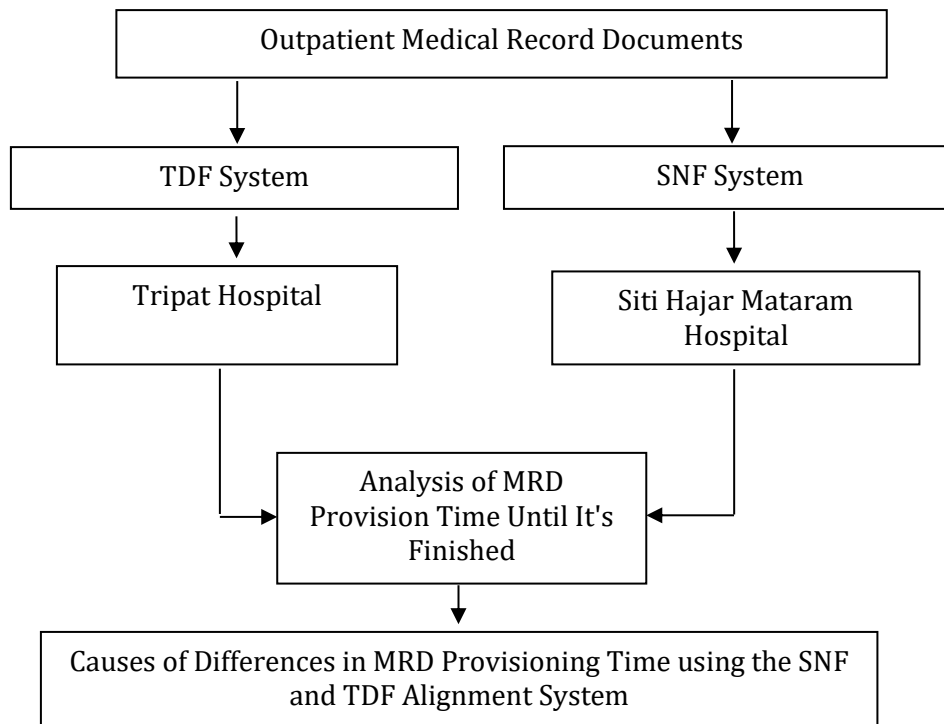
Figure 1. The Flow of Data Collection

The population in this study were all outpatient medical records in 2021 at Tripat Hospital with 887 documents and Siti Hajar Mataram Hospital with 693 documents. The research sample was obtained after going through calculations. The researchers determined 90 samples for the Tripat Hospital and 87 for the Siti Hajar Mataram Hospital. The research instrument was an observation sheet containing the patient's identity and the time of providing medical record documents. TDF and SNF. The data used was qualitative data, including the filing system, and quantitative data obtained from the time service for providing MRD. Analysis of research data used the independent sample test.

RESULTS AND DISCUSSION

Table 1 reveals the difference in the timeliness of providing outpatient medical record documents on the TDF system at Tripat Hospital and SNF at the Siti Hajar Mataram Hospital.

Table 1. Time of Provision of MRD at Tripat Hospital and Siti Hajar Mataram Hospital

No	Speed of Providing Outpatient MRD	TDF in Tripat Hospital	SNF in Siti Hajar Mataram Hospital
1.	Mean	08 minutes 45 seconds	09 minutes 26 seconds
2.	Standard deviation	29 minutes 22 seconds	18 minutes 40 seconds
3.	Maximum time	23 minutes 09 seconds	16 minutes 37 seconds
4.	Minimum Time	00 minutes 13 seconds	00 minutes 11 seconds
5.	Median	08 minutes 28 seconds	10 minutes 22 seconds
6.	Mode	09 minutes 50 seconds	03 minutes 24 seconds

Table 1 shows the time service for outpatient MRD at the Tripat Hospital. The data obtained for the time of offering documents with an average of 8 minutes 45 seconds, the standard deviation of 29 minutes 22 seconds, and the fastest is 00 minutes 13 seconds. The longest is 23 minutes and 09 seconds. Meanwhile, the time service for outpatient MRD at the Siti Hajar Mataram Hospital obtained an average of 9 minutes 26 seconds, the standard deviation of 18 minutes 40 seconds, the fastest is 00 minutes 11 seconds, and the longest is 16 minutes 37 seconds. The analysis to prove the difference in the time service for providing outpatient MRD in the TDF and SNF systems uses the Independent sample t-test comparison test in Table 2.

Table 2. Differences in Time Service for Outpatient MRD Provision on TDF and SNF Systems

Variables	Mean	T-count	*p-value*
TDF	695.43	2,041	0,043
SNF	799,24		

Table 2 reveals the difference in the time service for providing outpatient MRD in the TDF and SNF systems. The t-count value is 2.041 with a significance value (p-value) of 0.043. Suppose the p-value is smaller than 0.05 (0.043 < 0.05), then the test decision is H0 rejected, meaning there is a difference in the time service for outpatient MRD in the TDF and SNF systems. Furthermore, based on the average value of the MRD provisioning time, the TDF system has a faster average preparation time than the SNF system (695.43 < 799.24).

Time Service for Outpatient MRD Provision at Tripat Hospital with TDF System

The time for providing outpatient medical record documents is less than or equal to 10 minutes (< 10 minutes) until the medical record file is found by the officer or until it is available. Based on observations, by calculating the length of time from the patient registering until the officer discovers the MRD, the time was an average of 8 minutes 45 seconds, the standard deviation of 29 minutes 22 seconds, and the fastest was 00 minutes 13 seconds. The longest was 23 minutes and 09 seconds.

Based on the criteria according to or not following the standards set in MRD records, 44.4% fit the standards, with 40 MRD, and 55.5% are not appropriate, with 50 MRD. The officer takes the MRD, waits for a large number of tracers to accumulate, then sorts the numbers from small to large or sorts them into the closest number (e.g., the final number is 02, then the last number is 03). Then, the MRD is distributed to racks according to the polyclinic. The officers will collect more MRD beforehand to avoid going back and forth. Every patient who registers is not immediately taken for their MRD, but officers are waiting for many tracers. Then the tracers are sorted according to the number group so that when taking MRD. The officers are faster and more efficient in time and energy, but this situation may affect patients to wait longer. After the tracer comes out, the officer should immediately take the patient's MRD. Once the MRD is found and inputted, it should be sorted into the distribution rack according to the polyclinic. In addition, what causes long-time service is that the MRD has not returned for re-examination on the storage rack because it is still piled up in the

assembly section. The officers must assemble the MRD, submit it to the input section, and then place it on the distribution rack.

The delay in providing MRD depends on the medical record officers' knowledge. Aprilia et al. (2020) revealed that officers' understanding of the timing of MRD provision was needed. Lack of knowledge will only extend the process of providing MRD. This issue will cause longer waiting times. Patients and doctors will complain due to delays which ultimately hampers the service process at the hospital. In addition, the medical record officer does not participate in training related to MRD management activities, which will result in a long time in searching for patient MRD. The more often someone engages in training, the more knowledge they will gain, and the easier the problems will be solved in the unit (Aprilia et al., 2020).

The TDF system requires skilled personnel and is more expensive. There are still more than 10 minutes of MRD providing time. Officers are less experienced in providing patient MRD because there are still some misplaced MRDs. Although the TDF system can provide fast MRD, there are still shortcomings in practice, as Angara (2019) found. He wrote *Review of the Implementation of the Medical Record Document Filing System in the Filing Section at the Ken Saras Ungaran Hospital*. TDF system still had misfiles in the storage rack because officers were less focused due to additional tasks (Angara et al., 2019).

Andria's research (2015) on a review of medical record documents at RSUD Dr. Soekardjo, Tasikmalaya, showed that 63.64% of medical record documents were late with an average time of 12.36 minutes, exceeding the minimum service standard of 10 minutes (Andria & Sugiarti, 2015). Farhatani and Wulandari (2014) examined the determinants of the length of provision of outpatient medical records at RSUD DR. Moh. Soewandhie Surabaya. The determinant factors causing the length of time for medical record documents include employee workloads, facilities at the medical record installation, area for storing medical record documents, working distance, storage of medical record documents in outpatient services, and job design. (Farhatani & Wulandari, 2014).

In addition, the Standard Operating Procedure (SOP) can be a factor that affects the delay when providing MRD. Aprilia et al. (2020) explained no SOP regarding MRD and the distribution of medical record documents. There was only the Minimum Service Standard (SPM) for the quality section that 10 minutes is needed from the poly officer to call until the file arrives at the destination poly. Some officers do not know the time required to provide medical record documents. Hence, the officers are not aware of the correct time, which causes obstacles because there are no references, steps, or guidelines. This condition delays outpatient MRD because no policy regulates them (Aprilia et al., 2020).

Service Time for Providing Outpatient MRD at Siti Hajar Mataram Hospital with the SNF System

Based on data collection about time service for outpatient MRD at Siti Hajar Mataram Hospital using the SNF system, the data obtained an average of 9 minutes 26 seconds, the standard deviation of 18 minutes 40 seconds. The fastest was 00 minutes 11 seconds, and the longest was 16 minutes and 37 seconds. Furthermore, based on the criteria according to or not following the standards adjusted, most of them were suitable, with 37 MRD (42.5%) and the remaining 50 MRD (57.4%) being inappropriate. When the patient came to register, the officer immediately picked it up.

Due to no tracer, the officer writes in the expedition book. After being inputted and sorted according to the polyclinic, if many patients wait, the officer will take the MRD first, and once the MRD is piled up, they will input them. Sudrajat and Sugiarti (2015) investigated the relationship between time service for providing MRD and the level of patient satisfaction using the SNF system. They found that the time for delivering medical record documents for old patients in outpatient services was 64 (58, 72%) slow (Sudrajat & Sugiarti, 2015).

The SNF system's time service depends on the officer's skill in compiling medical records. If an error occurs in the medical history compiled, the medical record officer will have difficulty finding medical record documents, so the time for providing MRD will be longer. Farhatani and Wulandari (2014) examined the determinants of the length of outpatient MRDS at RSUD DR. Moh. Soewandhie Surabaya. The determinant factors causing the length of time for medical record documents include employee workloads, facilities at the medical record installation, area for storing medical record documents, working distance, storage of medical record documents in outpatient services, and job design. (Farhatani & Wulandari, 2014).

Differences in Time Service of Providing Outpatient MRD Provision in TDF and SNF Systems

There was a difference in the time service of outpatient MRD in the TDF and SNF systems. Based on MRD's average value of time service, the TDF system had a faster average preparation time than the SNF system (695.43 < 799.24). Hence, there are differences in time service between the TDF and SNF systems, where the TDF system had a faster MRD provision time than the SNF system. Providing MRD at the Tripat Hospital was not taking MRD directly but waiting for many tracers. They were sorted from the smallest number to the most significant number or sorted to the closest number (e.g., the final number is 02, then the last is 03) so that when the officer took MRD, more efficiently time and energy.

After the officers took the MRD, they input and sorted it according to the polyclinic. In the TDF system, the MRD increase is always evenly distributed. If there is a new MRD addition, the section can take the inactive MRD and still control the amount of MRD so that empty shelves do not arise. Each section number has a person in charge so that if there is a wrong number, it can be prevented because the officer only pays attention to the final two numbers. Angara et al. (2019), regarding the review of the MRD filing system in the filing section, showed that the TDF system still had misfiles in the storage rack because the officers were less focused on retrieval due to additional tasks that the filing officer must do. Meanwhile, at Siti Hajar Mataram Hospital, the officers took the MRD after the patient registered and immediately took the MRD without waiting for the tracer (Angara et al., 2019).

After the MRD was found, the medical record number, the patient's name, and the destination polyclinic were recorded in the expedition book, then input the medical record number. When entering the medical record number into the computer, however, the officers waited for a large number of MRD to be collected and sorted into the distribution rack. In taking MRD in large numbers of officers, the SNF system must be even more careful because it must pay attention to all numbers. The advantage of the SNF system is that it is easy for medical and non-medical records officers to carry out storage. Sudrajat's research (2015) on the relationship between the speed of providing outpatient medical record documents and the

level of patient satisfaction proved that the time service for providing MRD using the SNF system in outpatient services with 64 papers (58.72%) was still slow. (Sudrajat & Sugiarti, 2015).

The delay in providing MRD was due to the increasing number of visits not being matched by the addition of medical record document providers, filing systems that were not sequential, and the absence of tracers and books for borrowing medical record documents. (Aldossary et al., 2015). Almost all hospitals in Karisidenan Surakarta have used the TDF system. Changes to the filing system were implemented because the TDF system affected the increase in MRD for each MRD number evenly, and each MRD number already had a person in charge (Setijaningsih & Prasetya, 2020). The advantages of the TDF system are more when compared to the SNF system. In addition, some factors hinder the time in providing MRD for long outpatients in the TDF and SNF systems due to the characteristics that tend to be different in the Human Resources (HR) owned by each Health Service Facility (Fasyankes) or the behavior of medical record officers. (Nisaa et al., 2018).

The study revealed several factors affecting time service for MRD in hospitals, including medical record officers' educational background, knowledge, and lack of training related to medical record management activities. Human resources (HR) in a work unit must fit the workload. Funds or budgets in hospitals are available, but the implementation is not optimally funded, such as expanding the filling room. The HR budget for officer training, education, and rewards are still unavailable, so medical record activities are not optimal. It is necessary to use funds for medical record activities to run well, and the infrastructure that supports these activities can run better (Aprilia et al., 2020).

In addition, the contributing factor was that some officers did not know the time required for the process of providing medical record documents. Thus, the medical record officers were unaware of the SOP, causing obstacles due to no references or guidelines. The MRD, which consists of a sheet of paper, does not deserve to be wrinkled, torn, dirty, and easily misfiled. The tool to assist in providing outpatient medical record documents at the RSHU is the Hospital Information Management System (SIMRS). Through SIMRS, officers can see which patients will perform treatment, reports, and others (Aprilia et al., 2020).

CONCLUSION

The time service for providing outpatient MRD at Patuh Patut Patju Hospital with the TDF system with an average of 8 minutes 45 seconds and 58% was appropriate. While at the Siti Hajar Mataram Hospital with the SNF system, an average of 9 minutes 26 seconds and 35% was reasonable. There was a difference in the time service for providing outpatient MRD in the TDF and SNF systems, where the TDF system had a faster MRD provision time than the SNF system.

RECOMMENDATION

The filing clerk at the Tripat Hospital should immediately collect the patient's MRD without waiting for a lot of tracers so that the time for providing MRD for long outpatients is faster. Siti Hajar Mataram Hospital Filing officers should use a tracer to prevent misfiles. In addition, further research will hopefully investigate the factors that influence the difference in the time of providing MRD for long outpatients in the TDF and SNF systems.

REFERENCES

Aldossary, M., Almadni, O., Kharoshah, M., Alsaif, D., Alsowayigh, K., & Alfaraidy, M. (2015). Carbon monoxide toxicity in Dammam, KSA: Retrospective study. *Egyptian Journal of Forensic Sciences*, *5*(1), 36–38. https://doi.org/10.1016/J.EJFS.2014.10.002

Andria, F. D., & Sugiarti, I. (2015). Tinjauan Penyediaan Dokumen Rekam Medis Di Rsud Dr. Soekardjo Kota Tasikmalaya. *Jurnal Manajemen Informasi Kesehatan Indonesia (JMIKI)*, *3*(2), 51–57.

Angara, D. C., Lestari, T., & Harjanti. (2019). Tinjauan Pelaksanaan Sistem Penjajaran Dokumen Rekam Medis pada Bagian Filing di Rumah Sakit Ken Saras Ungaran. *Jurnal Hospital Science*, *3*(1), 1–4.

Aprilia, A. K. D., Nurmawati, I., & Wijayanti, R. A. (2020). Identifikasi Penyebab Keterlambatan Penyediaan Dokumen Rekam Medis Rawat Jalan di Rumah Sakit Husada Utama Surabaya Tahun 2020. *J-REMI : Jurnal Rekam Medik Dan Informasi Kesehatan*, *1*(4), 630–638. https://doi.org/10.25047/j-remi.v1i4.2130

Ernawati, S., Lestari, T., & Harjanti. (2013). *Tinjauan Pelaksanaan Sistem Penjajaran Dokumen Rekam Medis Di Bagian Filing Rsud Kabupaten Sukoharjo Tahun 2013*. 69–76.

Farhatani, W. H., & Wulandari, R. D. (2014). Faktor Determinan Lamanya Penyediaan Rekam Medis Rawat Jalan RSUD Dr. Moh. Soewandhie Surabaya. *Jurnal Administrasi Kesehatan Indonesia (JAKI)*, *2*(4), 243–254. http://journal.unair.ac.id/download-fullpapers-jaki062a6bdd33full.pdf

Halid, M., & Maryam. (2016). Tinjauan Analisis Kuantitatif Review Identifikasi pada Ringkasan Masuk Keluar Berkas Rekam Medis Operasi Caesar di Rumah Sakit Bhayangkara Mataram. *Jurnal Manajemen Informasi Kesehatan Indonesia*, *4*(2). http://jmiki.aptirmik.or.id/index.php/jmiki/article/view/138

Handiwidjojo, W. (2009). Rekam Medis Elektronik. *Universitas Kristen Duta Wacana Yogyakarta*, *2*(1), 36–41. https://ti.ukdw.ac.id/ojs/index.php/eksis/article/view/383

Ningsih, K. P., Pramono, A. E., Santoso, D. B., Ilmi, L. R., & Hernawan, H. (2021). Pendampingan Proses Transformasi Sistem Penjajaran Rekam Medis Menggunakan Terminal Digit Filing. *Link*, *17*(1), 61–66. https://doi.org/10.31983/link.v17i1.6819

Ningsih, K. P., Tunnisa, U., & Erviana, N. (2020). Manajemen Resiko Redesign Sistem Penjajaran Rekam Medis dengan Metode Failure Mode and Effect Analysis (FMEA). *Health Information Management Journal ISSN*, *8*(1), 2655–9129.

Nisaa, A., Mardeni, F. S., Perekam, P., Kesehatan, I., Veteran, U., Nusantara, B., Perekam, P., Kesehatan, I., Veteran, U., Nusantara, B., Dan, P. P., Manajemen, F., & Medis, I. R. (2018). Gambaran Penerapan alur Prosedur Pelayanan dan Penyelenggaraan Rekam Medis di RS PKU Muhammadiyah Selogiri. *Journal of Information Systems for Public Health*, *3*(3), 1–13. https://repository.uinjkt.ac.id

Nurripdah, A., & Sonia, D. (2021). Analisis Penjajaran Rekam Medis Straight Numerical Filing System menjadi Terminal Digit Filing System di RS Firdaus Tahun 2021. *Cerdika:*

Jurnal Ilmiah Indonesia, *1*(2), 120–137.

Ritonga, Z. A., & Sari, F. M. (2019). Tinjauan Sistem Penyimpanan Berkas Rekam Medis Di Rumah Sakit Umum Pusat H Adam Malik Tahun 2019. *Jurnal Ilmiah Perekam Dan Informasi Kesehatan Imelda (JIPIKI)*, *4*(2), 637–647. https://doi.org/10.52943/jipiki.v4i2.87

Riyanto, B., Pujihastuti, A., & Rohmadi. (2012). Tinjauan Pelaksanaan Penyimpanan Dan Pengambilan Dokumen Rekam Medis Di Bagian Filing Rsud Kabupaten Karanganyar. *Ejurnal.Stikesmhk.Ac.Id*, *VI*(2), 50–58. https://ejurnal.stikesmhk.ac.id/index.php/rm/article/download/268/242

Setijaningsih, R. A., & Prasetya, J. (2020). Standar Penyusutan Dokumen Rekam Medis di Puskesmas Kedungmundu Kota Semarang Tahun 2019. *VisiKes*, *18*(2), 18–29.

Sudrajat, I., & Sugiarti, I. (2015). Hubungan Kecepata N Penyediaan Dokumen Rekam Medis Rawat Jalan Dengan Tingkat Kepuasan Pasien. *Jurnal Manajemen Informasi Kesehatan Indonesia*, *3*(1). https://doi.org/10.33560/.v3i1.73