

# Inpatients Medical Record Delay: A Problem Analysis in Medical Record Department

Rita Anggorowati<sup>1</sup>, Tiny Rahayu<sup>1</sup>, Nurul Birulitsnaeni Aliyyati<sup>1</sup>, Rina Karlina<sup>1</sup>, Rifky Alfian Rochman<sup>1</sup>, Lidwina Azahra Rahmadanti Prayudi<sup>1</sup>, Asdi Bagus Mukhlis<sup>1</sup>

<sup>1</sup>Academy of Medical Records and Health Informatics (APIKES Bandung) Indonesia  
Email: [rita\\_anggoro@apikesbandung.ac.id](mailto:rita_anggoro@apikesbandung.ac.id)

## Abstract

Medical records are written as evidence of service processes performed on behalf of patients by doctors and other medical professionals. The deadline for returning medical records to the medical record facility is 2x24 hours from the patient's declaration of discharge by the patient's management. Based on the results of an initial survey in a form of a brief interview with the Head of the Medical Record Department at Al-Ihsan Hospital, the percentage of medical record returns from inpatients is still very low, less than 60%. This work highlights the analysis of the delayed return of medical records from the inpatient facility to the medical record storage room based on the completion of medical records, completeness of monitoring and evaluation, and compliance with the physician's obligations in completing the patient's medical records. This type of study is descriptive qualitative in the medical record-setting room at Al Ihsan Hospital. The results showed that, in terms of medical record completion, most physicians did not complete the patient's medical record. To include the primary diagnosis, physician's name, and signature. From the point of view of monitoring and evaluating medical records, medical records of inpatients are not monitored and evaluated by medical records due to the lack of staff at the medical record facility. On the other hand, from the perspective of physician compliance, more physicians are not compliant with filling out and filling out outpatient medical records.

**Keywords:** Inpatients medical record delay, medical records problem analysis, hospital management, descriptive qualitative

## 1. Introduction

A medical record is a file containing records and documents regarding patient identity, examination, treatment, actions, and other services that have been provided to patients (Bali, Bali, Iyer & Iyer (2011)). Medical records are written evidence of the service process provided by doctors and other health workers to patients. The Medical Record System in a hospital is a process of data collection, data processing, data storage, and data reporting (Sun, et. al., 2018; Baek, et.al., 2018). Organizing medical records is an activation process that starts from receiving patients at the registration site, recording medical data as long as the patient gets medical services at the hospital, followed by handling the patient's medical record file

This whole series is regulated in Standard Operating Procedures (SOP), which one of the points regulates the time limit for returning medical record files from inpatient installations to medical record installations, which is less than 2x24 hours after the patient is declared home by the doctor in charge of the patient. The regulation of the Ministry of Health of the Republic of Indonesia (2006) stated that inpatient medical records must be returned no later than 24 hours after the patient is discharged. If the medical record is not returned within 1x24 hours, then the medical record can be classified as a late or delayed medical record return. In other words, medical record return is a process of returning medical

records from the inpatient unit to the medical record installation in no more than 2x24 hours.

The process of returning inpatient medical records is recorded in the expedition book. The expedition book is written evidence stating that the medical record has been handed over by the medical record installation. This expedition book contains the patient's name, patient medical record number, and date of return of medical records (Putri & Sonia, 2021).

The delay in returning medical records affects the implementation of medical record services and can hinder the work of assembling officers who receive the return of medical records from the treatment unit, then the risk of loss and damage to medical records will be higher due to not being stored properly or called misfiled (Dilla, PM, & Alfiansyah, 2007). 2020). Medical records that have been returned and should be processed to produce quality information to improve the quality of hospital services are hampered due to delays in returning their medical records (McCrorie, et.al., 2019; Wani & Malhotra, 2018).

Field facts found when researchers conducted quantitative analysis in the assembling section who returned to the medical record installation on 20–21 January 2022 showed things that were different from what was determined by law where there were about 51 of 86 medical records of inpatients who did not return within 2x24 hours.

The delay in returning medical record files from

inpatient installations to medical record installations can be caused by several factors, namely the completeness of filling out medical record files by authorized officers, monitoring and evaluating the completeness of filling out outpatient medical record files, and doctors' compliance in completing patient medical record files.

Similar conditions regarding the problem of delays in returning medical files were also found in respective previous studies, where several factors were suspected to be the cause, such as research at the Semarang Police and TNI Hospital in 2010 which showed that incomplete medical record files were a factor affecting the delay in submitting medical record documents. hospitalization (Rachmany, 2010). Monitoring and evaluation used in the medical record process are to analyze the quality of medical records quantitatively and qualitatively (Muthee, et.al, 2018; Tsai, et.al., 2020). Qualitative analysis is a review of filling out medical records related to the consistency of the contents of medical records, while quantitative analysis is a review or review by evaluating the completeness of various types of forms and data/information. The absence of monitoring and evaluation can cause delays in returning medical record files from inpatient installations to medical record installations. This is by the results of research conducted at the Wangaya Hospital, Denpasar City which stated that one of the factors related to the rate of delay in returning medical record files from inpatient installations to medical records installations was the absence of monitoring and supervision from management and medical committees (Antara, 2013). Doctor compliance in filling out medical record files is in terms of filling out medical record files completely, correctly, and on time. The highest percentage of causes of delay in returning medical record files is found in the level of doctor discipline, namely the doctor's compliance in filling out the patient's medical record file. This is by the results of research conducted at PKU Muhammadiyah General Hospital Delanggu (Hastuti, 2009).

Based on the above background, the researchers are very interested in researching inpatients' medical record delay to do a problem analysis in the medical record department based on the completeness of filling out the medical record file, monitoring and evaluation, and the doctor's compliance in filling out the patient's medical record file.

## 2. Methods

The type of research used was descriptive qualitative research in the medical record installation room of Al Ihsan Hospital in 2022. The population in this study were all doctors at the Al Ihsan Hospital inpatient installation and the register book for returning patient medical record files. There are 6 key informants consisting of 3 general practitioners, 1 internship doctor, 1 paediatrician, and 1 medical record officer. The research instruments used were interview guides and observation sheets on 83

medical record files. To maintain anonymity, we present all respondent data using numeric codes that are not the initials of names.

## 3. Results

The key informants in this study consisted of 6 people which can be seen in Table 1.

No	Name	Age (years)	Gender	Position	Code
1	AXA	40	Female	General practitioners	a
2	BCX	38	Male	General practitioners	b
3	CDF	39	Male	General practitioners	c
4	EFH	29	Female	Internship	d
5	FDH	45	Male	Paediatrician	e
6	GJK	26	Female	Medical Records Officer	f

Further search results regarding the completeness of the medical record file based on the completeness of filling out the medical record file, monitoring and evaluation, and the doctor's compliance in filling out the patient's medical record file, it was found that:

### 3.1. Filling Completion in Medical Record Files

In the results of interviews with key informants regarding the completeness of filling out medical record files, it was found that not all doctors memorized clearly what medical file forms had to be filled out by doctors and not all doctors filled out complete medical records. On average, doctors take about 10 to 15 minutes to fill out a patient's medical record and due to busyness factors, the doctor does not immediately fill out the patient's medical file after the examination is complete. some doctors don't fill in completely because they have to wait for the results of laboratory tests that suddenly disappear, are incomplete, and some even claim to BPJS without any equipment.

For errors in writing in medical records, the average doctor already knows how to correct the error, namely by crossing out one line without eliminating the wrong writing with a scribble or with type x then replacing the correct writing and initialing it next to it. In terms of completeness of medical records returning to the medical record room, it is explained that medical records that never returned incomplete medical records to doctors for medical records also make doctors unable to analyze errors from filling out medical record files that are re-doing so that this makes doctors unable to analyze errors from filling out the medical record file.

In addition to the results of interviews, the following Table 2 also shows the results of observations of 83 medical record files:

No	Variable	Item in Medical Record Form				
		MR 3	MR 4	MR 6	MR 7	MR 13
1	Complete	25	31	30	74	48
2	Incomplete	58	52	53	9	35
In Total		83	83	83	83	83

From table 2 it can be seen that of the 83 medical

record files, not all of them are complete.

### 3.2. Monitoring and Evaluation of Medical Record Files

From the results of in-depth interviews with 1 medical record officer about monitoring and evaluating patient medical record files, it was found that the medical record officer knew the flow of returning medical record files. The flow is that the medical record file from the inpatient treatment room is returned to the medical record installation by the room staff. After that, the medical record officer saves the medical record file back to the filling room. The medical record officer cannot assess the completeness of filling out the medical record file because the medical record officer does not analyze the medical record file. The reason is that there is no special officer to analyze the patient's medical record file, the medical record officer only guesses which medical record files are often complete, namely the patient discharge resume form because if the resume form is incomplete then the medical record file cannot be claimed by BPJS. The medical record officer only knows that the medical record file is late being returned through the return register book. The filed return register book records the date the patient was discharged and the date the medical record file was returned. The book serves as proof of returning the medical record file from the room and as a tool for evaluating the medical record officer for the room being late in returning the medical record file. because the register is there. The medical record officer is only limited to knowing the delay in returning the medical record file rather than the completeness of filling out the medical record file because medical records still require additional employees, especially in the medical record file analysis section.

The total number of medical record officers is 8 officers, consisting of 6 people at the counter and 2 medical records. Of the 2 people in the medical records section, 1 person serves as a data processor for outpatient reports, outpatient reports, supporting reports, and other required reports. 1 more person serves as administrator for visum et repertum, death certificate, insurance, and other required certificates. In addition, the hospital leadership also did not ask for data about the completeness of filling out medical record files, so it can be seen that there was no monitoring and evaluation of the completeness of filling out outpatient medical record files.

In addition to the results of interviews, the following also shows the results of observations of 83 medical record files:

No	Variable	Total
1	Conducted	0
2	Not Conducted	83
	In Total	83

From table 3 it can be seen that of the 83 medical record files, none of the medical record files went through the stages of the monitoring and evaluation process.

### 3.3. Physician/Doctor Compliance

Based on the results of observations on 8 medical record files of returning patients who returned to the medical record room for the last 1 month, the level of doctor compliance in filling out and completing the patient's medical record files, namely from 8 doctors there were 6 obedient doctors and 2 doctors who were not obedient in filling out and completing medical records. Complete the patient's medical record file. This is by the following table:

No	Variable	Total
1	Comply	2
2	Disobey	6

Based on the results of interviews, it was found that most doctors did not mention the components that must be included in the complete medical record. Another cause is the doctor's ignorance about the time limit for returning inpatient medical record files to the medical record installation, which is no later than 2x24 hours after the patient returns, so doctors do not feel the need to immediately complete the inpatient medical record file.

## 4. Discussion

Completeness in filling out medical record files by doctors will be able to facilitate other health workers in providing action or treatment to patients and can be used as a source of data in the medical record section in data management and reports that will be used as useful information for hospital management in determining (Hatta, 2016).

The problem that often arises in filling out medical records is that the process of filling it is incomplete, the doctor's writing is less specific about the diagnosis. This situation will have an impact on internal and external hospitals because the results of data processing are the basis for making hospital internal reports and hospital external reports. This report relates to the preparation of various hospital plans, decision-making by the leadership, and especially the evaluation of services that have been provided which are expected to result in better evaluations. Seeing the importance of data in medical records, the quality of the information in medical records, including the timeliness of information stored and used, determines the quality of patient information.

The flow of medical records starts from the patient registration counter in the filling room or the patient's medical record file storage area. When the patient is being treated, the patient's medical record file will be taken to the intended treatment room after the patient is treated until he returns home the

doctor must fill out the complete medical record file first before the room administration officer returns the patient's medical record file to the room to the medical record installation and then the record file the patient's medical history is returned to its original place, namely in the medical record file storage area or in the filling room.

Based on the results of observations on the medical record files of returning patients who returned to the medical record room, namely 83 inpatient medical record files who returned to the medical record room, they were not assessed per file, but what was assessed was the form per sheet. The forms that are assessed are patent forms filled out by doctors. The forms are the informed consent form (MR 3), entry and exit summary form (MR4), patient & family information & education (MR 6), integrated progress note form (MR 7), and exit resume form (MR13). From the results of observations of the patient's medical record file, it was found that in terms of filling out the medical record file from 83 medical record files on MR 3, 83 forms were filled in, while 3 forms that were not filled in, MR 4 filled in 78 forms, while 5 unfilled forms. MR 6 forms filled in 67 forms while 16 forms were not filled in and MR 13 forms were filled in 79 forms while the forms were not filled in 5 forms, the results show that more doctors fill out medical record files than those who do not. medical record files, while to see the completeness of the researchers, look at the completeness of the 83 medical record files, namely on MR 3 complete forms 25 forms while incomplete forms 58 forms, MR 4 complete forms 31 forms while incomplete forms 52 forms, MR 6 complete forms, 30 forms while incomplete forms complete 53 forms, MR 7 complete forms 74 forms while incomplete forms 9 forms, and MR 13 complete forms 48 forms while incomplete forms 35 forms. These results indicate that more doctors do not complete medical record files.

The main thing that the researcher saw was that the main items were always missing, for example, the main diagnosis, the name, and the signature of the doctor, which many doctors did not provide. Then to see the completeness in terms of correcting errors in 83 medical record files, 17 writing errors or writing crossed out. Of the doodles, 7 scribbles were corrected correctly and 10 doodles were corrected incorrectly. The way to correct errors in writing is to cross out one line of writing that is wrong and write the correction of the error next to it and then put a signature or initials.

From the statement, it was found that there were still doctors who made mistakes in correcting writing errors in the patient's medical record file. It is better if the patient's medical record file that is filled out must be completely completed, not just filling out the medical record file, but the doctor needs to pay attention to the details of the completeness of filling out the medical record file, especially those that are often forgotten, namely the diagnosis, name, and signature of the doctor on each sheet of the record file form. without exception so that it will create a

complete and correct medical record file.

Medical record documents in hospitals aim to support the achievement of orderly administration in improving the quality of health services in hospitals. To achieve this goal, the filling or recording of medical records must be complete and legible so that the resulting information can be used as accountability.

Because of the importance of medical record documents as a source of information, it is necessary to monitor and evaluate the completeness of filling in the medical record file, in this case, the medical record file, it is necessary to analyze the patient's medical record file. Analysis of the quality of medical records used two ways, namely quantitative analysis (amount or completeness) and qualitative analysis. Quality in the filling is indeed the responsibility of the health workers because they are the ones who carry out the medical recording. When the medical record file arrives at the medical record unit, the medical record unit officer who receives it checks whether the medical record file meets the quality of the completeness of the file. If there is a medical record file that does not meet the need for completeness, the medical record unit officer is obliged to ask the health officer (medical or paramedic) concerned to complete it. The medical record unit officer may only enter the complete medical record file into the alignment rack. Based on the results of observations and interviews, the medical record officer was only limited to knowing the delay in returning the medical record file rather than the completeness of filling out the medical record file.

The monitoring and evaluation have not yet been carried out because the medical record installation still requires additional employees, especially in the medical record file analysis section. The need for this additional number of employees is so that the medical record officer can perform data processing on each medical record file to evaluate the completeness of filling out the medical record file of the patient returning home. In addition, there is a need for support from hospital leaders for the importance of monitoring and evaluating medical record files as part of the quality of hospital information systems.

Doctor compliance in completing medical record data is an important element so that there is no delay in returning medical record files from the treatment room to the medical record installation. Knowledge affects a person's behavior so that when knowledge is good, it will encourage someone to behave according to that knowledge

Based on the results of interviews and observations, it was found that most doctors did not mention the components that must be included in the complete medical record. Even though the doctor's knowledge of aspects of medical records can influence doctors in filling out medical records. In addition, doctors' ignorance about the time limit for returning inpatient medical record files to the medical record installation, which is no later than

2x24 hours after the patient returns home, also affects. This is because doctors do not feel in a hurry to complete the medical record files of inpatients after carrying out their other activities. The socialization of the hospital management to all medical personnel regarding the importance of the quality of patient medical record data and hospital SOPs is an alternative solution needed by hospitals to overcome the problem of delays in returning medical record files.

## 5. Conclusion

Based on the results of research and analysis carried out, it can be concluded that the delay in returning medical record files from the Inpatient Installation to the Medical Record Storage Room at Al Ihsan Hospital is due to the incomplete filling of medical record files by doctors, the absence of monitoring and evaluation carried out by doctors, medical record officers and there are still doctors who have not complied in filling out medical record files, Suggestions that can be given are the need for socialization from the hospital management to all medical personnel about the importance of the quality of patient medical record data and the role of every medical personnel, especially doctors, in completing the contents of medical records. Socialization of the SOP for the medical record process also needs to be carried out to support the achievement of doctor compliance in the completeness of medical record recording and the timeliness of returning medical record files. Additional personnel is also needed so that the monitoring and evaluation function can run in the hospital medical record installation.

## References

Antara, A.A.G.B.L. 2013. Faktor Faktor Yang Berhubungan Dengan Tingkat Keterlambatan Pengembalian Berkas Rekam Medis Dari Instalasi Rawat Inap Ke Instalasi Rekam Medis Di RSUD Wangaya Kota Denpasar. *Community Health Journal*. Vol. 1 No. 2.

Baek, H., Cho, M., Kim, Seok., Hwang, H., Song, M., & Yoo, S. 2018. Analysis of length of hospital stays using electronic health records: A statistical and data mining approach. *PLoS ONE* 13(4): e0195901. <https://doi.org/10.1371/journal.pone.0195901>

Bali, A., Bali, D., Iyer, N., & Iyer, M. (2011). Management of medical records: facts and figures for surgeons. *Journal of maxillofacial and oral surgery*, 10(3), 199–202. <https://doi.org/10.1007/s12663-011-0219-8>

Depkes RI, D. Y. (2006). *Pedoman Penyelenggaraan dan Prosedur Rekam Medis Rumah Sakit di Indonesia Rev. II*. Jakarta: Direktorat Jenderal Bina Pelayanan Medik.

Dilla, R. F., P.M., D. R., & Alfiansyah, G. (2020). Analisis Faktor Penyebab Keterlambatan Pengembalian Berkas Rekam Medis Rawat Jalan di

RSUPN Dr. Cipto Mangunkusumo. *Jurnal Rekam Medik dan Informasi Kesehatan* Vol. 1 No. 4 September 2020, 448.

Hastuti. S.D., dkk. 2009. Analisis Keterlambatan Pengembalian Dokumen Rekam Medis Pasien Rawat Inap di Bagian Assembling di RSUD PKU Muhammadiyah Delanggu Triwulan I Tahun 2009. *Jurnal Kesehatan*. Vol. III. No. 1.

Hatta, G.R..2016. *Pedoman Manajemen Informasi Kesehatan di Sarana Pelayanan Kesehatan*. Jakarta: Universitas Indonesia Press.

McCrorie, C., Benn, J., Johnson, O. et al. Staff expectations for the implementation of an electronic health record system: a qualitative study using normalization process theory. *BMC Med Inform Decis Mak* 19, 222 (2019). <https://doi.org/10.1186/s12911-019-0952-3>

Muthee, V., Bochner, AF., Osterman, A., Liku, N., Akhwale, W., Kwach, J., et al. (2018) The impact of routine data quality assessments on electronic medical record data quality in Kenya. *PLoS ONE* 13(4): e0195362.

<https://doi.org/10.1371/journal.pone.0195362>

Putri, A. K., & Sonia, D. (2021). Efektivitas Pengembalian Berkas Rekam Medis Rawat Inap dalam Menunjang Kualitas Laporan di Rumah Sakit Bhayangkara Sartika Asih Bandung. *Jurnal Inovasi Penelitian* Vol. 2 No. 3 , 909.

Rachmani, E. 2010. Analisa Keterlambatan Penyerahan Dokumen Rekam Medis Rawat Inap di Rumah Sakit Polri Dan TNI Semarang. *Junal VISIKES*. Vol.9 N0.2.

Sun,W., Cai, Z., Li, Y., Liu, F., Fang, S., & Wang, G. 2018. Data Processing and Text Mining Technologies on Electronic Medical Records: A Review. *Journal of Healthcare Engineering*, vol. 2018, Article ID 4302425, 9 pages, 2018. <https://doi.org/10.1155/2018/4302425>

Tsai, Chen, H., Aboozar, E., Nadia, D., Graham, W., Stephen, F., & Sabine, K. 2020. "Effects of Electronic Health Record Implementation and Barriers to Adoption and Use: A Scoping Review and Qualitative Analysis of the Content" *Life* 10, no. 12: 327. <https://doi.org/10.3390/life10120327>

Wani, D., & Malhotra, M. 2018. Does the meaningful use of electronic health records improve patient outcomes? *Journal of Operations Management*, Volume 60, 2018, Pages 1-18, ISSN 0272-6963, <https://doi.org/10.1016/j.jom.2018.06.003>.