

International Journal of Health and Information System (IJHIS)



journal homepage: https://ijhis.pubmedia.id/index.php/ijhis

Article

Improvement Strategy to Reduce Delay in Returning Inpatient Medical Record at Jenggawah Primary Health Center in 2023

Novita Nuraini 1*, Bella Amalia Febriyanti 2 and Rossalina Adi Wijayanti 3

- ¹ Politeknik Negeri Jember; novita_nuraini@polije.ac.id
- ² Politeknik Negeri Jember; bamalia842@gmail.com
- ³ Politeknik Negeri Jember; rossa@polije.ac.id
- * Correspondence: novita_nuraini@polije.ac.id

Abstract: Delay return of inpatient medical records still occur at Jenggawah Primary Health Center with an average percentage 52,15%. This situation leads to misfiled records, potentially causing disruptions and errors in patient care. The purpose's research was to develop a strategy to reduce delay return of inpatient medical records using action research. This research methodology is quasi-semi-experimental methodology, incorporating interviews, observations, documentation, and discussions for data collection. Results in diagnosing action, the delay in returning the medical record of inpatient was caused by the officers' lack of medical record knowledge and their lack of medical record training, the contents of the SOP, which required evaluation, and the tracer's inadequate work. Planning action to plan strategy which are hold medical record training, reviewing returning medical record's SOP and redesigning tracer. Taking action to implement strategy during 3 month. There is the evaluation action, which includes 4 success parameters. Overall, it is considered successful if the percentage of delays in returning inpatient medical records is dropped to a maximum of 50% per month. Evaluating action to evaluate taking action were carried out properly because the percentage of delays in returning inpatient medical record was reduced below 50%. It's hoped medical recorder always money and remind each other regarding the return of inpatient medical records. And it's hoped Jenggawah Primary Health Center will hold in house training, hold socialization of SOP and budgeting funds for supporting facilities.

Citation: N. Nuraini, B. A. Febriyanti and R. A. Wijayanti, "Improvement Strategy to Reduce Delay in Returning Inpatient Medical Record at Jenggawah Primary Health Center in 2023", *IJHIS*, vol. 2, no. 2, pp. 78–85, Sept. 2024.

Received: 30-07-2024 Accepted: 22-08-2024 Published: 08-09-2024



Copyright: © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International License (CC BY SA) license

(http://creativecommons.org/licenses/by-sa/4.0/).

Keywords: Action Research; Delay; Medical Record

1. Introduction

Primary Health Center is a health service facility that organizes community health efforts and individual health efforts at the first level, by prioritizing promotive and preventive efforts, to achieve the highest degree of public health in its working area. There are two efforts at the primary health center, namely UKP and UKM, where one of the UKP has the authority to carry out medical records[1]. The medical record is a file that contains notes and documents about patient identity, examination, treatment, actions and other services that have been given to patients[2]. In the implementation of medical records at Jenggawah Primary Health Center, problems often occur, one of which is related to delays in returning medical records. Delays in returning medical records also often occur at the Jenggawah Primary Health Center. The percentage of delays in inpatient medical records is still fluctuating and the average percentage is more than 50% until 2022. This is supported by the results of a preliminary study regarding data on delays in returning inpatient medical records with the highest percentage in February 2022 of 100% and the average percentage for 2021-2022 is 52.15%. It affects medical record misfiling, with a total of 25 files of lost and missing medical records.

Obviously, these issues must be followed by the development of an improvement strategy for solving delays in returning of inpatient medical records. The preliminary study's results from interviews with medical recorders hoped for follow-up to overcome delays in returning inpatient medical records at the Jenggawah Primary Health Center. In preserving with prior study, which similarly sought to solve difficulties by devising techniques to reduce delays in returning medical records[3]. Action research is one suitable way for building an improvement strategy. Action research refers to trials that are continuously watched for advantages and disadvantages, and then controlled modifications are made to maximize effort in the most appropriate kind of action[4]. So, based on the problems described above, this study aims to develop a strategy to reduce delays in returning inpatient medical records at the Jenggawah Primary Health Center using a blends qualitative methods with a quasi-experimental framework, which consists of four stages: diagnosing action, planning action, taking action, and evaluating action. The aim of using this method seeks to evaluate a treatment to establish its efficacy in overcoming an issue.

2. Materials and Methods

This study used a semi-qualitative quasi-experimental research design. Semi-qualitative quasi-experimental research design is a research approach that blends qualitative methods with a quasi-experimental framework. It aims to evaluate the effects of an intervention or treatment using a design that does not rely on random assignment, incorporating qualitative insights to enhance understanding and interpretation of the results. The usage of semi-experimental quasi seeks to evaluate a treatment to establish its efficacy in overcoming an issue[5]. The researcher employed action research in this semi-experimental qualitative study. The stages of action research are diagnosis, planning, implementation, and evaluation[6]. The Jenggawah Primary Health Center in Jember Regency is the site of this study. The research period begins in October 2022 and ends in May 2023. This study included five informants: two medical record officers, two inpatient nurses, and the director of the Jenggawah Primary Health Center.

Interviews, observation, documentation, and discussion were utilized to obtain data. Interviews and observations were carried out in order to discover and analyze delays in returning inpatient medical records at diagnosing and acting. Documentation is used to support supporting data from this study's observations about measures to eliminate delays in returning inpatient medical record files at the Jenggawah Primary Health Center. During the conversation, an effort strategy is developed at the planning activity, and the implementation of the effort strategy is evaluated at the evaluating action.

3. Results and Discussion

3.1. Diagnosing Action

In this study, diagnosing action was carried out by identifying the variables causing the delay in returning medical records at the Jenggawah Primary Health Center through talks with informants. The discussion results suggest that three key objectives were identified from a total of eight variables causing the problem identified as factors causing the delay in sending inpatient medical records at the Jenggawah Primary Health Center. There are officials' lack of medical record knowledge and their lack of medical record training, the SOP's contents must be examined so SOP socializing has yet to take place and tracer that isn't working properly. This is supported by USG results in prioritizing causal factors connected to the return of inpatient medical records at Jenggawah Primary Health Center, as shown below:

Table 1. Priority Factors Contributing to Issues

No.	Cause of Issue		USG		Score (U + S + G)	Rank
		U	S	G		
1.	Officials' lack of medical record knowledge and their lack of medical record training	19	21	16	56	1
2.	The SOP's contents must be examined, and SOP socializing has yet to take place	20	18	16	54	2

Source: Primary Data at Jenggawah PHC (2023)

Table 1 reveals that the elements leading the officers' lack of understanding and the lack of training on medical records are the most important causes of issues. It has been adjusted to the results of identifying the causative factors obtained related to the delay in returning inpatient medical records based on prioritizing of the factors causing the problem of late return of inpatient medical records. According to earlier research, prioritization of new problems can be carried out when the variables underlying the problem have been identified[3].

3.2. Planning Action

Planning is the process of selecting and integrating information, making and applying assumptions about the future, and identifying and structuring specific activities that are thought to be required to attain a specific result[7]. Planning is carried out at this stage based on the results of priority reasons causing delays in returning inpatient medical records at diagnosing action. According to the table below, the results of strategic efforts were obtained from each of the elements generating the current problems based on the findings of interviews with informants:

Table 2. Discussion Result of Planning Action

No.	Causative Factor	Strategic Planning
1	Officials' lack of medical record	Acquisition of internal medical record
	knowledge and their lack of medical	training
	record training	
2	The SOP's contents must be examined,	Reviewing SOP and obtaining SOP
	and SOP socializing has yet to take	socialization
	place	
3	Tracer that isn't working properly	Tracer inpatient medical record redesign
Sou	rce: Primary Data at Jenggawah PHC (2023)	

Table 2 illustrates the strategic planning activities that will be carried out in the following stage. First, the strategy of offering internal medical record training to account for officers' lack of expertise and absence of officers having attended medical record training. The preparation stage (submission of presenters, preparation of materials, technical preparation of time and place of implementation, preparation pretest and posttest, and manufacture rundown event) precedes the implementation and evaluation stages in the procurement of internal medical record training. The acquisition of internal medical record training has numerous applications, one of which is to assist the parties involved in appropriately organizing medical records. According to prior study,

implementing medical record training can increase the growth of medical record management governance[8].

The strategy for efforts to determine the causal factors for the contents of the SOP that need to be reviewed and the socialization of the SOP that has not yet been held is in the form of reviewing the SOP and procuring SOP socialization. This planning was carried out by reviewing the SOP for Returning Medical Records at the Jenggawah Primary Health Center by adding a clear standard time for returning inpatient medical records to the procedure section, namely 2x24 hours after the patient returns home. Furthermore, the results of the review of the SOP for returning medical records which were agreed upon in a discussion forum between researchers and informants will be socialized together with the implementation of medical record internal training. The significance of evaluating and socializing SOP so that the procedure for returning inpatient medical records is carried out by focused officers. According to previous research, it is necessary to develop a SOP for filling out medical record files in which there is a standard time for filling out medical records so that doctors or nurses have guidelines in filling out medical record files in order to reduce delays in officers returning medical record files[9]. Other studies emphasize the need of socializing SOP for returning inpatient medical record files and conducting regular evaluations by involving key personnel[10].

The third causative factor effort technique, tracer, has not performed optimally in the form of redesign tracer inpatient medical record. This strategic planning takes the form of the researcher proposing a design that is then agreed upon in a discussion forum, which design will be picked and then executed for usage at a later time. According to prior researchers who also performed redesign planning tracer in dealing with the incident misfile[11][12]. The effort strategy assigned to each element causing the delay in returning the inpatient medical record file, according to the researchers, had been modified to previous theory or research as well as field settings and the findings of conversations between informants and researchers.

3.3. Formatting of Mathematical Components

Taking action, that is, carrying out the effort strategy specified in the preceding stage. Taking action for three months, from January to March 2023. Elaboration of the effort strategy's implementation in taking action as follows:

- 3.3.1 Strategy of Acquisition of internal medical record training
 Internal medical record training was held by inviting presenters who are
 graduates of health information management, have job experience, and are
 knowledgeable about medical records and health information. Internal medical
 record training will be implemented on January 11, 2023 at the Jenggawah
 Primary Health Center's Joint Hall. Participants included 15 Jenggawah Primary
 Health Center staff from various departments.
- 3.3.2 Strategy of Reviewing SOP and obtaining SOP socialization

 The Jenggawah Primary Health Center's SOP for Returning Medical Records was reviewed by holding meetings with informants during the planning action. Technically, the researcher created a review plan for several SOP elements that were not suited to the Jenggawah Primary Health Center's guidelines and SOP format, which were then reviewed in a discussion on December 20, 2022. The researcher's SOP review design was also accepted by the debate participants, one of whom was the head of the primary health facility. Furthermore, during

the internal medical record training on January 11, 2023, the SOP on the review outcomes was socialized.

3.3.3 Strategy of Tracer inpatient medical record redesign

New design creation tracer inpatient medical records was carried out with technical researchers offering designs tracer and then gathering comments from informants who were officers who would implement and utilize it tracer. And the approved design's outcomes are red, which are created from red bufalo paper and then laminated to last a long time. Following agreement on the design, 30 samples were created to be used when an inpatient medical record was removed from the storage rack.

At the level of action, interviews were conducted with informants about the constraints encountered during the implementation of the effort strategy. As a result, informants met the following challenges:

"because the tracer is not on deck, several inpatient medical records are coming out of the storage shelf without a tracer." (Informant 1)

"a lot of medical records, after being filled out by nurses/doctors, are not put in their proper places, so I still have to look for new recapitalization to the expedition book, so there are still delays" (Informant 4)

The results of the above interview statement show that the informant faced two challenges: the number of samples tracer inpatient medical records and non-compliance officers (nurses/DPJP) putting medical records that had been filled in to the recording place before returning the inpatient medical records. This is consistent with earlier research, which argues that barriers during implementation cannot be avoided, thus they must be translated based on the implementation conditions[3]. According to researchers, the execution of the effort strategy at taking action was done correctly because the constraints that happened did not cause the effort strategy to fail.

3.4 Evaluating Action

The goal of action evaluation is to assess the outcomes of putting measures into practice to shorten the time it takes to return inpatient medical data. When reviewing the implementation of initiatives to cut down on inpatient medical record delays at the Jenggawah Primary Health Center in 2023, there are a number of success criteria to consider. Table 3 provides an explanation of the success parameters.

Firstly, the internal procurement plan for medical records has completely met its success criteria. On January 11, 2023, internal medical record training was implemented at the Jenggawah Primary Health Center. Additionally, the installation of internal medical record training attempts to address contributory variables such as officers' lack of expertise, and when doing so, pretests and posttests were conducted to gauge employee understanding. The outcome is an average posttest better than pretest as big percentage. This corresponds to an average pretest percentage of 66.67% and an average posttest percentage of 90.67%. Furthermore, the success parameter of changes in the conduct of medical record officers following internal medical record training has been reached. The behavior in question is increased medical recorder awareness of medical record implementation, such that after participating in internal medical record training, medical recorders return to routine reporting and retention. According to research, behavior change after training is one sign of training implementation success[13][14].

Table 3. Success Parameter

No.	Strategy		Success Parameter		
1.	Acquisition of	internal	1. Implementation of internal medical record		
	medical record tra	ining	training at the Jenggawah Primary Health Center		
			 Posttest's average more than pretest's average Improvements in medical recorder's behavior 		
2.	0	SOP and	Implementation of the Standard Operating		
	obtaining socialization	SOP	Procedure for Returning Medical Records		
3.	Tracer inpatient	medical	The usage of tracer whenever an inpatient medical		
	record redesign		record is removed from the storage rack.		
4.	Overall		The percentage of inpatient medical record delays		
			at Jenggawah Primary Health Center dropped to a		
			maximum of 50% per month.		

Source: Primary Data at Jenggawah PHC (2023)

Second, the strategy's success conditions for reviewing SOP efforts and securing SOP socializing have also been reached. Whereas the Jenggawah Primary Health Center's implementation of the procedure for returning inpatient medical records is in accordance with the SOP procedure for returning medical records, which has been reviewed, and inpatient nurses have also returned medical records 2x24 hours after the patient leaves the health facility. According to laws, the standard time for returning inpatient medical records is no later than 2 x 24 hours after the patient has been totally and correctly discharged[15]. In keeping with past study, the research location's protocols included the standard return of inpatient medical records 2x24 hours after the patient was discharged[16]

Third, the success parameter of the redesign tracer approach inpatient medical record was very well attained. When there is an inpatient visit and the medical records come out of the storage rack, the strategy implementation attempts at taking action with 30 samples tracer inpatient medical records are always employed. According to one of the most important rules in the storage area, no medical record may leave the medical record room without an exit sign/borrowing card[17][18].

The fourth success indicator for this study is to reduce delays in returning inpatient medical records at the Jenggawah Primary Health Center in 2023. The success indicator is the percentage of delays in returning inpatient medical records at the Jenggawah Primary Health Center, which has been reduced to a maximum of 50% each month and has been met. According to table 5 and figure 1, the observation findings also indicate data on delays in returning medical records before and after the effort plan is carried out, with a very favorable trend.

Table 4. Returning Medical Records Prior to Strategy Implementation

Month	Inpatient Visits	Late Return of	Delay Presentation
		Medical Record	
September 2022	77	35	45.50%
October 2022	76	48	63.20%
November 2022	67	40	59.70%
December 2022	68	43	63.24%

Source: Primary Data at Jenggawah PHC (2023)

According to table 4, the percentage of delays in returning inpatient medical records at the Jenggawah Primary Health Center prior to the introduction of the plan was still greater than 50%. While Figure 1 depicts the trend of delays in inpatient medical records, the percentage of delays is considerably below 50%. From January to February to March, the percentage of delays in returning inpatient medical records dropped. With percentages of 16.43%, 15.68%, and 9.52%.

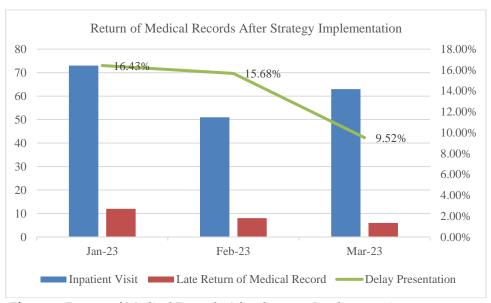


Figure 1. Return of Medical Records After Strategy Implementation

Conclusion on evaluating action are all success parameters attained in this study. As a result, on May 20, 2023, the Jenggawah Primary Health Center endorsed this approach in a discussion forum to continue following the strategy recommendations emerging from this research. This study, according to the researchers, had a significant influence on better medical record management at the Jenggawah Health Center. This is demonstrated by the certification of the Jenggawah Primary Health Center's endeavor strategy's durability. In line with prior studies made attempts to improve delays in returning inpatient medical record documents, and the results provided positive outcomes in the administration of his medical records[19][20]

4. Conclusions

The research on the Improvement Strategy to Reduce Delay in Returning Inpatient Medical Record Files at Jenggawah Primary Health Center in 2023 revealed that the delays were due to a lack of knowledge among officers and staff about medical records, insufficient review and socialization of SOP content, and an underperforming tracer system. To address these issues, a strategic plan was implemented in 2023, including internal training, a review of the SOP for Returning Medical Records, SOP socialization, and a redesign of the tracer system, with the initial phase starting in December 2022. The strategic measures were executed over three months from January to March 2023, and by May 2023, the implementation was reviewed and found effective, meeting the success criteria outlined in the TOR. The Jenggawah Primary Health Center plans to continue its efforts to further improve the process.

References

[1] Kemenkes RI," *Peraturan Menteri Kesehatan Republik Indonesia. Nomor 43 Tahun 2019 Tentang Pusat Kesehatan Masyarakat.*, no. 2, pp. 5–10, 2019.

- [2] Kemenkes RI, "Peraturan Menteri Kesehatan Republik Indonesia Nomor 24 Tahun 2022 Tentang Rekam Medis," *Peraturan Menteri Kesehatan Republik Indonesia. Nomor 24 Tahun 2022 Tentang Rekam Medis*, vol. 2, no. 1, pp. 1–4, 2022, [Online]. Available: http://www.ifpri.org/themes/gssp/gssp.htm%0Ahttp://files/171/Cardon 2008 Coaching d'équipe.pdf%0Ahttp://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203%0Ahttp://mpoc.org.my/malaysian-palm-oil-industry/%0Ahttps://doi.org/10.1080/23322039.2017.
- [3] F. Erawantini, A. Yuliandari, A. Deharja, and M. W. Santi, "Strategi Mengurangi Keterlambatan Pengembalian Berkas Rekam Medis Rawat Inap di RSUD Pasirian Lumajang Tahun 2020," J. Manaj. Inf. Kesehat. Indones., vol. 10, no. 2, p. 160, 2022, doi: 10.33560/jmiki.v10i2.474.
- [4] B. Cahyono, "Peran Modal Sosial Dalam Peningkatan Kesejahteraan Masyarakat Petani Tembakau Di Kabupaten Wonosobo," J. Ekon. dan Bisnis, vol. 15, no. 1, p. 1, 2014, doi: 10.30659/ekobis.15.1.1-16.
- [5] D. Utami, "Penerapan Model Pembelajaran Probing Prompting dalam Pembelajaran Mengabstraksi Teks Negosiasi pada Siswa Kelas X SMA/MA," *Riksa Bhs.*, vol. 2, no. 2, pp. 151–158, 2016.
- [6] T. P. Sari, R. Asrin, and W. Maulida, "Upaya Penurunan Terjadinya Duplikasi Penomoran Rekam Medis Pasien Di RSIA Budhi Mulia," *ARSY J. Apl. Ris. Kpd. Masy.*, vol. 2, no. 2, pp. 112–116, 2022, doi: 10.55583/arsy.v2i2.190.
- [7] Z. S. Baity, "Sistem Informasi Manajemen Keuangan di SMP Muhammadiyah 19 Kota Pematang Siantar," pp. 8–45, 2020.
- [8] F. Hakam, "Pelatihan Manajemen Rekam Medis Sesuai Dengan Standar Pedoman Penyelenggaraan Dan Prosedur Rekam Medis Di Puskesmas Kecamatan Weru Kabupaten Sukoharjo," *J. Manaj. Inf. dan Adm. Kesehat.*, vol. 1, no. 02, pp. 25–28, 2018, doi: 10.32585/jmiak.v1i02.164.
- [9] V. Munawaroh, "Analisis Faktor-Faktor Penyebab Keterlambatan Pengembalian Berkas Rekam Medis Dari Ruang BPJS Ke Unit Rekam Medis Rumah Sakit Islam Lumajang Tahun 2017." Jurusan Kesehatan:Program Studi Rekam Medik, 2018.
- [10] A. Haqqi, N. N. Aini, and A. P. Wicaksono, "Analisis Faktor Penyebab Keterlambatan Pengembalian Berkas Rekam Medis Rawat Inap di RS Universitas Airlangga," *J-REMI J. Rekam Med. dan Inf. Kesehat.*, vol. 1, no. 4, pp. 492–501, 2020, doi: 10.25047/j-remi.v1i4.2158.
- [11] S. C. Budi, "Pentingnya Tracer Sebagai Kartu PelaBudi, S. C. (2015). Pentingnya Tracer Sebagai Kartu Pelacak. Indonesian Journal of Community Engagement, 01, 121–132.cak," *Indones. J. Community Engagem.*, vol. 01, pp. 121–132, 2015.
- [12] R. Mohammad Rizal Mustaqim, Titin Wahyuni, Widi Astuti and Djamaludin, "Design Tracer Penyimpanan Berkas Rekam Medis Di Puskesmas," vol. 21, no. 1, pp. 1–9, 2020.
- [13] A. Rudi, "Pengaruh Pengetahuan, Sikap dan Ketrampilan Pengisi Dokumen Rekam medis Terhadap Kualitas Rekam Medis Rawat Jalan di Puskesmas," *Jupermik*, vol. 3, no. September, pp. 95–103, 2020, [Online]. Available: http://stikara.ac.id/jupermik/index.php/JK.
- [14] K. E. Werdani, "Pencapaian Standar Pengolahan Rekam Medis Sebelum Dan Sesudah Pelatihan Di Rsud Pacitan," *J. Manaj. Inf. Kesehat. Indones.*, vol. 4, no. 1, pp. 62–66, 2016, doi: 10.33560/jmiki.v4i1.98.
- [15] Kemenkes RI, "Peraturan Menteri Kesehatan Republik Indonesia Nomor 129 Tahun 2008 Tentang Standar Pelayanan Mimnimal Rumah Sakit," Jakarta.
- [16] N. Muchtar, R. D., & Yulia, "Kecepatan Pendistribusian Rekam Medis Ke Poliklinik Di Rumah Sakit an-Nisa Tangerang," *Inohim*, vol. 5, no. 1, pp. 109–113, 2017.
- [17] Depkes RI, "Rekam, Pedoman Pengelolaan Indonesia., Medis Rumah Sakit di." Depkes RI, Jakarta, 1997.
- [18] M. Harahap, "Gambaran Pengelolaan Rekam Medis Rawat Jalan Di Rumah Sakit Umum Daerah Gunungtua Tahun 2019," *Kesehatan*, 2019, [Online]. Available: http://repository.helvetia.ac.id/id/eprint/1828/.
- [19] Rosita, T. N. Farisni, and F. Reynaldi, "Analisis Kelengkapan Pengambilan dan Pengisian Rekam Medis Rawat Inap RSUD Cut Nyak Dhien Kabupaten Aceh Barat," *JURMAKEMAS (Jurnal Mhs. Kesehat. Masyarakat)*, vol. 2, no. 1, pp. 169–177, 2022.
- [20] E. Roselina, "Pengembalian Berkas Rekam Medis Pasien Rawat Inap: Capaianstandar Mutu Dan Faktor Penyebab Keterlambatan," J. Adm. Bisnis Terap., vol. 4, no. 2, 2022, doi: 10.7454/jabt.v4i2.1027.