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### Article

# Improvement Strategy For Outpatient Medical Record Return Delay At Jambesari Public Health Center Bondowoso

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Abstract: The delay in returning medical records significantly affects the quality of healthcare services. It was found that at Jambesari Health Center, there is a delay in returning outpatient medical records by 80 % due to the absence of Standard Operating Procedures (SOP), lack of tracer usage, and limited information media about service hours. Therefore, the purpose of this study is to develop an improvement strategy for outpatient medical record return delay using the PDCA approach. This type of research uses qualitative. The research informan were 8 informants consisting of 6 main subjects, namely 1 medical records officer, 1 counter clerk, 1 nurse, 1 general practitioner, 1 midwife, 1 dentist and 2 supporting subjects, namely 1 head of community health center and 1 head of administration. Data collection method use interviews, observation, documentation and brainstorming. The planning phase resulted in identifying 3 priority causes from the 7M process elements, namely the absence of specific SOP for returning outpatient medical records, lack of tracer usage and insufficient information the community for regarding operating hours with improvement actions including creating SOPs related to outpatient medical record return, acquiring tracers, and using banners as information media for service hours. The implementation phase lasted for 3 months from March to May 2023, guided by previously established TOR. The checking phase revealed a decrease of record return delay by 17% after improvements, followed by the action phase, which included brainstorming and socializing SOPs every month and optimizing tracer design and medical record training.

Keywords: PDCA; Outpatient; Medical Record; Return

## 1. Introduction

Puskesmas is mandated to provide medical record services to maintain and enhance the quality ofhealthcare services[1]. A medical record is a document containing patient-related data, examinations, treatments, procedures, and other services provided to patients[2]. One aspect of medical record management involves the return of medical records. The process of returning medical records has a specific time limit. According to the Ministry of Health (2008), the time limit for returning outpatient medical records is 1x24 hours, and for inpatient medical records, it is 2x24 hours after the patient is discharged[3][4].

Puskesmas Jambesari is a primary level healthcare facility providing outpatient and inpatient services, located in the Jambesari Subdistrict of Bondowoso Regency. Medical records are one of the representative indicators of healthcare quality at the Jambesari Primary Health Center in Bondowoso. The following is data on time delay problems return of outpatient medical records for the second quarter of 2022 in table 1.

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Month		Poly Name		RM amount requested	RM amount late	Delay Duration			Percentage
	BP	KIA/KB	Teeth & Mouth	_		2-4 days	5-7 days	>7 days	
April	456	240	43	739	557	481	91	48	75%
May	382	194	27	603	471	308	121	42	78%
June Average	296 e	164	20	480 <b>607</b>	415 <b>481</b>	238 <b>342</b>	80 <b>97</b>	97 <b>62</b>	86% <b>80%</b>

Table 1. Data on Delays in Returning Outpatient Medical Records

Source: Primary Data on Return of Outpatient Medical Records, Second Quarter 2022

Based on the quantitative data in Table 1.1, in the second quarter of 2022, a delay in returning outpatient medical records was identified, with a percentage of 1,443 files (80%) out of 1,822 that should have been returned, where the percentage of delay in return time should be 0%[5]. Delays in returning medical records can hinder activities such as assembling, coding, analysis, and indexing[6][7]. This situation can potentially lead to loss and damage of medical records if they are not stored properly. The loss or damage of medical records could have negative implications on the accreditation of healthcare facilities if needed for legal purposes[8].

The delay in returning outpatient medical records at Jambesari Public Health Center Bondowoso is a healthcare management issue that requires continuous and sustainable improvement efforts. The PDCA (Plan-Do- Check-Action) cycle serves as a systematic approach to problem-solving, carried out continuously and systematically [9]. In its application, the PDCA cycle involves all elements and mechanisms of medical record services. This ensures that every activity within the PDCA cycle is continuous and ongoing. As described by Bustami (2011), the systematic stages of the PDCA cycle consist of planning (plan), implementation (do), evaluation (check), and improvement (action)[10]. Thus, addressing the issue of delays in returning outpatient medical records will be achieved through the PDCA approach as a develop an improvement strategy for outpatient medical record return delay.

#### 2. Materials and Methods

a. Research Type

The type of research used in this study is qualitative research. Qualitative research is employed in this study to formulate and develop improvement strategies using the PDCA (Plan-Do-Check-Action) approach to address the issue of delays in returning outpatient medical records at Puskesmas Jambesari.

b. Research Subjects

The research subjects consist of 8 individuals, namely 2 medical record officers, 4 clinic staff members, 1 quality service supervisor, and 1 head of Puskesmas Jambesari.

c. Data Collection Methods

Data collection for this study involves interviews, observations, documentation, and brainstorming.Data collection was conducted from January to May 2023.

d. Data Analysis Method

The research presents findings from interviews, observations, and documentation. These findings are subsequently analyzed by the researcher to identify priority causes of the problem, formulate improvement plans, and determine follow-up actions through brainstorming.

e. Validity of the Research Data

This research uses 3 types of triangulation, namely technique, time and source

triangulation.

## 3. Results and Discussion

3.1 Formulating the Plan in the Improvement Strategy for Delays in Returning Outpatient Medical Records at Puskesmas Jambesari

Planning involves selecting and connecting facts, making and using assumptions related to the future, and describing and formulating specific activities believed to be necessary to achieve a certain outcome [11]. According to Bustami (2011), the planning phase requires a process of problem identification and prioritization of problems that need to be addressed beforehand[10].

The process of returning outpatient medical records is an aspect within the health management of Puskesmas. In line with Gaspersz V's theory (2007), management issues are always rooted in the elements present in the system, consisting of the 7Ms [12]. The identification of factors causing delays in returning outpatient medical records at Puskesmas Jambesari, conducted by the researcher using the 7M process elements (manpower, machines, material, method, media, motivation, money), is presented in the results shown in Table 2 below.

Table 2. Result of Problem Cause Identification

Medical RecordDelay					
ıdline					
forreturning medical records					
<i>c</i> . No use of tracer					
l. Inefficient use of expedition book					
. Lack of public awareness regarding service hours					
Incomplete completion of medical record documents					
Lack of SOP and specific SOP dissemination for					
outpatientmedical record returns					
n. No budget allocation for outpatient medical record					
t					
No implementation of rewards and punishments					

Source: Primary Data From Problem Cause Identification

Based on the data in Table 2, it can be concluded that there are 7 process elements contributing to delays in returning medical records. Each factor has specific issues, totaling 10 issues that have been identified as the causes of delays in returning outpatient medical records at Puskesmas Jambesari. A total of 10 issues found will be prioritized using brainstorming.

**Table 3.** Order of Problem Priority

No	Problems		Order of Problem Priority		
1.	Absence of specific SOP for re outpatient medicalrecords	1			
2.	Lack of tracer usage			2	
3.	Insufficient information f community regarding operating hours	for	the	3	

Source: Primary Data

Data in Table 3 following the brainstorming conducted by the researcher and the 8 informants to determine the dominant or prioritized causes of the problem, it was found that the primary priority issue causing delays in returning outpatient medical records at Puskesmas Jambesari is the absence of Standard Operating Procedures (SOP) as a reference for staff. Other main causes include the lack of public awareness regarding service hours and the absence of tracer usage. The results of the brainstorming by the researcher and the 8 informants concluded that to prevent delays in returning outpatient medical records, the initial step according to the main priority issue at Puskesmas Jambesari is to establish and socialize SOP for outpatient medical record returns. The creation of the SOP is the first step, allowing staff to have a guideline on how to perform organized and disciplined medical record returns[13]. Consequently, staff can ensure timely returns to the filing room[14].

From the entire brainstorming results, the proposed improvement strategy for addressing delays in returning outpatient medical records consists of:

- a. Method Element: Created and socializing SOP for outpatient medical record returns.
- b. Machine Element: Procuring tracers and creating information banners regarding service hours.

In terms of the proposed improvement strategies, a general success parameter has been agreed upon as abenchmark for the success of the implementation. This parameter involves achieving a reduction in the percentage of delayed medical record returns by up to 20%, representing the maximum acceptable delay. If the percentage of medical record delays after implementing the improvement strategy still exceeds 20%, the strategy's effectiveness is considered inadequate.

3.2 Analyzing the Do (Implementation) in the Improvement Strategy for Delays in Returning OutpatientMedical Records at Puskesmas Jambesari

Implementation (do) entails carrying out actions according to the agreed plan (plan). Implementation (do) can be seen as a trial or experimentation phase to determine the effectiveness of the planned measures. The implementation (do) aligns with the proposed improvement strategy for addressing delays in returning medical records, developed in the planning phase. The researcher observed the implementation over three months, from March to May 2023, to assess the effectiveness of the agreed-upon plan. For the implementation of medical record returns, a Standard Operating Procedure (SOP) is necessary as guidance. The created SOP will be reviewed and discussed with the 8 relevant informants for their input and approval. The agreed-upon SOP will then be introduced and explained to the staff to ensure understanding of the procedures for returning medical records. The SOP for medical record returns, established through consensus with the staff, is presented below: The researcher conducted a comprehensive introduction and instruction session for the medical record staff, the BP clinic nurses, the BP general clinic doctors, the dental and oral clinic dentists, and the KIA/KB clinic midwives.

The second aspect of the improvement plan involves optimizing the design of the tracer form. The design of the medical record tracer form must ensure that all essential information needed to track patient medical records is included. The form should encompass critical data such as patient name, medical record number, return date, and the staff member responsible for the return[11]. Additionally, the design should allow enough space for easily readable and clear information for the staff completing the form.

The third follow-up action pertains to the provision of medical record training, which is fundamental for the enhancement of medical record staff's knowledge and skills. Based on the findings from the implementation phase (do), medical record staff still require training to better navigate the challenges of the digital era, which mandates the use of Electronic Medical Records (EMR). Therefore, providing medical record training can equip staff with the necessary knowledge to navigate the challenges of EMR implementation[15][16].

3.3 Analyzing the Check in the Improvement Strategy for Delays in Returning Outpatient Medical Records at Puskesmas Jambesari

The evaluation phase (check) involves the examination of the implemented actions (do). According to Bustami (2011), the evaluation (check) is based on comparing the achieved results with the previously set targets[10]. This serves to determine whether the undertaken activities were successful or not, and whether the should be continued. The table below presents a comparison of data concerning the delays in returning outpatient medical records before and after the implementation of the improvement strategy.

Month	Average Number of	Average Number	Percentage
	<b>Requested Medical</b>	Delayed Medical	
	Records	Records	
Before Improvement	604	521	86%
After Improvement	491	87	17%
Reduction Difference	69%		

Table 4. Data of Comparison for Delayed Returns Before and After Improvement

Source: Secondary Data Of Delay Figures

Based on Table 4, the average delay in returning outpatient medical records before the implementation phase (do) was 86%, with 521 medical records out of a total of 604 being returned late. After the execution of the improvement strategy over a three-month period, the average delay rate decreased to 17%. This outcome indicates that the success parameter with a targeted maximum delay of 20% has been achieved.

3.4 Formulating the Action (Correction) in the Improvement Strategy for Delays in Returning OutpatientMedical Records at Puskesmas Jambesari

Correction (action) represents a repetitive prevention of the same issue. Based on the examination (check) results and the brainstorming conducted by the researcher, the implementation phase (do) of the planning (plan) has generally progressed as anticipated and in line with the set targets. However, there remain aspects of the planning that have not been executed successfully. As a result, a continuation of the improvement strategy involves the regular socialization of the Standard Operating Procedure (SOP) for Returning Outpatient Medical Records each month. Regular socialization enables staff to gain a better understanding of the medical record return SOP [7][17]. This process allows them to clarify queries, share experiences, and discuss challenges they encounter during the medical record return process.

The second follow-up action involves optimizing the design of the tracer form. The design of the medical record tracer form must ensure that all necessary information for tracking patient medical records is comprehensively covered. The form should include vital data such as patient names, medical record numbers, return dates, and the staff responsible for the return. Additionally, the design of the medical record tracer form should offer sufficient space for information, making it easy to read and clear for the staff completing the form[18].

The third follow-up action is the provision of medical record training, which is an essential requirement for medical record staff to enhance their knowledge and work skills [19][20]. Based on the evaluation (check) results, medical record staff still require training to cope with the challenges of the digital era, where all healthcare facilities are obligated to implement Electronic Medical Records (EMR). Therefore, the introduction of medical record training can significantly broaden the knowledge of medical record staff

# 4. Conclusions

- a. The results of determining the dominant or priority causes revealed that the main cause is the absence of Standard Operating Procedure (SOP) for returning outpatient medical records. Other contributing causes include the lack of tracer usage and the absence of information media regarding service hours.
- b. The results of the planning phase (plan) involve the development of SOP for returning medical records, the procurement of tracers, and the creation of banners as information media for service hours.
- c. The results of the implementation phase (do) include carrying out the agreed-upon improvement strategy for reducing the delay in returning outpatient medical records over a period of 3 months, starting from March to May 2023.
- d. The results of the evaluation phase (check) indicate that the executed planning has successfully achieved the target success parameter, with the percentage of medical record return delays being reduced to below 20%, with an average percentage of 17%.
- e. The results of the corrective phase (action) involve the agreement to conduct monthly socialization of the SOP for returning outpatient medical records, optimize the design of the tracer form, and provide medical record training for medical record staff.

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