

Implementation of An Integrated Referral System (SISRUTE) At Bumi Panua Pohuwato Hospital



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ABSTRACT: advanced level but the monitoring and evaluation system of these services is the data needed in planning future health development. This research aims to look at the implementation of an integrated referral system at Bumi Panua Regional Hospital. This research uses a qualitative descriptive design. The sample in this study was the service sector at Bumi Panua Regional Hospital, the Head of the Sistrute Team as the person in charge as the Key Informant and the Ordinary Informant, the doctor in charge, the Head of the medical services sector and members of the Sistrute team. The research results show that the Standard Operating Procedures (SOP) are running well, but several obstacles cause the SOP to go off the predetermined path. The referral process via SISRUTE is not yet supported by a clear and detailed SOP and flow. The application of SISRUTE has been running according to the flow set by the Ministry of Health, but there is a lack of human resources for SISRUTE operators or users at the Puskesmas, unfamiliarity with SISRUTE, accumulation of patients in the ER and errors in entering codes. In-application references cause SISRUTE flows to overlap. Conclusion: The SISRUTE application often experiences problems, routine maintenance that was suddenly carried out by the center without prior notification, server downtime, and hardware that had not been updated, which hampered referral services on the SISRUTE application and required offline or manual referrals.

KEYWORDS: Integrated Referral System, Information System, SISRUTE Application

I. INTRODUCTION

A good referral system will provide access and quality of service, as well as equitable distribution of health services. In the era of digitalization of health services, a system is needed that provides comfort for both the public and health service providers (Ahkam et al., 2021). This is needed in one type of service, namely referrals for health problems, so that they are right on target, on time, and effective. Several problems arise in this implementation, namely the implementation of the referral system, currently there is a buildup of patients in certain health service facilities so that services are less than optimal, where patient safety is given less attention (Kruk et al., 2018). A good referral system will provide access and quality of service, as well as equitable distribution of health services (Astiti et al., 2023). Therefore, it is necessary to improve and manage SISRUTE well.

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Health referral services are carried out based on the competency of health facilities, starting from first-level health facility services to advanced-level referral health facilities. An effective referral system ensures that there are close links between all levels of health care and that individuals receive the best service available (Risky et al., 2021). This also contributes to the cost-effective use of hospital and PHC services. Therefore, most patients referred to outpatient clinics at second-level centers can be well treated at healthcare centers with lower overall costs (Seyed-Nezhad et al., 2021).

To increase access and quality of referral services, an online-based referral information system application, namely the Integrated Referral Information System (SISRUTE) application, is used. One element in the decision-making process for referrals is assessment. The consequences of excessive referrals can and must be handled, but insufficient referrals or delays in referrals can

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have fatal consequences, especially if the referral hospital is not ready. The SISRUTE application is a referral process communication tool that can provide individual health service referral information. The SISRUTE application was implemented nationally at the end of 2016 for use in making patient referrals between Health Service Facilities (Fasyankes) with limited cases, namely emergency cases. The implementation of competency-based referrals with the SISRUTE application is expected to be carried out quickly, precisely, effectively, and efficiently so that it can improve the quality of individual health service referrals (Ministry of Health of the Republic of Indonesia, 2023).

Panua Regional Hospital, patients should have been hospitalized, but the patients were referred so that there were a lot of patients in the emergency room and there was a buildup of patients, in addition, referrals to service facilities were not by the SOP (Standard Operating Procedure). Therefore, this research is to look at the implementation of an integrated referral system at Bumi Panua Regional Hospital.

II. RESEARCH METHODS

The research was carried out at Bumi Panua Regional Hospital from April to May 2024 and received a research approval letter from the Master of Public Health study program, Gorontalo State University, and research permission from Bumi Panua Regional Hospital, Pohuwato Regency. 7 informants were recruited and willing to be interviewed for this research. The focus of this research is the implementation of an integrated referral system (SISRUTE) from 3 themes based on Standard Operating Procedures (SOP), SISRUTE Flow, and SISRUTE Application to analyze policy determination, forms of SISRUTE services and obstacles to SISRUTE implementation. Qualitative data from this research. Below we will discuss the variables used to determine the implementation of the integrated referral system (SISRUTE).

1. Characteristics of respondents

Table 1. Distribution of characteristics of research respondents

RESPONDENT CHARACTERISTICS		Frequency	%
AGE	<30 Years	2	28.6
	31-40 Year	4	57.2
	>41 Years	1	14.2
Gender	Man	1	14.3
	Woman	6	85.7
Last education	D4/S1	3	42.9
	S1 + Profession	4	57.1
Type of work	Head of Service Division	1	14.2
	Sisrute Team	5	71.6
	Doctor in Charge of Services	1	14.2
Years of service	<5 Years	3	42.9
	6-9 Years	2	28.6
	>10 Years	1	14.2

Data regarding the characteristics of respondents in the table above can be seen for the age category 4 respondents aged 31-40 years (57.2%), 2 respondents aged <30 years (28.6%), and 1 respondent aged >41 years (14, 2%). In the gender category, the majority of 6 respondents were female (85.7%) and 1 respondent was male (14.3%). For the final education category, 4 respondents were Bachelor+Profession graduates (57.1%) and D4/S1 graduates were 3 respondents (42.9). For the type of work category, 5 respondents were on the route team (71.6%), 1 respondent was a doctor in charge of services (14.2%), and 1 respondent was the head of the service sector (14.2%). For the work period category, 3 respondents had a work period of <5 years (42.9%), 2 respondents had a work period of 6-9 years (28.6%), and 1 respondent had a work period of >10 years (14.2%).

2. SISRUTE Standard Operating Procedures

Based on the results of interviews with several informants regarding the informants' opinions regarding SISRUTE standard operating procedures (SOP), the informant said that all the SOPs provided had been implemented as well as possible, but with limited human resources, several obstacles often occurred which could become obstacles in their implementation in the field. The following are statements from several informants involved in using the SISRUTE application:

The head of medical services at Bumi Panua Regional Hospital said that:

"The management of Bumi Panua Regional Hospital has formed a special team for the smooth running of the Ministry of

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Health's program, namely making referrals using a digital system (application) to make it easier for people to get referrals more quickly. "This is proven by the decision letter issued by the director of Bumi Panua Regional Hospital to the team that has been appointed to carry out digital referrals, both receiving referrals from primary health facilities and making referrals to referral hospitals to achieve more effective patient treatment needs."

From the results of the interview above, the Head of the SISRUTE Team at Bumi Panua Regional Hospital said that:

"We have been provided with training regarding the use of the application, software, and hardware, as well as how to deal with troubleshooting when the application is running. Several factors usually occur in the field which often hinder the smooth referral process from primary healthcare facilities to Bumi Regional Hospital. Panua. "We are also provided with training on standard operating procedures (SOP) in using the SISRUTE application."

From the interview conducted with the SISRUTE team leader regarding the SOP, further information was explored in more depth regarding the SOP that has been implemented by the SISRUTE team. The doctor in charge of the service said in the interview session that:

"All activities using SISRUTE in hospitals when operating the SISRUTE application in the online individual referral process. During application use, the SISRUTE team has implemented the SOP well, however technical errors often occur. "Errors such as giving the wrong ICD X code can make it difficult and detrimental for patients to get services at the hospital."

The results of the interview above, it was further confirmed by members of the SISRUTE team in the field who said that:

"Several obstacles often occur which result in slow services, such as the initial response in receiving referrals, where in the SOP we are asked to respond to initial referrals in < 5 minutes. The reality in the field is that it takes more than 5 minutes to make an initial response to receiving a referral."

This was again confirmed by another member of the SISRUTE team who said that:

"The response to responding to referrals from primary health service facilities (fasyankes) is sometimes delayed from the time specified in the SOP. This often happens due to a lack of human resources, in this case, the general practitioner on duty. "The slow response from the doctor on duty was because he coincided with the admission of new patients to the Emergency Room, which required prioritizing the provision of quick treatment to patients."

The results of the interview above were confirmed again by the Head of the SISRUTE Team at Bumi Panua Regional Hospital, who in his interview said:

"It is true that there is often a delay in the initial response due to network problems both at the hospital and at the primary health care facility that makes the referral. Human resources (HR) in primary health care facilities such as community health centers and private clinics need to receive technical guidance or training related to the SISRUTE application to reduce the occurrence of referral errors such as assigning ICD X codes."

Based on Table 4.1. It can be seen from the document review that it can be concluded that an SOP regarding referrals using SISRUTE already exists, however, the existing SOP does not accommodate the need for clarity in the referral flow using SISRUTE. The referral process through SISRUTE is not yet supported by clear and detailed SOPs and flows. Apart from that, the obstacle encountered in the flow of receiving incoming referrals is the need for consultation with the doctor in charge of the patient from the emergency room doctor on duty, where sometimes the response time is longer than the established standards.

3. SISRUTE Referral Flow

Based on the results of interviews conducted with several informants regarding the SISRUTE flow, the informants said that the SISRUTE flow had been determined by the Ministry of Health. The following are the results of interviews with informants:

The head of the SISRUTE team at Bumi Panua Regional Hospital said that:

"We have received technical guidance to apply the referral flow so that there are no communication errors between the referral provider and the referral recipient. Referral providers seek information and communicate with referral recipients at Bumi Panua Regional Hospital according to patient needs via the SISRUTE application. Primary health service facilities, in this case the Community Health Center, provide information about the patient's condition to the hospital. Next, the referral-receiving hospital confirms it. Once confirmed, the patient can be referred and taken to the referral hospital. In other words, the hospital is ready to serve referral patients."

The results of the interview above were confirmed by members of the SISRUTE team in the field who said that:

"There are often errors in referring patients from the Community Health Center due to communication errors, as a result of errors in giving referral codes resulting in patients not getting the right service at the hospital. Sometimes the referrer does not confirm the availability of specialist doctors according to the patient's needs."

This was also confirmed by other SISRUTE team members who said that:

"The unavailability of facilities and infrastructure is also sometimes an obstacle in receiving referrals. "Inpatient rooms that

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are not available because they are full are an obstacle in receiving patient referrals from the Community Health Center."

An interview was also conducted with the Head of medical services at Bumi Panua Regional Hospital who said that:

"Technical guidance needs to be provided periodically to the SISRUTE team, both the team from the Community Health Center and the team from the hospital so that there is good synergy between the two teams. It cannot be denied that the lack of human resources in several Community Health Centers, especially in remote areas, means that the assigned health workers sometimes do not understand the referral code which is the basis of the SOP for making online referrals via the SISRUTE application."

From the results of interviews conducted with the doctor in charge of the service, the person concerned said that:

"Patients who have been referred from the Community Health Center are sometimes slow to receive treatment even though they are proceeding according to the prescribed route. This happens because there is a buildup of patients in the ER so referral patients who arrive do not receive immediate treatment. Thus, complaints often occur from the patient's family or accompanying officers referring patients from the Community Health Center. We often cannot predict things like this in advance."

The results of the interview above, it was again confirmed by a member of the SISRUTE team in the ER who said:

"We often get complaints and complaints from the families of referred patients, where they often complain that we don't work according to the flow even though the conditions in the field cause our work to deviate from the specified flow. The lack of available beds sometimes results in long waiting times for patients to be transferred from the emergency room to the inpatient room."

Another SISRUTE team member said that:

"We have worked according to procedures and through established pathways. However, if asked whether so far this has been according to the plot, we will answer yes, it has been by the plot, but several obstacles often occur in the field. Even these obstacles are still within reasonable limits and we can still handle and account for them."

III. DISCUSSION

1. SISRUTE Standard Operating Procedures (SOP).

Based on a summary of the results of interviews conducted with informants, it was found that errors in assigning ICD Response time are the problem that is most often overlooked, this is because the attending doctor takes a long time to respond to referrals. The accumulation of patients in the ER causes the duty doctor's concentration to be divided into two, but the duty doctor must prioritize treatment in the ER rather than responding to referrals that come in via SISRUTE.

From the document review, it can be concluded that SOPs regarding referrals using SISRUTE already exist, however, the existing SOPs do not accommodate the need for clarity on the use of SISRUTE. The referral process through SISRUTE is not yet supported by a clear and detailed SOP. Apart from that, the obstacle encountered in accepting incoming referrals is the need for consultation with the doctor in charge of the patient from the emergency room doctor on duty, where sometimes the response time is longer than the established standards.

This research is in line with (Wati, 2022) which shows that SOPs are not implemented properly, seeing that response times under 5 minutes are still 57%. This indicates that there are still many referrals, in fact almost half of the number of referrals are responded to in more than 5 minutes. The same thing happened at Bumi Panua Regional Hospital, where the average response time was above 5 minutes, and receiving referrals was delayed due to the lack of stability of the internet network, sudden maintenance, and miscommunication with SISRUTE users of primary health service facilities (Puskesmas).

2. SISRUTE Referral Flow

application is running according to its schedule, although there are still several factors that can result in delays in service to patient referrals. Referring patients to primary health care facilities such as Community Health Centers often do not seek information from hospital users or SISRUTE operators. This causes miscommunication errors in determining the referral code. The completeness of patient data is often neglected by emergency health center staff. Emergency is the reason most often expressed by Puskesmas officers.

This research is in line with (Bancin, 2019) in his research who said that health workers did not search for enough information, resulting in referral errors that violated the established flow. Before making a referral, it would be a good idea for health workers such as doctors to seek information from SISRUTE users to determine a referral code according to the diagnosis that has been made to the patient. Information about the patient's condition is also needed and communicated to the referral recipient so that the patient can be treated effectively and efficiently at the referral recipient's hospital. What often happens due to a lack of communication with referral recipients is that they are not served quickly due to a buildup of patients in the emergency room, and there is no availability of specialist doctors according to the diagnosis from the primary health service facility.

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3. SISRUTE application

Based on the results of the summary of interviews conducted with several informants, it was found that there were still many problems that occurred with the SISRUTE application, starting from internet network problems, hardware and software devices, and sudden program maintenance without prior notification.

This research is in line with (Zahrawi, 2021) who found that there were problems with the facility's carrying capacity factor, namely that the computer equipment used was not updated. This is due to a lack of budget for computer renovation needs in hospitals. Rejuvenation of computer equipment is very necessary considering that the software used from year to year is becoming more sophisticated, so like it or not, hardware devices have to keep up.

This research is also in line with (Bancin, 2020) where in the research it is said that the SISRUTE feature is complete and can be adjusted to patient needs, there is certainty of patient information that will be referred, the response time is unlimited, but it has System/Network problems, internet connection is not stable so that SISRUTE performance is not optimal. This is because the internet network in Pohuwato Regency is not evenly distributed, there are still several remote areas that cannot be connected to internet technology.

This tiered health service referral system provides health services that are needed by patients, but sometimes it is hampered and takes longer, increasing health costs. This referral system can run more effectively and efficiently through the use of information technology systems, namely through the Integrated Referral System Application (SISRUTE).

The SISRUTE Version-2 application has several menus to support the implementation of competency-based referral activities based on existing resources in health facilities for referral purposes. The SISRUTE application has a database originating from the Medical Facilities, Infrastructure and Equipment Application (ASPAK), Online Hospital Information System (SIRS), Health Human Resources Information System (SISDMK), and Hospital Inpatient Information System (SIRANAP). Several menus in the SISRUTE application can be used by SISRUTE users from health facilities such as hospitals, health centers, clinics, Public Safety Center (PSC) 119, and independent practice health workers. After the health facility admin logs in according to their respective access rights, the health facility admin can use several menus on the SISRUTE dashboard display. The SISRUTE application has several menus that can be used by health facilities both in making individual medical referrals and in terms of receiving medical referrals (Ministry of Health, 2023).

IV. CONCLUSION

Based on the discussion that has been described, the researcher can conclude the research results as follows:

1. Standard Operating Procedures (SOP) have been running well, but several obstacles cause the SOP to go off the predetermined path. The referral process through SISRUTE is not yet supported by clear and detailed SOPs and flows. Apart from that, the obstacle encountered in the flow of receiving incoming referrals is the need for consultation with the doctor in charge of the patient from the emergency room doctor on duty, where sometimes the response time is longer than the established standards.
2. The SISRUTE application has been running according to the flow set by the Ministry of Health, however, the lack of human resources for operators or SISRUTE users at the Community Health Center, unfamiliarity with SISRUTE, accumulation of patients in the ER and errors in entering referral codes in the application have caused the SISRUTE flow to overlap.
3. The SISRUTE application often experiences troubleshooting, routine maintenance is suddenly carried out by the center without prior notification, servers are down, and hardware has not been updated, resulting in referral services on the SISRUTE application being hampered and having to make referrals offline or manually.

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