



## ANALYSIS OF FACTORS INFLUENCING THE IMPLEMENTATION OF AN INTEGRATED REFERRAL SYSTEM (SISRUTE) IN AN EFFORT TO IMPROVE THE QUALITY OF HEALTH SERVICE FACILITIES

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### ABSTRACT

The Integrated Referral Information System (SISRUTE) is an application designed and implemented nationally since 2016 which helps the referral process effectively and efficiently by providing referral information for individual health services. SISRUTE has been used by Community Health Centers as First Level Health Facilities (FKTP) and Hospitals (Advanced Care Health Facilities). This research aims to analyze the factors that influence the implementation of SISRUTE in Indonesia, both at the FKTP and FKRTL levels in Indonesia. The research method used is a systematic review, complemented by secondary data search using the PRISMA method to analyze the influencing factors in the process of implementing the integrated referral system in Indonesia. The results obtained show that the application of SISRUTE is influenced by several factors including data quality, human resources and organization, facilities, budget allocation, policies, system quality, communication and reporting and evaluation monitoring. In general, the most influential factors are data quality, infrastructure, policies and standard operational procedures, data management processes and human resources both in terms of training or appointing a team specifically for handling SISRUTE. There is a need for commitment from the leadership of FKTP and FKRTL to be able to encourage improvements in infrastructure both in terms of hardware, software and internet networks as well as technical assurance regarding human resources who are responsible for operating the system.

Keywords: factor analysis; implementation, referral; sistrute; quality improvement

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### INTRODUCTION

Based on Government Regulation Number 47 of 2021 concerning the Implementation of the Hospital Sector, it is stated that hospitals are obliged to implement a referral system. In implementing the referral system, hospitals can use an integrated referral system application which has been encouraged to be implemented by the Ministry of Health since 2016 to be able to support the one data policy in Indonesia that is accurate, up-to-date and integrated (President of RI, 2021). This patient referral can be carried out by health service facilities, both those at the same level, and health facilities at different levels. The implementation of a tiered referral system consists of First Level Health Facilities (FKTP) which can be in the form of community health centers or clinics and Advanced Level Health Facilities (FKRTL) in the form of hospitals (Kemenkes, 2012).

The Integrated Referral System Application (SISRUTE) is a communication tool for implementing the referral process which can provide referral information for individual health

services. The SISRUTE application can be implemented in making patient referrals between Health Service Facilities (Fasyankes) with limited cases, namely emergency cases. The implementation of referrals using the sisrute application is expected to improve the quality of individual health service referrals which are carried out quickly, precisely, effectively and efficiently (Kemenkes, 2023).

Using the SISRUTE application can integrate the health service referral system, accelerate services, and act as a reference regulation in the digital era. By using SISRUTE, patient medical information can be obtained quickly and completely because the referring health facility knows the destination hospital according to the patient's needs and gets certainty about the patient who will be referred so as to avoid a buildup of patients at the destination hospital. This integration process really helps provide more focused patient care and improves patient safety (Nurhayani & Rahmadani, 2020). Efforts to monitor the implementation and use of SISRUTE in all Health Facilities have been carried out by the Ministry of Health by issuing a Circular Letter from the Director General of Health Services Number HK.02.02/I/1161/2022 concerning Implementation of the Use of the Integrated Referral System Application (SISRUTE) in Providing Referrals for Individual Health Services. Currently, SISRUTE Version-2 has been developed to meet the needs of health facility competency-based referral services and improve data security (Kemenkes, 2023).

Although efforts have been made to increase the use of the SISRUTE application in health facilities, of course there are many challenges that must be faced during the implementation process, which contribute to the possibility of implementation failure. Supporting and inhibiting factors that can influence the success of implementation need to be identified for continuous improvement. The purposes of this research is to analyze the implementation of SISRUTE in Indonesia both at the First Level Health Facility (FKTP) and FKRTL (Advanced Care Health Facilities) level so that it can provide recommendations for improvements at community health centers and hospitals in an effort to improve the quality of referrals at health service facilities.

## **METHOD**

The research method used is a systematic review, complemented by searching secondary data and sorting relevant news to analyze stakeholder statements regarding the implementation of the integrated reference system. Initial exploration was carried out via Google Scholar, to search for suitable articles using the keyword "Integrated Reference System" and found 16,500 search results, then filtered with more specific keywords. The search process can be described as follows:

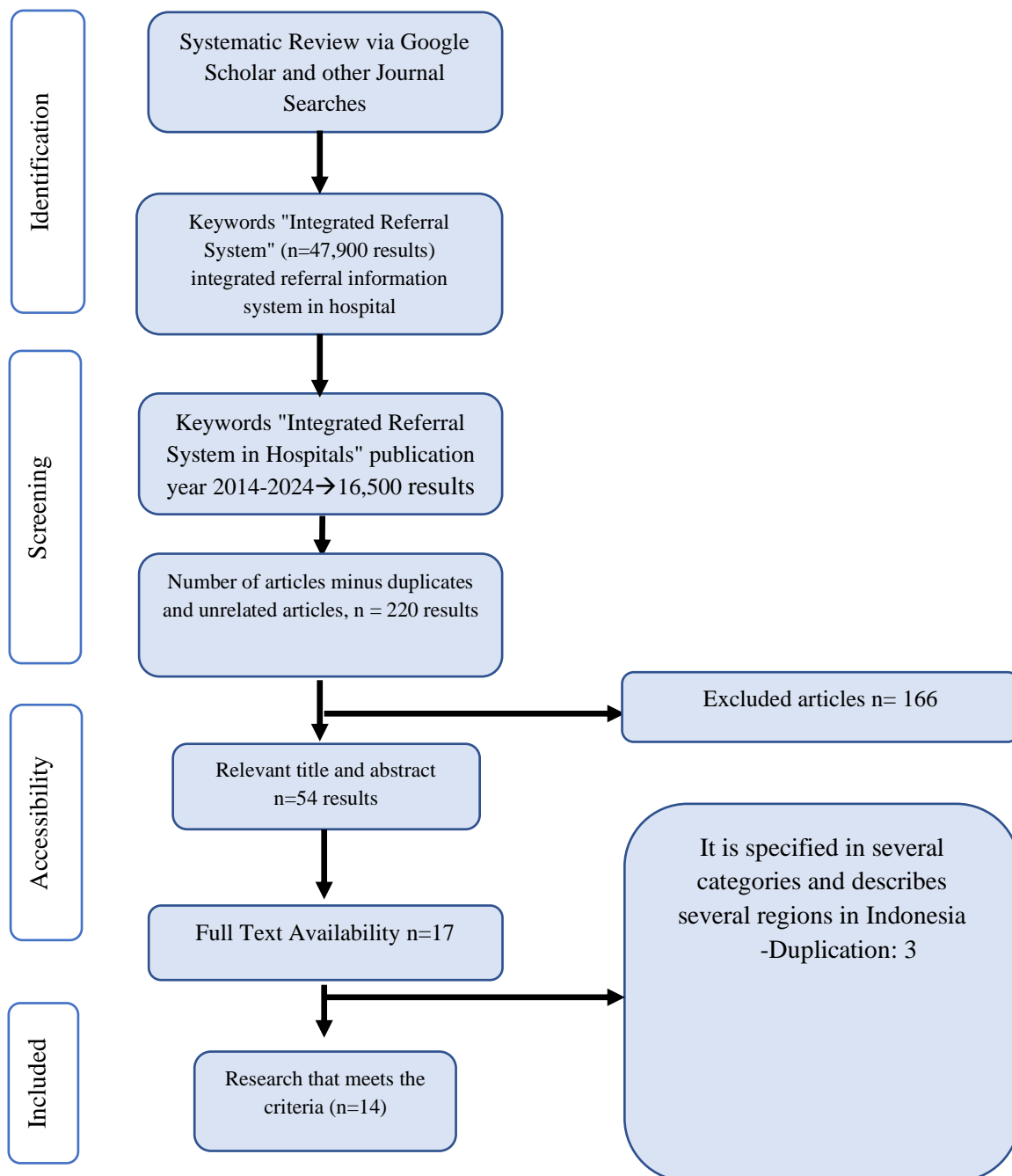


Chart 1. Systematic Review Process

## RESULTS

A systematic review was carried out on 14 articles found via Google Scholar and other journal search sites and can be described in the following table:

Table 1.  
Article search results on Google Scholar and other journal search sites

Article Reference No	Title	First Author and Year of Publication	Region	Study Design	Subjects in Research	Research Results related to Inhibiting and Supporting Factors for SISRUTE Implementation
1	Overview of the Integrated Referral System (Sisrute) at RSUD Dr. RM Djoelham Binjai 2019 (Bancin et al., 2020)	Bancin, 2020	Binjai, North Sumatra	The type of research is descriptive research	Integrated Referral System	<ol style="list-style-type: none"> <li>1. The data on referred patients is incomplete according to the form in the system, making it difficult for the receiving hospital to receive answers.</li> <li>2. The main function of the internet server is unstable so operators have problems maximizing Sisrute performance.</li> <li>3. Hospital operators who do not master the use of the Sisrute application.</li> <li>4. There is no written SOP for using the Sisrute application</li> </ol>
2	<i>Physician Satisfaction Analysis in Using Integrated Referral System (SISRUTE) at RSUD H. Padjonga Dg. Ngalle Takalar</i> (Riski et al., 2020)	Riski, 2020	Takalar, South Sulawesi	This research uses a mix method with a cross-sectional study.	The sample in this study was 33 doctors who worked in the ER	<ol style="list-style-type: none"> <li>1. Have never received SISRUTE training directly from the provider.</li> <li>2. Data regarding the availability of beds, facilities and blood banks is not always updated in several referral hospitals.</li> <li>3. Doctors find it difficult to perform SISRUTE together when examining other patients and waiting for answers and the SISRUTE process.</li> <li>4. There is no clear party that can be contacted regarding the SISRUTE</li> </ol>
3	Implementation of the Integrated Referral System (SISRUTE) at Labuang Hospital Baji Makassar City (Ahkam et al., 2021)	Ahkam, 2021	Makassar	Qualitative methods and phenomenological approaches	Informants in research This is the deputy director of services as the key informant, the general practitioner as Ordinary informants and administrative employees as regular informant.	<ol style="list-style-type: none"> <li>1. Information on referral hospitals sometimes changes, especially regional hospitals, resulting in a lack of relevance of SISRUTE information at Labuang Baji Makassar Regional Hospital.</li> <li>2. Availability of computer equipment is limited.</li> <li>3. There are no special officers to carry out SISRUTE so that sometimes there are obstacles to examining patients while referring other patients.</li> <li>4. There is no training on the use of SISRUTE for users of the system.</li> </ol>

						<ol style="list-style-type: none"> <li>5. The SISRUTE display is very easy to use and very good and has now been updated according to the conditions of the Covid-19 pandemic.</li> <li>6. The features and functions are adequate, but less detailed.</li> <li>7. There is a special team that is responsible according to its level, such as representatives of medical and health services.</li> <li>8. There is a policy for daily reporting.</li> <li>9. Access is very safe and only uses hospital access rights, not individuals.</li> <li>10. The speed of response to referrals by the referring hospital can greatly hinder patients from being referred and the hardware used is not updated or is still an old edition.</li> </ol>
4	Learning to Implement an Integrated Referral System (Sisrute) At Regional General Hospital X (Eko Irianto et al., 2021)	Irianto, 2021	X Hospital	Community service report	In-depth interviews and document study to identify and analyze Swot in implementing the route with the director, head of service and Another section related to the implementation of sirute at RSUD x Mesuji Regency.	<ol style="list-style-type: none"> <li>1. Internet network problems, as well as busy vertical referral hospital telephone numbers.</li> <li>2. There is commitment and support from the regional government, with BLUD status where financial management can be freely utilized by RSUD to meet service needs, especially SISRUTE</li> <li>3. Strategic location and has sufficient human resources, and has been intermediately accredited.</li> <li>4. SISRUTE governance is not yet optimal</li> <li>5. Lack of quality human resources</li> <li>6. Feasibility of hardware and software is not optimal,</li> <li>7. For example, the limited budget ceiling is to fulfill SISRUTE's needs, especially fulfilling hardware in the form of PCs and smartphones specifically for call centers and SISRUTE's Personal In Charge (PIC).</li> </ol>
5	Consistency of Communication System	Amalia, 2022	Makassar	Quasi qualitative research	The informants in this research are divided into three,	<ol style="list-style-type: none"> <li>1. The obstacle experienced by officers during the implementation of the route</li> </ol>

	Implementatio n Integrated Reference Information (Sisrute) for Improving the Quality of Hospital Services (Amalia et al., 2022)			with a descriptio n and approach Observati onal	namely the key informant is the information system managerFor integrated purposes, the usual informants are doctors and nurses.	was a poor network which hampered the process of sending and replying to the route. 2. The problem with the central network is that data usually does not show information regarding the availability of beds to the destination hospital
6	Data Analysis of the Integrated Referral System (Sisrute) in the Infection Emergency Room (IGD) at RSUP dr. Sardjito(Kadek Ari Astiti & Indah Kusumawati, 2023)	Astiti, 2023	Yogyakart a	Quantitati ve descriptiv e approach <i>Retrospec tive.</i>	The research sample is in the form of secondary reference data for Sien in the route application in the infection emergency room at Dr. RSUP. Sardjito. Sampling was taken using a total sampling technique with inclusion criteria: referral of Covid- 19 patients who were admitted to the emergency room at Dr. RSUP. Sardjito via SISRUTE during the period June to August 2021. Meanwhile, the exclusion criteria are: patient referrals Covid-19 with incomplete data, patient referral Covid-19 with multiple reference data, as well as referrals Covid-19 patients who were canceled unilaterally.	1. SISRUTE response time at RSUP Dr. Sardjito is influenced by the amount of time required for internal consultation or consultation between Medical Staff Groups (KSM) when making a decision to accept a referral. 2. The speed of staff response to incoming referrals can be influenced by the surge in untreated COVID-19 patients in the ER. 3. The biggest reason for refusing and accepting referrals was the need for space (59.73%). 4. One of the recommendations given is to create standard operating procedures (SOP) regarding decision-making times for intra- or inter- KSM consultations, so that referrers can receive immediate feedback. 5. To facilitate equal distribution of referrals in the DIY region, coordination and evaluation between network hospitals must be improved. 6. Reasons for patient refusal showed that there were several other reasons, including 31 cases (3.86%) of 804 refusals, related to incomplete data.
7	Evaluation of Usability of Integrated Referral System (Sisrute) In the emergency room at Yogyakarta	Susanto, 2023	Yogyakart a Special Regional Hospital	This research is descriptiv e research with quantitati ve approach.	Samples were taken using a consecutive technique sampling. The sample in this study was emergency room health workers in six of the eighty-	1. The route is still complicated to use, confusing. 2. SISRUTE does not yet meet user requirements for display, server, and functionality. 3. Hospitals must create Standard Operating Procedures (SOP) and

	Special Regional Hospital (Susanto et al., 2023)				one DIY hospitals.	provide feedback to developers to explain the authority to use Sisrute.
8	Analysis of the Effectiveness of the Integrated Referral Information System (Sisrute) in Cases Covid-19 at Semen Padang Hospital (Pratiwi et al., 2023)	Pratiwi, 2023	Padang, West Sumatra	Qualitative research with the data collection process was carried out using secondary data analysis, in-depth interviews and document review	Deep interview Seven informants were selected using purposive sampling	<ol style="list-style-type: none"> <li>1. The need stated by the informant is for a doctor on duty to carry out triage for referrals that come in via SISRUTE.</li> <li>2. The system was down so it couldn't be used for several weeks for COVID-19 referrals so it was switched to using WhatsApp.</li> <li>3. Lack of convenience in inputting patient medical record data which must be typed, not in the form of options that can be clicked to save energy and time.</li> <li>4. Difficulty in sending files, especially photo and video files.</li> <li>5. There is no automatic search feature for available hospitals so it must be sent to each referral destination hospital.</li> <li>6. There is no dashboard that provides information regarding the availability of beds and hospital facilities.</li> <li>7. Additional communication is required to confirm referrals via telephone or WhatsApp.</li> <li>8. Management support in using SISRUTE during the pandemic in the form of technical support related to networks/signals assisted by the information systems/SISFO section</li> <li>9. assignment of admissions in assisting with checks. and sending templates for several months, SISRUTE recording and reporting which also lasted several months, as well as orientation on the use of SISRUTE for new duty doctors.</li> <li>10. Internal monitoring for the use of SISRUTE in SPH has not been implemented and no team has been appointed</li> <li>11. There is no monitoring and evaluation from external</li> </ol>

						parties or the Padang City Health Service, so the hospital has not yet carried out structured and scheduled evaluation monitoring.
						12. There is no SOP regarding referrals using SISRUTE and the existing SOP does not accommodate the need for clarity in the referral flow using SISRUTE.
9	Implementation of an Integrated Referral System (SISRUTE) in RSUD Sheikh Yusuf, Gowa Regency (Fauzy Abdullah et al., 2024)	Abdullah, 2024	Gowa, South Sulawesi	Qualitative method of phenomenological approach	The informants in this research are people who are directly involved in the research object, namely the hospital director as the key informant, the general practitioner as the regular informant, the administrative officer as the regular informant and the hospital patient as the informant.normal.	<ol style="list-style-type: none"> <li>1. Quick response in responding to answers from SISRUTE, the Hospital has met the established SOP standards.</li> <li>2. The information provided by doctors or health workers regarding the referral process is easy to understand and the instructions are clear from start to finish.</li> </ol>
10	<i>Constraints In The Implementation Of Integrated Information Referral System (Sisrute) In Emergency Department Of Bahteramas Regional General Hospital</i> (Setiawan & Tosepu, 2024)	Setiawan, 2024	Kendari, South Sulawesi	This study used descriptive qualitative method. Data was collected by means of interviews and observation techniques.	In selecting informants, researchers used Purposive Sampling Techniques where respondents were selected who met the specified criteria. The criteria set are doctors in the Emergency Room at Bahteramas Regional Hospital, Persons in Charge of the system and operators in First Level Health Facilities and Network Hospitals, and Patients.	<ol style="list-style-type: none"> <li>1. FKTP's response regarding the SISRUTE response from Bahteramas Hospital seems to be slow</li> <li>2. Health facilities in emergency rooms are limited</li> <li>3. Computer facilities often encounter technical problems, crowded emergency rooms,</li> <li>4. There is no SPO available for SISRUTE services,</li> <li>5. SISRUTE is not yet considered a shared responsibility, and there is no implementation of SISRUTE on computers in service units</li> <li>6. There are no administrators assigned to the inpatient unit so that system services for outgoing patients or patients who will be referred to other hospitals must also go through the ER unit information system.</li> </ol>
11	Analysis of the Use of Integrated Referral System	Suhodo, 2024	Asy-Syifa Hospital, West Sumbawa	Type of qualitative research with a phenomen	The research sample was selected using purposive sampling	<ol style="list-style-type: none"> <li>1. There were errors and delays in referring patients. The busy telephone number of the vertical referral hospital is an obstacle for SISRUTE</li> </ol>

	Applications (SISRUTE) (Suhodo et al., 2024)		ological approach.	according to the criteria for 12 informants, who then collected data using structured interview techniques	to be hampered.	<ol style="list-style-type: none"> <li>2. When using the SISRUTE application, a loading error still occurs when accessing SISRUTE</li> <li>3. data information in the SISRUTE application that has not been integrated</li> <li>4. There is no special officer for SISRUTE input.</li> <li>5. Policy determination by hospitals in the referral process from to and from hospitals is still not completely uniform.</li> <li>6. The process of managing referral data in SISRUTE from and to hospitals that must be input is very accurate but slow and runs in one direction.</li> <li>7. Determination of the Person in Charge of SISRUTE to and from the hospital. data management is not optimal because the head of the room acts as a manager without a decree.</li> <li>8. The problem is that there is a delay in the superior's response, so you have to wait for confirmation from the head of the room regarding the account used.</li> </ol>
12	Analysis of the Use of the Integrated Referral System (SISRUTE) in Community Health Centers Makassar city (Rahmadani et al., 2021)	Rahmadani, 2021	Public health center Makassar city	This research uses a quantitative type of research with a cross-sectional study approach.	Sample in research These are 39 direct users of the SISRUTE application at the Makassar City Health Center. Data collection by direct interviews using questionnaires.	<ol style="list-style-type: none"> <li>1. Respondents who often use SISRUTE stated that the SISRUTE application is easy to use, and can even be used anytime and anywhere.</li> <li>2. Delays in hospital responses and sometimes invalid information on the availability of treatment rooms as well as unstable internet connections.</li> </ol>
13	Implementation of Web Based (SISRUTE) Application Patient Referral From Public Health Center in Pamekasan (Novel & Wardani, 2024)	Novels, 2024	Community Health Center in Pamekasan	The method used in this research is a qualitative approach which is defined as a research procedure that produces descriptive data which aims to reveal the deep meaning behind a phenomenon.		<ol style="list-style-type: none"> <li>1. The implementation of a web-based patient referral application (SISRUTE) at the Pamekasan District Health Center has proven to be effective and simple, capable of speeding up the patient referral process to higher health facilities, in line with community demands.</li> <li>2. The challenge mainly lies in dependence on internet network connections.</li> <li>3. The ability of the</li> </ol>

						Community Health Center's Human Resources (HR) in operating this application is considered quite good, showing an adequate level of mastery and understanding of the contents of the SISRUTE application.
						4. The Pamekasan District Health Center has provided adequate facilities and infrastructure such as computers and internet connections to support the implementation of the web-based patient referral application (SISRUTE).
14	Dynamics of Use of Integrated Referral System (SISRUTE) at the South Tangerang City Health Center (Shania Wahyudi et al., 2023)	Wahyudi, 2023	South Tangerang City Health Center	This research is quantitative with a cross-sectional approach (cross sectional)	Population included in this study are doctors, physicians dentists, midwives and nurses who have authority to use SISRUTE and served at the Tangerang City Health Center South. The number of research populations is as large as 148 people were then counted using the Lemeshow formula and The number of samples obtained was 58 person.	<ol style="list-style-type: none"> <li>1. The use of SISRUTE at the South Tangerang City Health Center in the patient referral process has gone well.</li> <li>2. The description of the use of SISRUTE in the South Tangerang City Health Center shows that the majority of respondents are categorized as expecting profitable performance, expecting easy business in using SISRUTE.</li> </ol>

From the search results, it was found that there are several things that can be supporting factors but also inhibiting factors in the implementation of SISRUTE in hospitals and health centers which are summarized as follows:

Table 2.  
Systematic Review Synthesis Results

Factors Influencing Implementation	Systematic Review Synthesis Results	Reference number
Data Quality	<ol style="list-style-type: none"> <li>(1) The data on referred patients is incomplete according to the form in the system and the criteria for referring patients are not consistently met, making it difficult for the receiving hospital to receive an answer.</li> <li>(2) The quality of information that is considered to be still not optimal includes the validity, accuracy and</li> </ol>	1,2,3,5,6,8,10,11,12

		correctness of information produced from SISRUTE from both referring hospitals and referral recipients.	
	(3)	Data related to bed availability and facilities is not always updated in several referral hospitals	
	(4)	Referral hospital information sometimes changes, especially regional hospitals, resulting in a lack of relevance of information in SISRUTE	
HR and Organizational structure	(1)	Operators in hospitals do not master the use of the Sistrute application and the majority have never received SISRUTE training directly from the organizers	1,2,3,4,5,8,9,11,12,13,14
	(2)	Difficulty for doctors to carry out SISRUTE together when examining other patients and waiting for answers and the SISRUTE process	
	(3)	There is no doctor on duty to carry out triage for referrals that come in via SISRUTE.	
	(4)	There is no specifically appointed SISRUTE management team through a director's decree and allocation of doctors on special duty for SISRUTE	
	(5)	There is no orientation on the use of SISRUTE for new attending doctors on duty.	
	(6)	SISRUTE is not yet considered a shared responsibility and only a few officers are able and willing to serve requests on the system	
	(7)	Several Health Services provided training to Puskesmas officers, but only to representatives of each Puskesmas so that not all respondents received direct training.	
	(8)	Data management is not optimal because the head of the room acts as a manager without a decree	
Infrastructure	(1)	The main function of the internet server is unstable so that operators have problems maximizing Sistrute performance and hamper the process of sending and replying to Sisroutes.	1,3,4,5,6,8,9,10,12,13,14
	(2)	The dynamic conditions of the ER followed by limited bed facilities hinder decision making in accepting referrals	
	(3)	Limited availability of computer equipment,	
	(4)	Hardware and software feasibility is not yet optimal	
	(5)	The computer in the inpatient service unit has not yet implemented the SISRUTE application and there is no administrator assigned to the inpatient unit so that the service system for outgoing patients or patients who will be referred to another hospital must also go through the ER unit information system.	
Budget Allocation	(1)	There are limited budget ceilings in several areas to fulfill SISRUTE's needs, especially fulfilling hardware in the form of PCs and smartphones specifically for call centers and SISRUTE Personal In Charge (PIC).	4
Policy/SOP	(2)	Hospital regulations and policies change frequently,	1,2,4,6,7,8,9,10,11,12,13,14
	(3)	There is no SOP regarding referrals using SISRUTE and the existing SOP does not accommodate the need for clarity in the referral flow using SISRUTE	
	(4)	Policy determination by hospitals in the referral process from to and from hospitals is still not completely uniform	

	(5)	In the flow of receiving incoming referrals, it is necessary to consult with the doctor in charge of the patient or KSM from the doctor on duty in the emergency room for decision making, where sometimes it takes a long time to pick up the consultation telephone so that the response time becomes long.	
	(6)	There has been no external outreach regarding the Operational Service Standards (SPO) of SISRUTE services in First and Secondary Level Health Facilities	
	(7)	There is no SOP available regarding the facilities and infrastructure that must be had when using SISRUTE	
	(8)	There is no clear party that can be contacted regarding the SISRUTE.	
System Quality	(1)	The features and functions are adequate, but less detailed.	3,4,7,8,9,10,11,12,13,14
	(2)	Access informants said that it was very safe and only used hospital access rights, not individuals	
	(3)	Many findings do not meet user requirements for display, server, and function.	
	(4)	Lack of convenience in inputting patient medical record data which must be typed, not in the form of options that can be clicked to save energy and time	
	(5)	Difficulty in sending files, especially photo and video files.	
	(6)	There is no automatic search feature for available hospitals so it must be sent to each referral destination hospital	
	(7)	There is no dashboard that provides information regarding the availability of beds and hospital facilities	
	(8)	There is still a loading error when accessing SISRUTE	
	(9)	Data information in the SISRUTE application that has not been integrated	
	(10)	The process of managing referral data in SISRUTE from and to hospitals that must be input is very accurate but slow and runs in one direction	
	(11)	In health centers, they often use P-care or Whatsapp Groups (which include PKM representatives and SISRUTE managers) because they are considered easier and respond quickly. Meanwhile, if you use SISRUTE, the waiting/response time can be up to 3-4 hours or more	
Communication	(1)	Additional communication is required to confirm referrals via telephone or WhatsApp.	8,9,11
	(2)	The telephone number of the vertical referral hospital is sometimes busy, thus hampering the communication process	
Evaluation reporting and monitoring	(1)	There is a policy for daily reporting that is prepared for evaluation to assist in monitoring implementation.	3.8
	(2)	Internal monitoring for the use of SISRUTE has not been implemented and no team has been appointed	
	(3)	There is no monitoring and evaluation from external parties or the Health Service, so hospitals have not carried out structured and scheduled evaluation monitoring.	

## **DISCUSSION**

From the results of the synthesis carried out on the 14 articles, it is known that there are 5 (five) factors that dominantly influence the implementation of integrated referral systems both in community health centers and hospitals, namely data quality, infrastructure, policies and standard operational procedures, system quality and resources. human resources both in terms of training or appointing a team specifically for handling SISRUTE. Data quality is important in implementing information systems. The quality of the data, whether good or bad, will greatly influence the decision-making process primarily in the hospital. The need for precise, accurate and accountable information is very much needed in determining patient treatment. The quality of information obtained through SISRUTE is greatly influenced by human factors/doctors from the referring hospital regarding the correctness and suitability of the patient data sent.(Pratiwi et al., 2023). Apart from that, information is needed regarding updated bed availability in the SISRUTE application to make it easier for referring hospitals. Incomplete data quality can lead to inappropriate decision making which can impact patient treatment, especially emergency cases. Supporting infrastructure at health centers and hospitals can include computer equipment (hardware) and software that supports the application of SISRUTE. Apart from that, the need for adequate internet network capacity will greatly influence the speed of the patient referral process. An unstable internet server can result in operators having problems maximizing Route performance(Bancin et al., 2020).

Policies and Standard Operational Procedures (SOP) are the foundation for implementing an activity. Without clear policies and SOPs, it can result in confusion in implementation. To improve the quality of health services in health service facilities, it is mandatory to develop SOPs which are one of the efforts to maintain patient safety and improve services. To improve effective and efficient hospital performance, it is necessary to have technical, administrative and procedural SOPs as guidelines in implementing hospital performance.(Atmoko, 2012). System quality is related to the system's ability to accommodate user needs both in terms of features and data management processes. The security of patient data in SISRUTE is considered very safe and only uses hospital access rights, not individuals (Ahkam et al., 2021) Apart from that, it is also supported by application SISRUTE Version-2 to be able to meet the needs of health facility competency-based referral services and improve data security(Kemenkes, 2023). Various features have been increasingly developed, although monitoring and evaluation still needs to be carried out in use. Human resources are also very crucial in supporting the success of SISRUTE implementation. Human resources include the quantity and quality of what is owned, which needs to be improved with training efforts and technical guidance related to use. The legality of the team appointed to be responsible for implementation is also important considering the quite large responsibility.

Factors that influence the success of SISRUTE implementation are also in line with the Hot-FIT Theory which is often used to evaluate hospital management, namely the Human Organization and Technology (HOT-Fit) model because this model involves organizational elements which are important components in implementing information systems. The HOT-Fit model is a model that can be seen as a whole system assessment with 4 important factors, namely Human, Organization, Technology and Benefit.(Maryati Mohd. Yusof et al., 2008). This can also be related to the theory of implementing policies in organizations or institutions. According to George Edward III (1980) stated four things that encourage successful policy implementation, namely: a) Communication, related to how policies are communicated to the organization, the availability of resources in implementing the policy, the attitudes and responses of the parties involved, and how the organization is structured. policy implementer;

- b) Resources, related to the availability of supporting resources, especially human resources;
- c) Disposition or attitude in implementing policies, related to the willingness of implementers to implement policies; and
- d) Bureaucratic System (Nugroho, 2008).

In general, the efforts made by the Ministry of Health to increase the effectiveness of using the SISRUTE application have been described in various regulations and circulars regarding technical instructions for the application of SISRUTE, but this may need to be supported by training and technical guidance that can directly bring together developers and implementers in field so that it can clarify the SISRUTE management process. Apart from that, regular meetings for monitoring and evaluation of SISRUTE implementation by the local Health Service can intensify communication regarding the obstacles faced in the field.

## CONCLUSION

The implementation of the SISRUTE application is influenced by several factors including data quality, human resources and organization, facilities, budget allocation, policies, system quality, communication and evaluation reporting and monitoring. In general, the most influential factors are data quality, infrastructure and human resources, both in terms of training or appointing a team specifically for handling SISRUTE. There is a need for commitment from the leadership of the Community Health Center as FKTP and the Hospital as FKTRL to be able to encourage improvements in infrastructure both in terms of hardware, software and internet networks as well as technical assurance regarding human resources who are responsible for operating the system.

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