

POLICY IMPLEMENTATION HOSPITAL MANAGEMENT INFORMATION SYSTEM (SIMRS) AT THE KABELOTA REGIONAL GENERAL HOSPITAL

Syavira Andina Anjar¹, Syahrudin Hattab², Vidyanto³

^{1,2,3}Public Health Study Program, Postgraduate Program

Universitas Tadulako, Palu City

Corresponding Email: syaviraandina@gmail.com

Received : 31 November 2024

Published : 26 January 2025

Revised : 13 December 2024

DOI : <https://doi.org/10.54443/morfai.v4i4.2418>

Accepted : 23 December 2024

Link Publish : <https://radjapublika.com/index.php/MORFAI/article/view/2418>

Abstract

This study aims to find out and analyze the implementation of the Hospital Management Information System (SIMRS) policy at the Kabelota Regional General Hospital (RSUD) of Donggala Regency in 2024. Research Method: This study uses a qualitative approach with primary and secondary data types. Data collection techniques include in-depth interviews, observations, and documentation studies. Informants are selected purposively, including medical staff, non-medical, and technical personnel who are directly involved in SIMRS operations. Data analysis uses the Miles and Huberman interactive model, including the stages of data condensation, data presentation, and conclusion / verification as well as Analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT) The results of the research, the implementation of the SIMRS policy at Kabelota Donggala Hospital as a whole has been running well, but it has not been fully optimal. Aspects of communication, disposition/attitude, and bureaucratic structure showed positive results. However, there are significant challenges, such as internet network instability, hardware limitations, and lack of advanced training for staff. The IFAS and EFAS analysis placed hospitals in Quadrant I (Aggressive Strategy), indicating that hospitals have opportunities to leverage external factors to improve internal weaknesses and strengthen existing strengths. In conclusion, With the improvement of technological infrastructure, recruitment of additional IT personnel, and continuous training, the implementation of SIMRS at Kabelota Donggala Hospital can be optimized to support more efficient and quality health services.

Keywords : *Hospital Management Information System, Public Policy, SIMRS Implementation, Aggressive Strategy, Kabelota Donggala Hospital*

INTRODUCTION

Hospitals are one of the means of health services that are needed for everyone. The Hospital Management Information System (SIMRS) is an important component in improving the quality of health services in hospitals. SIMRS is defined as an integrated system used to manage data and information in hospitals, ranging from administration, finance, human resources, to clinical services (Permenkes No. 82 of 2013). Effective implementation of SIMRS can provide significant benefits for hospitals, such as improving operational efficiency, supporting management decision-making, and improving patient quality and safety (Molly and Itaar, 2021) Hospital information systems (SIMRS) can be characterized by their function through the information and types of services offered. An information system is a system whose internal function is limited to processing information by performing 6 types of operations, including capturing, transmitting, storing, retrieving, manipulating, and displaying information. (Molly and Itaar, 2021)

One of the critical areas in hospitals that can be optimized through SIMRS is the Emergency Installation (IGD). The emergency room is the first service unit that must be responsive and fast in handling patients with critical or emergency conditions. The implementation of SIMRS in emergency rooms can help speed up administrative processes, patient management, and coordination between staff, thereby improving service quality and efficiency. Thus, the analysis of the implementation of SIMRS in the emergency room is important to identify potential performance and service improvements in the unit. (Molly and Itaar, 2021) The implementation of SIMRS in hospitals in Indonesia is regulated in the Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013 concerning Hospital Management Information Systems. A hospital is a healthcare

institution that provides comprehensive individual services. including inpatient, outpatient, and emergency services. This regulation aims to realize an integrated information system in improving health services in hospitals. This regulation establishes technical standards and operational procedures for implementing SIMRS effectively. Some of the main provisions in this regulation include: (1) The obligation of hospitals to implement an integrated SIMRS; (2) Electronic management of data and information; (3) Compliance with standards of patient data security and confidentiality; and (4) Improvement of human resource competence in the use of SIMRS (Permenkes No. 82 of 2013). With a clear legal foundation, hospitals in Indonesia, including Kabelota Hospital, have an obligation to implement SIMRS comprehensively. Husnaeni and Susanti (2023)

Kabelota Hospital is one of the leading hospitals in Donggala Regency that has an Emergency Installation (IGD) as the first service unit for patients with critical or emergency conditions. As a unit that must be responsive and fast, the Emergency Room of Kabelota Hospital has a strategic role in providing effective and efficient health services. (Husnaeni and Susanti, 2023) However, in practice, based on the author's observations, the Emergency Room of Kabelota Hospital still faces various challenges related to data and information management. Manual and electronic systems that are still implemented in emergency rooms often cause problems, such as limitations in data collection and processing, data input errors, and delays in information needed for decision-making (Kabelota Hospital, 2020). This condition can have an impact on the quality and efficiency of services in the emergency room, especially in terms of patient safety and response speed.

Therefore, the implementation of an integrated Hospital Management Information System (SIMRS) is an urgent need for the Emergency Room of Kabelota Hospital. SIMRS is expected to accelerate the process of administration, patient management, and coordination between staff in the emergency room, thereby improving the quality and efficiency of services (Wager et al., 2017). However, the SIMRS implementation process at the Emergency Room of Kabelota Hospital still faces various challenges that need to be identified and overcome. Based on the results of the author's observations, which was also carried out directly about the Implementation of Hospital Management Information System (SIMRS) in the Emergency Department (IGD) has high relevance in improving performance and service quality. Some of the potential benefits of SIMRS for emergency rooms include:

First, SIMRS can speed up the administrative and patient management process in the emergency room. With an integrated electronic system, emergency room staff can quickly register patients, monitor their condition, and coordinate necessary medical measures (Wager et al., 2017). This can increase the efficiency and responsiveness of emergency rooms in treating patients with critical conditions.

Second, SIMRS can improve the accuracy of data and information in the emergency room. An integrated electronic system can reduce data input errors and provide more accurate and real-time data. This has an impact on improving patient safety and the quality of clinical decision-making (Roshanov et al., 2011).

Third, SIMRS can improve the security and confidentiality of patient data in the emergency room. Electronic systems equipped with adequate security features can protect patient data from unauthorized access and ensure the confidentiality of medical information (Permenkes No. 82 of 2013). This is important to maintain patients' right to privacy and increase public trust in emergency room services.

Previous studies have shown significant benefits of SIMRS in improving emergency room performance. A study in a hospital in Canada found that the implementation of SIMRS in the emergency room can improve the efficiency of administrative processes, reduce medical errors, and speed up patient waiting times (Roshanov et al., 2011). Another study in the United States also identified an increase in patient and staff satisfaction, as well as a decrease in operational costs after the implementation of SIMRS in the emergency room (Wager et al., 2017). Thus, the analysis of the implementation of SIMRS in the Emergency Room of Kabelota Hospital is important to optimize the benefits of the information system. Furthermore, the results of the third observation The implementation process of the Hospital Management Information System (SIMRS) in the Emergency Installation (IGD) of Kabelota Hospital faces several problems that need to be identified and overcome. Some of the obstacles that may arise include:

First, the limitations of information technology infrastructure in the Emergency Room of Kabelota Hospital. Effective implementation of SIMRS requires adequate infrastructure support, such as hardware, networking, and data security systems. However, current conditions show that emergency rooms still face limitations in terms of the availability and quality of IT infrastructure (Kabelota Hospital, 2024). This can hinder the optimal SIMRS implementation process.

Second, the lack of competence of medical and non-medical personnel in the emergency room in utilizing SIMRS. The success of SIMRS implementation depends not only on the availability of the system, but also on the readiness of human resources to use the system effectively. Previous studies have shown that resistance to change

and lack of training can be an obstacle in the adoption of SIMRS in hospital settings (Sherer, 2024). Therefore, increasing the competence of emergency room staff is a key factor in optimizing the use of SIMRS.

Third, management support that is not optimal in the implementation of SIMRS in the emergency room of Kabelota Hospital. Commitment and support from hospital management are urgently needed to ensure the sustainable and effective implementation of SIMRS. This includes adequate resource allocation, clear policy development, and leadership in the digital transformation process (Permenkes No. 82 of 2013). Without strong management support, the implementation of SIMRS in the emergency room can face significant obstacles. Identification and handling of these problems is important to ensure that the implementation of SIMRS at the Emergency Room of Kabelota Hospital can run effectively and provide optimal benefits for improving the quality and efficiency of services in the unit.

The objectives of this research are

1. Analyze the implementation of the Hospital Management Information System (SIMRS) in the Emergency Installation (IGD) of Kabelota Hospital in accordance with the standards regulated in the Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013.
2. Identifying with SWOT Analysis of the strengths, weaknesses, opportunities and threats of SIMRS implementation in the Emergency Room of Kabelota Hospital and providing recommendations to optimize the implementation of SIMRS in the Emergency Room.

LITERATURE REVIEW

1. Previous Research

This research was carried out inseparable from the results of previous studies that had been carried out as material for comparison and study. The results of the research that are used as comparisons are inseparable from the topic of research, namely the implementation of the SimRS policy.

Mulyono et al. (2022), with the title "Implementation of Hospital Management Information System (SIMRS) Policy in Improving Health Service Performance." The purpose of this study is to describe the implementation process and the impact of the policy of the Minister of Health of the Republic of Indonesia Number 82 of 2013 concerning SIMRS in improving service performance in the emergency department at Undata Hospital. The research method used is qualitative descriptive. The results of the study show that the implementation of SIMRS has a positive impact on improving health service performance, increasing the timeliness and accuracy of medical information. The implementation of SIMRS also encourages an increase in the discipline of medical personnel, both in attendance and discipline in the implementation of health protocols. The implementation of the SIMRS policy leads to the Van Horn and Van Metter policy implementation model. However, the implementation of SIMRS has not fully supported the achievement of the target of health service performance indicators at the hospital. Putri and Mulyanti (2023)

2. Policy Implementation Concept

A very simple definition of implementation is as expressed by Jones in Pramono (2020:57-58) where implementation is interpreted as "getting the job done" and "doing it". But behind the simplicity of such a formulation means that policy implementation is a policy process that can be carried out easily. In contrast to policy implementation, good or bad will be greatly influenced by the behavior of policy implementers. but policy implementation is an important aspect of the entire implementation of the policy-making process.

Van Meter and Van Horn in Abdal (2022:149) formulate the implementation process as "those actions by public or private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions". This means that implementation is "actions taken either by individuals/officials or government or private groups that are directed towards the achievement of the goals outlined in the policy decision".

3. Policy Implementation Model

Models are widely used to make it easier for observers or beginner learners. The approaches in public policy implementation by Peter deLeon and Linda deLeon are grouped into three generations. The first generation, namely in the 1970s, understood policy implementation as problems that occur between policy and its execution. Those who use this approach include: Graham T. Allison with the case study of Cuban missiles. In this generation, policy implementation is focused on the study of decision-making in the public sector (Mustari, 2022:149).

The second generation is the generation that develops a "top-downer" approach to policy implementation. This perspective focuses more on the bureaucratic task to implement policies that have

been decided politically. At the same time, a bottom-upper approach developed by Michael Lipsky and Benny Hjern emerged (Mustari, 2022:149).

The third generation, developed by social scientist Malcolm L. Goggin (1990), introduced the idea that the behavioral variables of the implementing actors of policy implementation determine the success of policy implementation. At the same time, a contingency or situational approach in policy implementation emerges that suggests that policy implementation is largely supported by the adaptability of policy implementation. The scientists who developed this approach are, among others, (Mustari, 2022:149:150).

Here are some policy implementation models put forward by several experts:

1. George C. Edward Policy Implementation Model

The public policy implementation model with a top-down perspective was developed by Edward III. The approach proposed by Edward III in the Budget (2018:250-254) has four variables that greatly determine the success of a policy implementation, namely:

a. Communication

Communication has a fairly important role/function to determine the success of public policies in its implementation. One of the weaknesses in this public policy process, especially in Indonesia, is the problem of its implementation. One of the factors is weak communication. This communication weakness actually does not only occur at the time of implementation, but also occurs at the time of formulation. Communication should have been built since the formulation, so that the contents or materials that will be the "soul" of a policy can be known and adjusted to the demands of evolving needs. Intensity in communicating public policies at the implementation level is needed so that the support and commitment of related parties can be formed. The policies communicated must also be precise, accurate, and consistent. Communication (information transmission) is needed so that decision-makers and implementers are more consistent in implementing every policy that will be implemented in society. Furthermore, he put forward three indicators of communication success in the context of public policy, which are as follows.

1) Transmission

A policy to be implemented must be channeled to the officials who will implement it. Transmission problems often occur when the implementer does not agree with the policy (disposition) by distorting policy orders or shutting down necessary communications. Transmission problems also occur when the policy to be implemented must go through a layered bureaucratic structure or the unavailability of adequate communication channels (resources).

2) Clarity

Clarity of objectives and methods to be used in a policy is an absolute necessity so that it can be implemented as decided. However, this is not always the case. There are various reasons why a policy is not clearly formulated, including: a) the complexity in policy-making that occurs between the executive and the legislature so that it tends to leave its implementation to subordinates; b) there is opposition from the community to the policy; c) the need to reach consensus between competing goals when formulating such policies; d) new policies whose formulators have not mastered the problem too much; e) usually occurs in policies that concern the rule of law. In this section, in addition to associating implementation with the type/type of policy, it seems that Edwards III also referred to the results of Bardach's study on the Implementation Game.

3) Consistency

Effective implementation requires clear communication, as well as consistency. A good transmission process, but with inconsistent commands will confuse the executor. Many things cause policy direction to be inconsistent, including: a) the complexity of policies that must be implemented; b) difficulties that arise when starting the implementation of new policies; c) the policy has various goals and objectives, or is contrary to other policies; d) the many influences of various interest groups on the issues brought by the policy.

b. Resources

The resources needed in the implementation according to Edwards III are as follows.

1) staff, whose number and capabilities are in accordance with what is needed.

2) Information, which is related to how to implement policies and data related to the policies to be implemented.

3) Authority. This means that the authority needed for the implementer varies greatly depending on the policy that must be implemented. Authority can take the form of bringing cases to the green table,

providing goods and services, authority to obtain and use funds, authority to request cooperation with other government agencies, and others.

- 4) Facilities. Physical facilities are important for the successful implementation of policies by implementers. Physical facilities as supporting facilities and infrastructure are needed to facilitate the policy communication process. Without adequate physical facilities, implementation will also be ineffective. These physical facilities vary depending on policy needs.

c. Disposition

Disposition is the attitude and commitment of the implementer to the policy or program that must be implemented because every policy requires implementers who have a strong desire and high commitment to be able to achieve the expected policy goals. There are three main elements that affect the ability and willingness of the implementing apparatus to implement policies, including the following.

- 1) Cognition, which is how far the implementer understands the policy. Understanding the policy objectives is very important for the implementing apparatus. If the value system that influences attitudes is different from the value system of policymakers, policy implementation will not run effectively. Administrative incompetence of policy implementers, namely the inability to respond to the needs and expectations conveyed by the community, can cause the implementation of a program to be ineffective.
- 2) Implementation directions and responses. This includes acceptance, impartiality or rejection of the implementer in responding to the policy.
- 3) The intensity of the response or the response of the executor.

d. Bureaucratic Structure

The Edwards III bureaucratic structure is a working mechanism established to manage the implementation of a policy. He emphasized the need for a Standard Operating Procedure (SOP) that regulates the flow of work among implementers, especially if the implementation of the program involves more than one institution. He also reminded that sometimes fragmentation is needed when policy implementation requires many programs and involves many institutions to achieve its goals.

RESEARCH METHODS

This study uses a qualitative descriptive approach to understand problems and work processes in the field. This approach, according to Sugiyono, aims to describe and analyze the results of the research without drawing general conclusions, so that it is more flexible in exploring information (Narbuko & Achmadi, 2021). The research is based on a qualitative method that emphasizes meaning rather than generalization (Sugiyono, 2024). In this case, the researcher becomes the main instrument with data collection techniques through interviews, observations, and documentation, which are then analyzed inductively. The object of the research is the implementation of the Hospital Management Information System (SIMRS) in the Emergency Installation (IGD) of Kabelota Hospital, with a focus on data integration, workflow, communication between staff, resources, staff commitment, and bureaucratic structure. The research aims to evaluate the effectiveness of SIMRS, identify challenges, and provide recommendations for increasing the use of the system. The research subjects were selected purposively involving seven informants, consisting of three emergency room staff (doctors, nurses, administration), two SIMRS management teams, and two SIMRS operational technical teams.

The unit of analysis includes processes and workflows at the Emergency Department of Kabelota Hospital, medical staff and SIMRS user administration, implementation policies, and SIMRS usage processes and systems. Data collection techniques are carried out through direct observation in the field, in-depth interviews with informants, and documentation in the form of an assessment of documents, reports, and related literature. Data analysis refers to the theory of Miles, Huberman, and Saldana (2014), which includes three stages: data collection through interviews, observations, and documentation; condensation of data by selecting, focusing, simplifying, and summarizing important information; and the systematic presentation of data for interpretation. Finally, conclusions are drawn based on the verification of the data that has been analyzed. The SWOT Analysis method was used to evaluate internal factors (strengths and weaknesses) as well as external factors (opportunities and threats) that affect the implementation of the Hospital Management Information System (SIMRS) in the Emergency Department (IGD) of Kabelota Hospital. This analysis aims to identify strategies that can maximize strengths and opportunities, as well as minimize weaknesses and threats.

The SWOT analysis process is carried out through the following steps:

1. Identify Internal Factors (Strengths & Weaknesses):
 - o Strengths include the advantages of the SIMRS system such as effective data integration, hospital management support, and the availability of technical resources.

- Weaknesses include obstacles such as lack of training for users, dependence on technicians, and limited budget for system development.
- 2. Identify External Factors (Opportunities & Threats):
 - Opportunities include advances in information technology, government policies that support digitalization, and patient needs for faster and more efficient services.
 - Threats include external challenges such as resistance to change, data security, and the risk of technical disruption or cyberattacks.
- 3. SWOT Mapping in the Matrix: All internal and external factors are analyzed and mapped in the SWOT matrix to determine the relationship between the elements:
 - SO (Strength-Opportunities): Strategies that leverage strengths to seize opportunities, such as improving user training by leveraging the support of the latest technology.
 - WO (Weakness-Opportunities): A strategy that addresses weaknesses by taking advantage of opportunities, such as proposing additional budgets for the development of government policy-based systems.
 - ST (Strength-Threats): Strategies that use strength to address threats, such as strengthening data security through the development of reliable systems.
 - WT (Weakness-Threats): Defensive strategies to minimize weaknesses and avoid threats, such as setting up a rapid response team to deal with technical disruptions.
- 4. Determination of Priority Strategies: Based on the results of the analysis, priority strategies are determined by considering the most urgent factors to be addressed. The strategy was then designed to improve the effectiveness and efficiency of SIMRS implementation at the Emergency Room of Kabelota Hospital.

RESULTS AND DISCUSSION

1. Research Results and Discussion

Implementation of the Hospital Management Information System (SIMRS) policy at the Kabelota Regional General Hospital, Donggala Regency in 2024

The implementation of the Hospital Management Information System (SIMRS) in the Emergency Installation (IGD) of Kabelota Hospital is a strategic step in improving the quality of health services. SIMRS is designed to integrate all operational processes in hospitals, including in the emergency room, so that services become faster, more efficient, and more accurate. As one of the vital elements in the healthcare system, emergency rooms need information technology support to effectively handle patients with urgent needs.

The legal basis for the implementation of SIMRS refers to the Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013, which requires hospitals to adopt information technology to improve operational efficiency and quality of health services. This provision emphasizes the importance of SIMRS as a means to support data-driven decision-making, facilitate access to information, and increase service accountability in hospitals. By referring to these regulations, Kabelota Hospital seeks to optimize the function of the emergency room through the implementation of integrated SIMRS, as part of its commitment to provide quality health services to the community.

A. Communication Aspects

The results of the research based on interviews with various sources at Kabelota Donggala Hospital show that the communication aspect in the implementation of the Hospital Management Information System (SIMRS) has been going well. SIMRS has been proven to support effective coordination between units in hospitals, simplify workflows, and improve service efficiency. However, there is a need to improve technical skills through advanced training to ensure that users are able to make optimal use of the system. One of the main challenges in the implementation of SIMRS is the instability of the internet network which often hampers system operations, as well as the limited capabilities of the hardware used. Communication efforts related to the implementation of SIMRS have been carried out regularly through socialization and monthly meetings, which help ensure that all staff understand the procedures for using the system. To support SIMRS optimization, recommended strategic steps include improving internet network infrastructure, providing more adequate hardware, and implementing advanced training for system users. This effort is expected to be able to strengthen the implementation of SIMRS while improving the quality of services at Kabelota Donggala Hospital.

B. Resource Aspects

The results of the study show that the implementation of the Hospital Management Information System (SIMRS) at Kabelota Donggala Hospital still faces significant challenges, especially in terms of budget support, technological resources, and system maintenance. All speakers agreed that budget support for the development and maintenance of SIMRS is still limited. Uzair, S.KM, as the person in charge of SIMRS, emphasized the need for

budget evaluation so that the use of funds is more optimal, while Dr. Sidik Pribadi revealed that the current budget from the government is not enough to meet hardware and software needs. This was reinforced by Wandu, who highlighted the importance of a larger budget allocation to ensure the continuity of the system. In addition, the limitations of hardware such as computers, especially in Emergency Installations (ER), and the lack of IT personnel for system maintenance are the main obstacles. Although initial training has been conducted and given positive results, periodic evaluations are urgently needed to maintain consistency in the quality of SIMRS implementation. Based on data analysis, it was found that hardware needs vary in each service unit, while IT personnel for system maintenance are still minimal. To overcome this challenge, it is recommended that hospitals prioritize adding hardware, especially computers in the emergency room, as well as recruiting additional IT personnel to support the development and maintenance of the system. Periodic evaluations of BLUD fund management are also needed to ensure that the budget allocation meets the operational and development needs of SIMRS. In addition, investments in more cutting-edge hardware and software are expected to improve the efficiency and overall quality of hospital services. With these strategic steps, the implementation of SIMRS can be more optimal in supporting health services at Kabelota Donggala Hospital.

C. Aspects of Disposition/Attitude

The results of the study show that the implementation of the Hospital Management Information System (SIMRS) at Kabelota Donggala Hospital has been running well and has received positive acceptance from various related parties. The informants, including medical and non-medical staff, acknowledged that SIMRS simplifies various aspects of work, from administration, medical services, to data management and medicines. There is no significant resistance to the implementation of this system, which reflects the good readiness and adaptation of all users. However, several important aspects need more attention to optimize SIMRS performance. One of the obstacles identified is the limitation of intensive training, especially for staff who are not familiar with information technology. Suggestions from informants such as Ayu Aisyah and dr. Githa highlighted the importance of more intensive socialization and additional training that is adjusted to the staff's work schedule, considering the limited training time due to the hospital's busy duties.

In addition, the technical aspects of SIMRS also need to be improved, especially in terms of monitoring patient data security and regular system updates, as conveyed by Wandu from the technician team. The security of patient data should be a top priority, and continuous system updates are essential to maintain relevance and operational efficiency. Hospital management support is also key to the successful implementation of SIMRS, especially in providing continuous training, improving monitoring systems, and ensuring adequate budget allocation for technology development and maintenance needs.

Overall, the implementation of SIMRS at Kabelota Donggala Hospital has had a positive impact on administrative efficiency and service quality. However, to achieve optimal levels, continuous improvement efforts are required, such as more comprehensive training, stronger security systems, and consistent management support. With these steps, SIMRS can further support digital transformation in health services, answer increasingly complex service needs, and improve the overall quality of hospital services.

D. Aspects of Bureaucratic Structure

The results of the study show that the implementation of the Hospital Management Information System (SIMRS) in the Emergency Room of Kabelota Donggala Hospital has gone quite well, supported by an effective organizational structure, structured workflow, and consistent implementation of Standard Operating Procedures (SOP). The existence of SIMRS has helped improve service efficiency and simplify data management in hospitals. However, this study also identifies several obstacles that need to be overcome immediately to ensure that the implementation of SIMRS runs more optimally. One of the main aspects of concern is the importance of continuous training for all SIMRS users, especially when there is a system update or technical change. This training will ensure that all staff, both medical and non-medical, are able to keep up with technological developments and use the system properly.

In addition, the quality of technological infrastructure, especially the internet network, needs to be improved to reduce technical disturbances that can hinder the smooth filling of data and SIMRS operations. The process of monitoring and validating the use of the system must also be strengthened to ensure compliance with the SOPs that have been set. No less important, the development of technological competencies among staff, including technicians, medical personnel, and administration, needs to be a priority so that they are able to face various technical challenges in the management of SIMRS.

Overall, although the implementation of SIMRS at Kabelota Donggala Hospital has shown positive results, this study concludes that the system is not fully optimal. By increasing routine training, improving technological infrastructure, tightening monitoring, and developing staff skills, SIMRS at Kabelota Donggala Hospital is

expected to function more effectively, support more efficient health services, and have a more significant impact on improving the quality of health services for the community.

2. Analysis of SIMRS Policy Implementation at the Emergency Installation of Kabelota Hospital

The following is a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis based on the data that has been submitted regarding the implementation of SIMRS at Kabelota Donggala Hospital:

Strength :

1. Positive Reception from Staff: Overall, the implementation of SIMRS at Kabelota Donggala Hospital has been well received by medical and non-medical staff, which reflects the strong internal support for this system.
2. Good Coordination: The implementation of SIMRS supports good cross-unit coordination, improves communication between hospital sections, and helps operational efficiency.
3. Positive Initial Training: Initial training has provided the basic skills needed to use SIMRS, demonstrating a commitment to improving the technical skills of staff.
4. Supportive Organizational Structure: The availability of clear SOPs and organizational structures that are organized help facilitate the implementation of SIMRS in hospitals.

Debilitation:

1. Limitations of Technological Infrastructure: Internet network instability and hardware limitations are the main challenges in the implementation of SIMRS. Inadequate infrastructure can hinder smooth operations.
2. Insufficient IT Staff: Lack of IT personnel to monitor and limited resources for SIMRS maintenance and development can hamper system encryption efforts.
3. Lack of Advanced Training: Although initial training has been provided, advanced training for staff has not been conducted consistently, so the technical skills of staff may not be in line with the continuous development of SIMRS technology.
4. Limited Budget: Inadequate budget allocation for the development and maintenance of SIMRS and hardware and software updates limits the hospital's ability to improve the quality and efficiency of the system.

Chance :

1. Increased Budget for SIMRS: There is an opportunity to increase budget allocation, particularly through BLUD funds, to support the development and maintenance of SIMRS and hardware and software updates.
2. Recruitment of More IT Personnel: By recruiting additional trained IT personnel, Kabelota Donggala Hospital can strengthen the management capacity of SIMRS and reduce dependence on limited personnel.
3. Investments in Technology Infrastructure: Investments in more cutting-edge technologies and improved network quality can improve the speed and efficiency of SIMRS, as well as reduce the problems associated with poor internet connections.
4. Enhancement of Continuous Training: The strengthening of continuous training programs for medical and non-medical staff will ensure up-to-date technical skills and can improve the operation of SIMRS more efficiently.
5. Enhanced Patient Data Security: Opportunities to strengthen patient data security systems, such as stronger encryption and tight access controls, will increase patient and staff trust in SIMRS.

Threats :

1. Dependence on Vulnerable Internet Networks: Internet network instability can disrupt SIMRS operations and have an impact on the speed and accuracy of data filling, disrupting the smooth administration and hospital services.
2. Lack of Resources for Maintenance and Development: Lack of funds and manpower for maintenance systems can cause SIMRS to not be able to evolve as needed or even suffer technical breakdowns that affect operational performance.
3. Resistance to Change: Although most staff have already accepted SIMRS, there is still a possibility of resistance from some staff to change, especially with regard to adapting to new technologies and evolving system updates.
4. Threats to Data Security: If data security systems are not improved, potential data leaks or unauthorized access to data can damage the hospital's reputation and reduce public trust.

Next, the researcher conducts an analysis To create IFAS (Summary of Internal Factor Analysis) and EFAS (Summary of External Factor Analysis), we will use the SWOT analysis that you have provided. Here are the steps to calculate IFAS and EFAS and how they are calculated:

Syavira Andina Anjar et al

Step 1: Determine the Weights for Each Factor

The weight reflects the extent to which these factors affect the success of the implementation of SIMRS at Kabelota Donggala Hospital. The weights are usually given in the range of 0 to 1, where 1 is the most significant and 0 is the least significant.

Step 2: Give a Rating for Each Factor

The ranking reflects how well the organization manages internal (for IFAS) and external (for EFAS) factors. Ratings are given on a Scale of 1 to 4, where:

- 1 = Very bad
- 2 = Pretty bad
- 3 = Good enough
- 4 = Excellent

Step 3: Calculate the Total Score

The total score for each factor is calculated by multiplying the Weight by the Rating.

Total Score = Weight x Rating

Step 4: Summary of Results

After calculating the total score for each factor, we can see which factors have the most impact on the implementation of SIMRS and which factors need further attention.

IFAS and EFAS – Implementation of SIMRS Kabelota Donggala Hospital

1. IFAS (Internal Factor Analysis Summary)

To get the value of x, it is necessary to know the difference from the total strength and total weakness using the following formula.

Total Strength–Total Weakness = x

S–W=x

Internal Factors (Strengths and Weaknesses)	Weight	Rating	Total Score
Positive Reception from Staff	0.2	4	0.8
Good Coordination	0.2	3	0.6
Positive Initial Training	0.15	3	0.45
Supportive Organizational Structure	0.15	4	0.6
Limitations of Technology Infrastructure	0.2	2	0.4
Insufficient Number of IT Personnel	0.1	2	0.2
Lack of Advanced Training	0.1	3	0.3
Limited Budget	0.15	2	0.3

IFAS Total Score: 3.65

2. EFAS (External Factor Analysis Summary)

External Factors (Opportunities and Threats)	Weight	Rating	Total Score
Increased Budget for SIMRS	0.25	3	0.75
Recruitment of More IT Workers	0.2	4	0.8
Investment in Technology Infrastructure	0.25	3	0.75
Continuous Training Improvement	0.15	3	0.45
Enhanced Patient Data Security	0.15	4	0.6
Dependence on Vulnerable Internet Networks	0.25	2	0.5
Lack of Resources for Maintenance and Development	0.2	2	0.4
Resistance to Change	0.15	3	0.45
Threats to Data Security	0.2	2	0.4

The table above shows the value obtained from the difference from the total threat opportunity so that the value y can be obtained with the following formula

O-T=y

Total EFAS Score: 4.90

With a lower total IFAS score than EFAS, it is important for Kabelota Donggala Hospital to improve its technology infrastructure and human resources (such as IT personnel and continuous training) to optimize the

implementation of SIMRS. In addition, existing external opportunities, such as increased budgets and recruitment of additional IT personnel, can be leveraged to support the development of better systems.

After obtaining each of the x and y values of the above factors, the location of the quadrant is determined with a diagram so that you can find out the action of the strategy chosen correctly, here is a SWOT analysis diagram of the strategy that can be used to formulate a strategy for the implementation of the SIM policy for hospitals at Kabelota Hospital, Donggala Regency

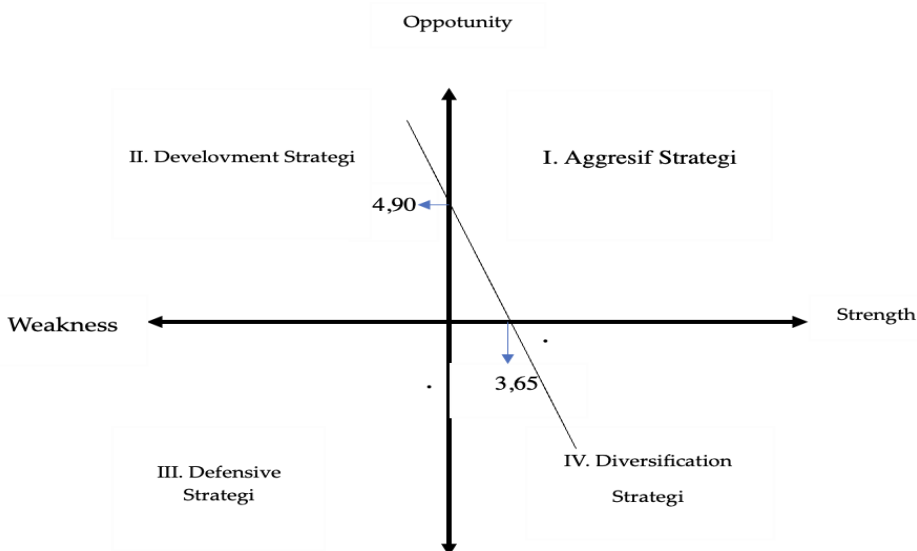


Figure 1. SWOT analysis diagram
Source: Author's Preparation, 2024

Based on the results of IFAS and EFAS analyses which show a higher total score on external factors (EFAS) compared to internal factors (IFAS), Kabelota Donggala Hospital is in Quadrant I (Aggressive Strategy). This indicates that hospitals can better utilize external opportunities to address internal weaknesses and strengthen existing strengths.

Alternative Proper Strategy in Quadrant I (Aggressive Strategy):

1. Technological Infrastructure Upgrades:
 - o Strategy, Focus on developing hospital technology infrastructure, including improving internet connections, updating hardware and software, and investing in more cutting-edge technologies.
 - o The goal is to change SIMRS to run smoothly and efficiently, as well as reduce dependence on unstable internet networks.
 - o Action, Allocation of funds for internet network repair and hardware upgrades. Looking for a technology partner who can provide innovative solutions.
2. IT Recruitment and Training:
 - o Strategy, Recruit additional IT personnel who train and have the latest skills to support the development and maintenance of SIMRS.
 - o Objective: Reduce dependence on limited manpower and increase hospital capacity in managing SIMRS more effectively.
 - o Action, Preparing IT energy conservation plans, and holding periodic training for technical staff to maintain their ability to keep up with technological developments.
3. Improved Patient Data Security:
 - o Strategy, Strengthening the patient data security system to prevent data leakage and increase public trust.
 - o Objective: Improve encryption systems and stricter access controls to ensure patient data is properly protected.

- Action, Implementing stronger encryption systems, and updating data security policies and procedures to ensure more secure data management.
- 4. Ongoing Training for Staff:
 - Strategy, Develop and implement continuous training programs for all medical and non-medical staff so that their skills remain relevant to the development of SIMRS.
 - Objective: Improve the skills of technical staff to operate SIMRS efficiently and reduce the inability that may arise due to technological changes.
 - Action, Developing a continuous training program that includes more in-depth use of SIMRS, as well as providing training on problem solving and system management
- 5. Optimize the Utilization of the BLUD Budget:
 - Strategy, Utilizing BLUD funds to improve SIMRS, including hardware and software updates, and staff training.
 - Objective: Increase budget allocation to support the sustainable development and maintenance of SIMRS.
 - Action, Planning detailed budget proposals to be submitted to BLUD, as well as identifying expenditure priorities that support the development of SIMRS.

With the implementation of this aggressive strategy, Kabelota Donggala Hospital can improve operational efficiency, overcome technology shortcomings, and make the most of external opportunities.

Strategies Based on SWOT Analysis:

- Power-Opportunity (SO) Strategy:
 - Leverage positive reception from staff and organizational structure support to increase investment in technology infrastructure and ongoing training.
 - Recruit additional IT staff and increase the budget for SIMRS to address hardware and software shortages.
- Strength-Threat (ST) Strategy:
 - Use the positive reception of SIMRS to build awareness of the importance of improving data security and strengthening monitoring systems to avoid the threat of data leaks.
 - Strengthen communication between medical and non-medical staff to ensure that all parties are prepared for potential network-related or technical disruptions.
- Advantage-Advantage (WO) Strategy:
 - Focus on the procurement of adequate hardware and advanced training for staff, as well as increase the budget for the development of SIMRS by utilizing BLUD funds.
 - Recruit additional IT personnel trained to assist with the maintenance and development of SIMRS.
- Weakness-Threat Strategy (WT):
 - Strengthen SIMRS's fund management and budget allocation policies to reduce reliance on inadequate technology.
 - Conduct periodic evaluations to identify areas that need improvement, particularly related to monitoring systems, networks, and hardware.

CONCLUSION

1. Overall, the implementation of SIMRS at Kabelota Donggala Hospital has gone well, but it has not been fully optimal. Aspects of communication, disposition/attitude, and bureaucratic structure have shown positive results, although there are several challenges that need to be addressed immediately, such as network instability, hardware limitations, and the need for continuous training. In terms of resources, improvements to technological infrastructure and additional IT personnel are also needed to support the smooth operation of SIMRS. With these improvement steps, SIMRS at Kabelota Donggala Hospital can be optimized to support more efficient and quality health services.
2. Analysis of SIMRS Policy Implementation in the Emergency Installation of Kabelota Hospital
Based on the results of IFAS and EFAS analyses which show a higher total score on external factors (EFAS) compared to internal factors (IFAS), Kabelota Donggala Hospital is in Quadrant I (Aggressive Strategy). This indicates that hospitals can better utilize external opportunities to address internal weaknesses and strengthen existing strengths.

REFERENCES

- 1) Husnaeni, & Susanti. (2023). *Implementasi Sistem Informasi Manajemen Rumah Sakit (SIMRS) di Instalasi Gawat Darurat (IGD) Rumah Sakit Kabelota.*
- 2) Kementerian Kesehatan Republik Indonesia. (2013). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 82 Tahun 2013 tentang Sistem Informasi Manajemen Rumah Sakit.* Jakarta: Kementerian Kesehatan RI.
- 3) Molly, A., & Itaar, D. (2021). *Manfaat Sistem Informasi Manajemen Rumah Sakit dalam Meningkatkan Efisiensi Operasional dan Keselamatan Pasien.*
- 4) Mulyono, et al. (2022). *Implementasi Kebijakan Sistem Informasi Manajemen Rumah Sakit (SIMRS) dalam Meningkatkan Kinerja Pelayanan Kesehatan.*
- 5) Putri, I., & Mulyanti, R. (2023). *Analisis Implementasi Kebijakan SIMRS di Rumah Sakit Undata.*
- 6) Roshanov, P. S., Fernandes, N., Wilczynski, J. M., Hemens, B. J., You, J. J., Handler, S. M., & Haynes, R. B. (2011). *Features of Effective Computerized Clinical Decision Support Systems: Meta-Regression of 162 Randomized Trials.* *BMJ*, 342, d165.
- 7) Sherer, S. A. (2024). *Challenges in Implementing Health Information Systems in Developing Countries.* *Journal of Health Informatics*, 14(3), 45–60.
- 8) Wager, K. A., Lee, F. W., & Glaser, J. P. (2017). *Health Care Information Systems: A Practical Approach for Health Care Management* (4th ed.). San Francisco: Jossey-Bass.
- 9) Rumah Sakit Kabelota. (2020). *Laporan Pelaksanaan Sistem Informasi Manajemen Rumah Sakit (SIMRS) di IGD Rumah Sakit Kabelota.*
- 10) Rumah Sakit Kabelota. (2024). *Evaluasi Infrastruktur Teknologi Informasi dalam Implementasi SIMRS di IGD Rumah Sakit Kabelota.*