



# Analysis of The Influence of Risk Management And Hospital Management Information System on The Performance of Regional Public Hospitals (Empirical Study at Regional General Hospitals in Lampung Province)

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## ARTICLE INFO :

### **Keywords :**

*Risk Management;  
Hospital Performance;  
SIMRS (Hospital Management  
Information System);  
Performance of Regional  
Public Hospital*

### **Article History :**

Received : 2024-06-09

Revised : 2024-07-18

Accepted : 2024-08-24

Online : 2024-09-19

## ABSTRACT

*As health service providers, hospitals have a big responsibility to provide high quality services. This is achieved by paying attention to security, health and occupational safety aspects in providing health services. One of the main efforts is through identification, assessment and risk management to minimize the possibility of unwanted risks and injuries for patients and medical personnel involved. Problem Does risk management have a significant effect on the performance of regional hospitals in Lampung Province? Does the Hospital Management Information System (SIMRS) have a significant effect on the performance of Regional Hospitals in Lampung Province. The research method used in this research is quantitative descriptive research using survey methods. The results of the research are that risk management has a positive and significant influence on the performance of Regional General Hospitals (RSUD). This is proven by the path analysis coefficient data showing that risk management contributes 35.9% to improving hospital performance. The Hospital Management Information System (SIMRS) has a positive and significant influence on the performance of Regional General Hospitals (RSUD). This research shows that SIMRS contributed 63.7% to improving RSUD performance, which is reflected in the path analysis coefficient value of 0.637. The implication of the finding that risk management has a positive and significant influence on the performance of Regional General Hospitals (RSUD) is the need to improve risk management strategies by hospital management. This may include developing and implementing comprehensive risk management policies and procedures, ongoing training for staff on risk identification and mitigation, and improving risk monitoring and evaluation systems.*





## INTRODUCTION

Healthcare is an important aspect of meeting the needs of the community, with hospitals playing a central role in providing comprehensive medical services. Regulation of the Minister of Health of the Republic of Indonesia Number 30 of 2019 defines a hospital as an institution that provides comprehensive services, including inpatient care, outpatient care, and emergency care. Hospitals are required to ensure that patient's medical needs are met properly through these services.

To achieve high quality of service, hospitals must pay attention to aspects of occupational safety and security. Identification, assessment, and management of risks are important to minimize unwanted injuries to patients and medical personnel. Risk in health services is the possibility of negative events that can be detrimental, so it needs to be managed properly through a risk management program. Risk management helps hospitals maintain smooth health services by minimizing the impact of risks that may arise.

Risk management is a method used to identify, analyze, and control risks in a company's operations, both in the product and service sectors. The goal is to achieve higher effectiveness and efficiency. In business, risk management protects companies from threats that can result in losses. This process helps companies make better and wiser decisions in dealing with risks.

According to the Minister of Health Regulation Number 82 of 2013, the Hospital Management Information System (SIMRS) is a system of information technology that integrates all service processes in the hospital. SIMRS simplifies administration, reporting, and coordination, and supports appropriate decision-making. With SIMRS, hospitals can manage patient data, medical records, and finances more efficiently and accurately, improving efficiency and quality of service.

The Regional Public Hospital in Lampung Province has implemented SIMRS to improve the efficiency and effectiveness of health services. Several regional hospitals that have implemented SIMRS include Dr. Hi. Abdul Moeloek Regional Hospital, A. Dadi Tjokrodipo Regional Hospital, and Dr. H. Bob Bazar Regional Hospital. However, the use of this information technology also carries risks, such as system failure and data insecurity. These risks can disrupt hospital performance if not handled properly.

Risk management audits are essential in addressing risks related to the use of SIMRS, especially in accounting and finance. Although there is no specific risk management audit in this section, this step is necessary to minimize errors, deviations, or fraud. This audit helps evaluate the process, analyze potential risks, and identify corrective steps needed to maintain financial integrity.

The author is interested in examining how the application of risk management affects financial performance in SIMRS at RSUD in Lampung Province. The formulation of the problem raised is whether risk management and SIMRS have a significant effect on the performance of RSUD in Lampung Province.

The purpose of this study was to analyze the influence of risk management and SIMRS on the performance of regional public hospitals in Lampung Province. This study is expected to provide theoretical benefits as a scientific and practical reference in improving the implementation of risk management and SIMRS on the performance of regional public hospitals in Lampung Province. The results of the study are expected to increase knowledge in the field of accounting management as well as provide a reference for hospitals in managing risks and improving service quality.

To find out and analyze whether risk management has a significant influence on the performance of regional public hospitals in Lampung Province. To know and analyze system Information Hospital Management (SIMRS) has a significant influence on the performance of regional public hospitals in Lampung Province.

## LITERATURE RESEARCH

### A. Definition of Management

Management is a process that involves planning, organizing, directing, and supervising the efforts of organization members and the use of resources other organizational resources to achieve the goals set by the organization (Handoko, 2015).





## B. Understanding Risk

According to Hanafi (2016), risk is the potential danger, impact, or consequence that may occur as a result of an ongoing process or future event. Risk can be defined as a situation full of uncertainty, where if something undesirable happens, it can cause losses.

## C. Information Systems Management (SIMRS)

According to Stenly (2018), Hospital Management Information System (SIMRS) is an integrated information system that functions to handle all activities and transactions that take place in the hospital. SIMRS is designed to improve the quality of service and facilitate hospital management in carrying out various routines and transactions carried out .

## D. Definition of Performance

According to Sayles and Strauss (1998), performance standards are not only used as a reference for comparing actual results with those expected but also function as a benchmark in providing accountability for tasks that have been carried out.

## METHOD

Djamil (2023) This research uses a quantitative descriptive method with Survey approach. The survey was conducted using a questionnaire as the main tool for collecting data. It is expected that through this survey, the research results can reflect real conditions. This study aims to describe the company's activities based on questionnaires, which are then processed into statistical data and interpreted. (Sugiyono, 2012). The population in this study were employees of the management department of Dr. H. Bob Bazar Hospital, SKM, Ahmad Yani Hospital, and Pesawaran Hospital, totaling 40 people.

## RESULTS AND DISCUSSION

### A. The Influence of Risk Management on the Performance of Regional General Hospitals (

Based on the results of the research that has been conducted, it was found that risk management has a positive and significant influence on the performance of Regional General Hospitals (RSUD). This study involved 40 respondents consisting of management staff at three different RSUDs. The results of the data analysis showed that risk management contributed 35.9% to improving hospital performance, as measured by the path analysis coefficient value of 0.359. This figure reflects the significant influence of the implementation of risk management on the overall performance of the hospital.

Hypothesis testing using the t-test also supports this finding. The calculated t-value of 3.115 exceeds the table t-value of 2.026. This shows that there is a real and significant difference between the implementation of risk management and the resulting performance. In addition, the P value obtained from the data processing results is 0.002, which is much smaller than the set significance threshold of 0.05. Thus, the null hypothesis stating that risk management has no effect on the performance of the Regional Public Hospital can be rejected, and the alternative hypothesis stating that there is a positive effect can be accepted.

This study confirms the importance of risk management in the operation of regional public hospitals. By identifying, evaluating, and controlling various risks that may occur, hospitals can improve efficiency, effectiveness, and quality of service. Good risk management helps regional public hospitals reduce untoward incidents. Desired, optimize resource utilization, and improving operational procedures. All of these contribute directly to improving hospital performance, which ultimately has a positive impact on patients and society as a whole.

These findings underscore the need for every regional hospital to integrate risk management into their operational strategy. Structured and systematic risk management enables hospitals to face challenges more readily and responsively, reduce losses, and improve performance outcomes. In the long run, effective risk management implementation not only improves hospital performance but also builds public trust.

On the quality of health services provided. To maximize the performance of the regional general hospital through the implementation of effective risk management, the first step is to identify risks thoroughly. Comprehensive. RSUD needs to develop a system to identify various types of risks, ranging from clinical, and





financial, to operational risks. Involving various parties in this process, such as doctors, nurses, administrative staff, and management, can provide a more complete picture of the potential risks that exist. The use of information technology and data-based management systems can also help in identifying risk patterns that may not be immediately visible.

Once the risks have been identified, the next step is to conduct a risk analysis to determine the impact and probability of each risk occurring. This analysis is important for prioritizing risks that require more attention and greater resources for mitigation. Using a comprehensive risk analysis method, such as SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) or FMEA (Failure Mode and Effects Analysis) analysis, can help hospitals in assessing risks objectively and strategically. The results of this analysis must then be integrated into the hospital's strategic planning.

Implementation of risk mitigation measures is a critical step in risk management. RSUD needs to develop and implement policies and procedures that designed to reduce the impact of identified risks. This may include regular staff training, improved information security systems, more prudent financial management, and strengthening health protocols. In addition, the hospital must ensure that there is an ongoing monitoring and evaluation mechanism to ensure the effectiveness of the mitigation measures that have been implemented.

Building a culture of risk awareness across the organization is key to successful risk management. Continuous education and training for all staff on the importance of risk management and how to identify and report risks should be a priority. The involvement of all staff in the risk management process will increase shared commitment and responsibility for safety and quality of service.

Performance measurement and evaluation are also important aspects in maximizing the performance of the hospital through risk management. The hospital must develop key performance indicators (KPIs) related to risk management, such as the frequency of incidents, patient satisfaction levels, and operational efficiency. By monitoring these KPIs regularly, management can identify areas that need improvement and take timely corrective actions.

## **B. The Influence of SIMRS on the Performance of Regional General Hospitals**

Based on the results of the research that has been conducted, it was found that the Hospital Management Information System (SIMRS) has a significant influence on the performance of the Regional General Hospital (RSUD). This study involved 40 respondents and produced data showing that SIMRS contributed 63.7% to improving the performance of the RSUD. The path analysis coefficient value for the SIMRS variable (X2) on the performance of the RSUD (Y) of 0.637 from the original sample shows that the implementation of SIMRS plays a major role in improving the efficiency and effectiveness of hospital operations.

Hypothesis testing using the t-test supports these findings. The results of the t-test show that the calculated t-value of 5.567 far exceeds the t-table value of only 2.026. This indicates a real and significant difference between the use of SIMRS and the performance achieved by the RSUD. In addition, the P value obtained was 0.000, which is smaller than the significance threshold of 0.05, further strengthening the conclusion that the effect of SIMRS on RSUD performance is significant. Thus, the null hypothesis stating that SIMRS has no effect on RSUD performance can be rejected, and the alternative hypothesis stating that SIMRS has a positive effect can be accepted.

This finding underlines the importance of implementing SIMRS in RSUD. SIMRS enables the integration of various hospital functions such as patient data management, administration, finance, and human resources into one integrated system. Thus, SIMRS helps speed up the decision-making process, improve data accuracy, and reduce administrative errors. This not only improves operational efficiency but also improves the quality of service to patients, which ultimately improves the overall performance of the hospital.

Furthermore, the significant influence of SIMRS on the performance of the regional hospital emphasizes the need for investment in information technology and staff training. The hospital must ensure that all staff are skilled in using SIMRS to maximize the benefits that can be obtained from this system. In addition, continuous development and updating of SIMRS must be carried out to keep up with technological developments and the operational needs of the hospital. In the long term, effective implementation of SIMRS





will not only improve the efficiency and quality of services in the regional hospital but also build the hospital's reputation as a modern and technology-oriented institution.

The implementation of SIMRS in RSUD is a strategic step that can bring significant improvements in various aspects of operations and health services. SIMRS is a system designed to integrate various hospital management functions, including patient data management, administration, finance, and human resources. By utilizing this technology, RSUD can achieve higher efficiency, faster and more accurate decision-making, and improve the quality of health services.

The first step in Maximizing the performance of the RSUD through SIMRS is to ensure that the system is implemented comprehensively and effectively. This includes the development of adequate technological infrastructure, including appropriate hardware and software, as well as a reliable network. The RSUD also needs to ensure that all modules in SIMRS, such as electronic medical records, inventory management, and financial systems, are implemented properly and integrated with each other. Thus, data from various departments can be accessed and managed easily, reducing redundancy and possible errors.

Training and capacity building of human resources are also key in maximizing the benefits of SIMRS. RSUD must hold a comprehensive training program for all staff, from doctors, and nurses, to administrative staff, so that they are proficient in using this system. This training should cover not only the technical aspects of using SIMRS but also an understanding of the strategic benefits of this system in improving hospital performance. Thus, all staff will have the awareness and skills needed to optimally utilize SIMRS.

In addition, RSUD needs to implement policies and procedures that support the use of SIMRS. This includes policies on data security and privacy, protocols for patient data management, and procedures for system maintenance and updates. Data security is a very important aspect because SIMRS manages sensitive patient information. With the right policies, hospitals can ensure that patient data is safe from cyber security threats and is stored with high privacy standards.

Continuous monitoring and evaluation are also an important part of efforts to maximize the performance of the RSUD with SIMRS. RSUD must develop key performance indicators (KPIs) related to the use of SIMRS, such as patient waiting time, administrative error rate, and patient satisfaction. Regular monitoring of these KPIs will help hospital management to identify area.

Which need improvements and to ensure that SIMRS continues to provide optimal benefits. Evaluation can also include feedback from staff and patients to identify areas that require further improvement. In the long term, the effective implementation of SIMRS will not only increase the efficiency and quality of services at the regional general hospital but will also build the hospital's reputation as a modern and professional institution. Oriented towards technology. Public trust in the quality of health services provided by the RSUD will increase, which in the end can attract more patients and increase hospital revenue. Thus, SIMRS is not only an information management tool, but also a strategic investment for a better future for the hospital.

## CONCLUSION

Risk management has a positive and significant influence on the performance of the Regional General Hospital (RSUD). Data show contributions management by 35.9% in improving hospital performance, with a path analysis coefficient value. 0.359. The t-test results show a t-count value of 3.115, which exceeds the t-table of 2.026, and a P value of 0.002, which is smaller than the significance threshold of 0.05. This confirms that risk management has a significant impact on the performance of the regional general hospital, so the hypothesis that risk management has no effect can be rejected.

Hospital Management Information System (SIMRS) also has a positive and significant influence on the performance of the Regional Public Hospital, with a contribution of 63.7%. The path analysis coefficient of 0.637, t-count of 5.567, and P value of 0.000 indicate a significant influence of SIMRS. Thus, the hypothesis that SIMRS does not affect the performance of the Regional Public Hospital can also be rejected. Conduct training ongoing training for staff regarding risk identification and mitigation. Upgrade the system risk monitoring and evaluation to reduce untoward incidents and increase efficiency in operational and patient safety.





Investment in SIMRS: Investment in adequate information technology infrastructure and SIMRS development need to be improved. Comprehensive training for staff on the use of SIMRS must be conducted. Full integration of all hospital management functions in SIMRS achieves efficiency operational and improve service quality.

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