MORFAI JOURNAL Multidiciplinary Output Research For Actual and International Issue
Multidiciplinary Output Research For Actual and International Issue
(MORFAI Journal) | ISSN (e): 2808-6635
Volumes 5 No. 1 (2025)

THE INFLUENCE OF MANAGEMENT INFORMATION SYSTEMS, PROCESS INNOVATION AND OPERATIONAL EFFICIENCY IN HOSPITALS

Ivana Yolanda[1]*, Kosasih[2], Vip Paramarta[3], Farida Yuliaty[4]
[1,2,3,4]Universitas Sangga Buana, Bandung
E-mail: : ivanayolanda97@gmail.com[1]*, vip@usbypkp.ac.id[2], kosasih@usbypkp.ac.id[3], fys@usbypkp.ac.id[4]

Received	: 14 December 2024	Published	: 15 February 2025
Revised	: 23 December 2024	DOI	: https://doi.org/10.54443/morfai.v5i1.2512
Accepted	: 13 January 2025	Link Publish	: https://radjapublika.com/index.php/MORFAI/article/view/2512

Abstract

The implementation of Hospital Management Information System (SIMRS) is a solution to improve operational efficiency by integrating various aspects of services, including administration, electronic medical records, and resource management. This study aims to analyze the role of Hospital Management Information System (SIMRS) and process innovation in improving hospital operational efficiency. The method used is a literature review by collecting and analyzing sources from academic databases such as PubMed, ScienceDirect, ResearchGate, and Google Scholar in the range of 2019-2024. This review discusses the implementation of SIMRS, digitalization of health services, and optimization of medical personnel and facility management. The results show that SIMRS implementation improves administrative efficiency and service coordination, while innovations such as electronic medical records, digital queuing systems, and telemedicine contribute to improved access and quality of care. In addition to technology, efficient management of medical personnel and referral systems also had a significant impact on hospital performance. This study provides recommendations for hospital managers in designing optimal strategies for technology implementation to improve health services.

Keywords: ***SIMRS, Healthcare Innovatin, Operational Efficiency, Telemedicine, Electronic Medical Record***

INTRODUCTION

In the era of globalization, the development of information technology has become a major factor in changes in various sectors of life, including the healthcare sector. Digitalization has changed the way organizations work, increased efficiency, and accelerated access to information. Various technology-based innovations have been implemented to improve health services, both on a national and international scale. Hospitals as health institutions are required to be able to adapt to these developments in order to provide more effective and efficient services. Therefore, the role of information technology in supporting hospital management is increasingly important to be studied .(Apriani et al., 2024)

Along with the increasing demand for quality health services, hospitals face challenges in managing resources, patient administration, and medical services. Inefficiencies in the operational system can cause various problems, such as long queues, service delays, and errors in recording medical data. This can lead to decreased patient satisfaction and burden medical personnel in carrying out their duties. To overcome these problems, the application of information technology in hospital management systems is a solution that is increasingly being used (Bambang Sulistyo & Dety Mulyanti, 2023) .

One of the main implementations of information technology in hospitals is the Hospital Management Information System (SIMRS). SIMRS is a system designed to integrate various aspects of hospital operations, ranging from patient registration, electronic medical records, to financial and pharmaceutical management. With SIMRS, hospitals can reduce administrative errors, speed up access to information, and improve efficiency in the health service process. In addition, the system enables better coordination between medical personnel, patients, and hospital management in providing optimal services(Fladyan Grace Wulur et al., 2023) .

Innovation in hospital service processes is also a key factor in improving operational efficiency. Process innovations include the application of new technologies in diagnosis and treatment, the improvement of digital-based queuing systems, and the implementation of telemedicine for remote consultation services. With these innovations, hospitals can reduce patient waiting time, improve diagnosis accuracy, and optimize the use of healthcare resources. Therefore, process innovation supported by an integrated information system is necessary to improve the overall performance of the hospital .(Yuliaty et al., 2024)

The efficiency of hospital operations depends not only on the technology implemented, but also on the readiness of human resources and policies that support these changes. Implementation of information systems and process innovations often face challenges, such as resistance from medical personnel, limited technological infrastructure, and high investment costs. Without the right strategy in change management, the implementation of information technology and process innovation can experience obstacles in its implementation. Therefore, it is important to identify factors that support and hinder the success of management information systems and process innovation in hospitals.

Research into the influence of management information systems and process innovation on hospital operational efficiency is becoming increasingly relevant in the face of challenges in the healthcare sector. Many hospitals have adopted information technology and process innovation, but have not fully understood their impact on service efficiency. Therefore, further studies are needed that analyze how the application of these technologies can optimize hospital performance. Thus, this study is expected to provide a clear picture of the effectiveness of management information systems and process innovation in improving hospital operational efficiency.

Based on this background, this study aims to analyze the role of management information systems and process innovation in improving hospital operational efficiency. Using the literature review method, this research will collect and discuss the results of previous studies related to this topic. The results of this study are expected to provide recommendations for hospital managers in designing more effective strategies in implementing information systems and process innovation. Thus, this research not only contributes to the development of hospital management science, but also in improving the quality of health services for the community.

LITERATURE REVIEW

Management Information System

The definition of a management information system is a system that serves as an initial part of internal business operations, consisting of the use of documents, people, technology, and procedures in management accounting. Typically, a management information system is used to resolve or continue a solution to business problems such as production costs, services, or predetermined business strategies. A management information system is very different from a regular information system because it is commonly used to analyze other information systems implemented in an organization's active activities. Academically, this term is generally used for integrated components of an information management method or as support for human decision-making processes, such as decision support systems, expert systems, and executive information systems. The difference between a management information system and other regular information systems is that it can automatically provide an analysis of other information systems. According to O'Brien, a management information system is a logical system that supplies all kinds of information to support the operational activities, management, and decision-making functions of an organization. A management information system (MIS) is an information system that can generate outputs by utilizing inputs and various processes required to achieve specific objectives in a management-related matter(Nasution et al., 2022).

Innovation Process

Innovation in the healthcare service sector is one of the ways to overcome stagnation and bottlenecks within healthcare organizations. The rigid and inefficient systems that have long characterized the healthcare sector must be transformed through a culture of innovation. The development of innovative service quality models can be achieved if innovation continues to progress effectively. Innovation, which is usually associated with dynamic environments such as the business sector, must gradually be introduced into the public sector, particularly in healthcare services. This is highly relevant in the hospital industry, where hospitals function as service organizations with specific characteristics in terms of human resources, infrastructure, and facilities. Hospitals are organizations that are heavily dependent on human resources, technology, and knowledge. The measurement of service innovation will impact a company’s success in implementing innovation (Fattima et al., 2024).

1. Creating a New Business Model
   Developing a new business model involves fundamental changes in how revenue and profit are generated. Business model innovation can occur through the integration of different business fields into a single process, such as acquiring a broader customer database and creating additional value for customers.

2. Developing New Services
   The development of new services can take various forms, including new service concepts. The introduction of new services significantly influences marketing performance. If service development is successfully implemented, it will enhance the company's marketing performance. Conversely, if the implementation is unsuccessful, marketing performance will decline.
3. Establishing New Customer Interactions
   The interaction between service providers and customers plays a crucial role in fostering close relationships between consumers and the company. This interaction allows companies to better understand customer needs and preferences.

Operational Efficiency

Operational efficiency in hospitals extends beyond patient-centered services. It also encompasses several systems, including hospital marketing strategies. The marketing function involves automation, advertising, and service optimization to maximize effectiveness while minimizing costs. To further enhance hospital operations, an information system can be developed. This system serves as a subsystem of the hospital's overall technical infrastructure, consisting of all information processing systems used by different personnel according to their operational tasks. The main objective of implementing this system is to support patient services, covering patient management as well as financial and legal aspects related to patient data security. By utilizing an appropriate information system, business operations can be monitored through recorded processes, including patient interactions during registration, interactions with doctors in ambulances or emergency rooms, interactions with supporting medical facilities such as laboratories, radiology, medical rehabilitation, pharmacies, and interactions with the hospital itself. The purpose of patient registration is to meet reporting and statistical requirements as well as to document financial transactions. To assess hospital management efficiency, hospital service indicators are necessary. These metrics can be used to determine service utilization rates, service quality, and overall hospital efficiency (Bambang Sulistyo & Dety Mulyanti, 2023).

METHOD

The research design used in the preparation of this article is a literature review method related to Hospital Management Information Systems, Process Innovation and Operational Efficiency in Hospital services using databases including PUBMED, Sciencedirect, Researchgate, and Google Scholar, in the 2019-2024 range. In this study, researchers collected literature review data with a thematic structure based on the concept of thought arranged to answer scientific questions by grouping and discussing literature sources according to the theme or topic. The literature search in this study was carried out by systematically organizing the topic of discussion in order to obtain relevant references. The search process began by inputting keywords such as "hospital information system", "process innovation in healthcare", and "operational efficiency in hospitals" into various academic databases. This keyword selection aims to obtain studies that discuss the implementation of management information systems, innovation in healthcare processes, and operational efficiency in hospitals. The search results were then selected based on relevance to the research topic in order to obtain references that support a comprehensive analysis (Kristanti & Ain, 2021).

The literature searched in this study was tailored to each topic that was the focus of the discussion. Literature sources consisted of books and journals that used systematic review research methods, quantitative studies, or qualitative studies, taking into account the publication period in the last decade to remain relevant to the latest developments. In analyzing the data, this research uses the critical appraisal method, which examines each selected journal to identify differences, similarities, and advantages and disadvantages. The journal review process was conducted systematically to ensure that each reference used could answer the research questions related to each aspect of this study. After all the main topics in the concept of thought have been answered, the researcher then synthesizes the results of the literature review into a paper that provides a comprehensive picture of the implementation of management information systems, innovation in health service processes, and operational efficiency in hospitals.

RESULTS AND DISCUSSION

Based on the literature search and literature review, three discussion topics were obtained with detailed points that support the explanation of management information systems, innovation in the health service process, and operational efficiency in hospitals.

Hospital Management Information System

A Hospital Management Information System (SIMRS) is a computer system that manages and unifies all business processes related to medical services. The goal is to collect data through well-coordinated networks, reports, and administrative procedures. Computerized information systems for hospital management are now an essential tool to support management and operations in hospitals. The implementation of SIMRS itself has 2 objectives. The main objective is to create a Hospital Management Information System (SIMRS) application that can fulfill all the requirements registering Hospital business processes. Specific objectives with the implementation of several modules: including Payment Management, Pharmacy, Medical Records, Nursing, Hospital Care, Emergency Room, Radiology, Patient Safety, Patient management, Room management, and Asset Management .(Rusli, 2022)

With the development of information technology, almost every institution and government agency has begun to integrate computer-based Management Information Systems into all its operational activities to improve public services including Hospitals(Ilham, 2022) . The use of SIMRS can help hospitals become more efficient in operations and service delivery, reduce operational costs, increase employee productivity, improve the ability to manage human resources, and improve organizational structure. It is better to develop SIMRS holistically and consider various factors rather than slowly. We should examine everything from the patient's perspective, which prioritizes healthcare, or even from the administrative side, which handles patient data and transactions. Payment for treatment does not always have to be made in cash; credit cards and debit cards can be used instead, in addition to the many other services that hospitals can provide. . (Maya Saufinah Pane et al., 2023)

According to Azwar, good health services are health services that can satisfy all users of the right health services with the average level of satisfaction of the population and in accordance with the implementation of professional standards and ethics. To get a sense of satisfaction from patients, of course, the hospital must provide operational system efficiency. From filing and organizing records to managing data in a way that produces relevant medical information, medical services cover all aspects of medical records management(Bambang Sulistyo & Dety Mulyanti, 2023) . Hospital management in the modern era is no longer as simple as it used to be. The presence of business principles has become inevitable. Today's hospitals require large capital investments, especially to provide more and more of the latest technology, as well as sufficient manpower to organize operations more professionally. In addition, the need for technical personnel who are skilled in operating sophisticated equipment has also become essential . (Ali et al., 2024)

Hospital Information System provides a clear picture of the relationship between information technology and information processing, quality of care, and patient trust through two indicators of hospital performance: patient satisfaction and quality of treatment. Improving the quality and efficiency of care is directly and indirectly affected by this(Saputra Mokoagow et al., 2024) . Therefore, the needs of patients must be considered among many other criteria when developing. Prompt, pleasant, and quality service is what patients expect from service providers. Due to the high degree of patient mobility, prompt service and communication is first needed between patients and medical facilities, and then between patients and doctors. If the hospital system can offer a way for patients to register with a doctor such as sending an SMS or using a website, it is beneficial. In reality, the method of patient communication is irrelevant as what matters most is the speed, convenience, and accuracy of the information recorded(Sitepu & Kosasih, 2024)

In fact, hospital data is so extensive and complex both medical and administrative data stored by hospitals that it may have the following impacts if handled manually without the help of SIMRS: (a). Data reduction, data duplication arises from recording the same medical information repeatedly, thus increasing data storage capacity. Due to the high backlog of files, data retrieval is delayed, which causes services to slow down. (b). Lack of integration in data management and storage leads to unsynchronized data in that assumptions regarding each element vary depending on the needs of each installation or unit. (c). Outdated information, when information has to be printed during compilation, it is presented with less verifiable accuracy. (d). Human Error, weaknesses include fatigue, inattention, and burnout. This leads to many mistakes being made during the manual data collection and processing process, which increases if a lot of data is recorded or processed(Diphan & Ikasari, 2023)

Almost all hospitals today have technology in their hospital information systems, which suggests that it is the role of computer-based SIMRS that has the greatest potential to improve or facilitate the delivery of health services while increasing the productivity of medical and administrative staff performance in hospitals. The two main categories of hospitals are non-medical services and medical services. Hospitals are already using computer-based information systems to support medical services. One example is the Computerized Billing System, which is an electronic billing system or transaction processing system used for administrative functions and financial

services. This ensures fast, transparent and accountable financial management of the hospital . (Puspitasari & Nugroho, 2021) Technological trends will also also scan the idea of paperless practice, which is defined by the limitation of paper as a medium for storing medical records. Hospitals are trying to work on creating information systems that accentuate service quality by utilizing not only computer technology but also mobile phone technology. An integrated SMS-based hospital information system can provide calendars for doctor's appointments, patient registration, as well as feedback and criticism that help improve the healthcare system.

Process Innovation in Healthcare

Process innovation in healthcare is an effort to update or improve operational procedures to improve the efficiency, quality, and accessibility of medical services. This innovation covers various aspects, from the application of digital technology to optimizing the workflow of medical personnel. With the increasing need for fast and accurate health services, hospitals are required to adapt to technological changes and the latest service methods. The development of information technology has enabled the automation of various administrative and clinical processes, which were previously done manually and time-consuming. Therefore, process innovation is one of the key factors in improving the overall effectiveness of healthcare services .(Puspitasari & Nugroho, 2021)

One form of process innovation that is growing rapidly is the digitization of electronic medical records (EMR). Electronic medical records enable fast and secure storage, access and updating of patient data, replacing manual paper-based record systems that are prone to loss or input errors. With EMR, medical personnel can access a patient's medical history within seconds, thus speeding up clinical decision-making. In addition, the integration of EMR with the hospital's information system enables better coordination between various service units, such as laboratory, pharmacy, and radiology. EMR implementation has been proven to improve operational efficiency and reduce medical errors that can occur due to inaccurate or incomplete information .(Alim & Ibrahim, 2024)

Process innovation is also applied in technology-based patient queuing systems. The digital queue system allows patients to register and monitor queue numbers online, thereby reducing waiting time at health facilities. With this system, patients can schedule visits according to the availability of doctors, reduce crowding in the waiting room, and improve service comfort. Some hospitals have even implemented artificial intelligence (AI)-based queuing systems to optimize patient distribution based on the level of urgency or medical specialization needed. This innovation not only improves time efficiency, but also helps hospitals manage service capacity more effectively .(Sodani, 2020)

The implementation of telemedicine is also one of the process innovations that have had a major impact in modern healthcare. Telemedicine allows patients to consult with doctors virtually through digital platforms, without having to come directly to the hospital or clinic. This is especially beneficial for patients who live in remote areas or have limited mobility. In addition, telemedicine can reduce the burden on hospitals in handling patients with minor complaints that can actually be handled through online consultations. Several countries have successfully integrated telemedicine into their healthcare systems, which is proven to improve access to healthcare while reducing operational costs .(Yuliaty et al., 2022)

Another process innovation that is widely implemented is the use of technology-based inventory management systems in the management of drugs and medical devices. This system allows hospitals to monitor drug stocks in real-time, reducing the risk of shortages or excess inventory that can affect service quality. With an automated system in inventory management, hospitals can estimate drug needs more accurately and prevent waste. In addition, the system's integration with SIMRS enables better coordination between pharmacy, finance, and medical services. Efficiency in inventory management not only improves drug availability for patients, but also reduces the hospital's overall operational costs .(Maya Saufinah Pane et al., 2023)

While process innovation brings many benefits to healthcare, challenges in its implementation remain. Some of the obstacles often encountered include high investment costs, resistance from medical personnel to technological change, and regulatory and policy constraints. Training medical personnel in operating new technology is a crucial step to ensure innovation can be optimally implemented. In addition, support from the government and hospital management in terms of funding and strategic policies is needed to accelerate the adoption of process innovation. With the right approach, process innovation can be a key solution in improving operational efficiency and quality of healthcare services in the future.

These innovations are in line with the research findings of Bobi Rizki Ananda, et al (2020) which state that the application of technology in the health service system has a positive impact on hospital operational efficiency and patient satisfaction. In the study, it was explained that the use of hospital management information systems (SIMRS) contributed significantly to accelerating the flow of patient services, reducing waiting times, and

increasing the accuracy of medical record data. With digitization in health services, medical personnel can work more optimally in providing care to patients, thereby improving the overall quality of service .(Ananda et al., 2020)

The success of the innovations made by RSUD Pariaman is also reflected in the increase in the public satisfaction index (IKM), which shows that the majority of patients are satisfied with the services provided. This further strengthens the findings of Bobi Rizki Ananda et al. (2020) which confirms that the quality of health services is strongly influenced by how well hospitals can adopt and implement technology-based innovations. With increased efficiency and quality of service, hospitals can meet community expectations and increase public trust in available health facilities.

Hospital Operational Efficiency

Hospitals are always required to maintain patient trust to improve service quality. Hospitals as one of the practical organizers need Health provide quality services based on RI Law No. 36 of 2009, 4 Article 54 states that Health Administration is carried out with full responsibility, safety, quality and fairness and indiscriminately. According to Azwar, the service Good health is a health service that can satisfy all the right health service users with the average level of satisfaction of the population and in accordance with the implementation of professional standards and ethics. To get a sense of satisfaction from patients, of course, the hospital must provide an efficient operational system .(Bambang Sulistyo & Dety Mulyanti, 2023)

Hospitals are always required to maintain patient trust to improve service quality. Hospitals as one of the practical organizers need Health provide quality services based on RI Law No. 36 of 2009, 4 Article 54 states that Health Administration is carried out with full responsibility, safety, quality and fairness and indiscriminately. According to Azwar, the service Good health is a health service that can satisfy all the right health service users with the average level of satisfaction of the population and in accordance with the implementation of professional standards and ethics. To get a sense of satisfaction from patients, of course, the hospital must provide an efficient operational system.

This efficiency includes the management of medical personnel, facilities, technology, and information systems used to accelerate services to patients. With the increasing number of patients and the complexity of health services, hospitals are required to continue to innovate in managing their operations to remain optimal and able to provide fast and accurate services. Operational efficiency also has a direct impact on service costs, where good management can reduce waste and increase effectiveness in the use of the budget .(Utami, 2023)

One of the main factors in improving hospital operational efficiency is the application of digital technology in healthcare management. The Hospital Management Information System (SIMRS) is a solution in accelerating administrative processes, reducing patient queues, and improving coordination between units in the hospital. With SIMRS, electronic medical records can be accessed quickly by medical personnel, making decision-making in diagnosis and treatment more efficient. In addition, SIMRS also allows integration with payment systems, logistics, and human resource management, all of which contribute to improving the hospital's operational efficiency .(Maya Saufinah Pane et al., 2023) In addition to technology, hospital operational efficiency is also influenced by effective medical personnel management. Hospitals need to ensure that the number of doctors, nurses, and other health workers is in accordance with the needs of the services provided. An optimal work schedule, equitable distribution of tasks, and regular training for medical personnel are key factors in improving service productivity. An efficient shift system can reduce medical personnel fatigue, which in turn contributes to improving the quality of service to patients .(Utami, 2023)

Efficiency in the management of medical facilities and equipment is also an important aspect of hospital operations. Sophisticated equipment that is rarely used or not in accordance with the needs can cause budget waste. Therefore, hospital management needs to conduct regular needs analysis to ensure that the available facilities truly support the services provided. In addition, regular maintenance of medical equipment can reduce the risk of damage and ensure uninterrupted operational continuity .(Yuliaty et al., 2024)

Hospital operational efficiency can also be improved through optimizing patient flow. Hospitals need to design a service system that minimizes patient waiting time at various stages, from registration, examination, treatment, to discharge. One strategy that can be implemented is the use of a digital-based queuing system that allows patients to get a queue number online before arriving at the hospital. Thus, waiting times can be reduced, and hospitals can serve more patients in less time .(Ardyles, 2023)

Collaboration with primary health care and other health facilities can also help hospitals improve operational efficiency. Appropriate patient referrals and a good coordination system with clinics or health centers can reduce the patient load at the hospital and ensure that patients receive the appropriate level of care. With an

efficient referral system in place, hospitals can focus more on treating cases that require intensive care, while primary healthcare services handle minor cases that do not require hospitalization.

CONCLUSION

Hospital Management Information System (SIMRS) plays an important role in improving operational efficiency by integrating administrative processes and medical services. Its use enables more accurate data management, reduces duplication of information, and accelerates access to patient medical records. SIMRS also helps increase transparency in hospital management, ensure more efficient services, and support faster and more informed decision-making.

In line with technological developments, innovations in the healthcare process are increasingly necessary to improve the quality and accessibility of medical services. Digitalization in the form of electronic medical records (EMR), technology-based queuing systems, and telemedicine services have helped hospitals optimize services. In fact, the application of artificial intelligence (AI) and robotics in medical procedures can improve the efficiency and accuracy of medical actions, so that patients get more optimal care. Furthermore, the operational efficiency of hospitals depends not only on technology, but also on effective management of medical personnel and facilities. Good management in organizing the number of medical personnel, work schedules, as well as the maintenance of medical equipment contribute to the improvement of service quality. Better coordination with primary healthcare services through an efficient referral system can help hospitals reduce patient load, ensure each patient gets the care they need, and speed up the overall healthcare process.

REFERENCES

Ali, F., Siregar, T., Irwan, M., & Nasution, P. (2024). Peran Sistem Informasi Manajemen dalam Meningkatkan Kinerja Organisasi. *Jurnal Sistem Informasi Dan Ilmu Komputer*, *4*(2), 137–145.

Alim, M. S., & Ibrahim, R. (2024). Optimalisasi Kualitas Pelayanan Publik di Era Digital Desa Moluo Kab. Gorontalo Utara. *INNOVATIVE: Journal Of Social Science Research*, *4*(2), 3793–3802. http://j-innovative.org/index.php/Innovative/article/view/9803

Ananda, B. R., Putera, R. E., & Ariany, R. (2020). Inovasi Pelayanan Kesehatan Di Rumah Sakit Umum Daerah Kota Pariaman. *Publik (Jurnal Ilmu Administrasi)*, *8*(2), 167. https://doi.org/10.31314/pjia.8.2.167-179.2019

Apriani, K., Siregar, A. D., Putri, A. A. T., Purwadhi, & Widjaja, Y. R. (2024). INOVASI DAN TANTANGAN DALAM MANAJEMEN STRATEGI RUMAH SAKIT: SEBUAH TINJAUAN LITERATUR. *Journal of Innovation Research and Knowledge*, *4*(5), 1–18.

Ardyles. (2023). Maksimalkan Efisiensi Rumah Sakit: Peran Penting Utilisasi Unit Laboratorium Kateterisasi dalam Manajemen yang Efektif-Sebuah Tinjauan Literatur. *Jurnal Kesehatan Masyarakat*, *11*(4), 362–370. https://ejournal3.undip.ac.id/index.php/jkm/article/view/40628

Bambang Sulistyo, & Dety Mulyanti. (2023). Strategi Manajemen Kesehatan di Rumah Sakit: Memaksimalkan Pelayanan Pasien dan Efisiensi Operasional. *Jurnal Sains Dan Kesehatan*, *7*(1), 09–19. https://doi.org/10.57214/jusika.v7i1.273

Diphan, R., & Ikasari, I. H. (2023). Literature Review Evaluasi Sistem Informasi Manajemen Rumah Sakit. *JURIHUM : Jurnal Inovasi Dan Humaniora* , *1*(1), 155–160. http://jurnalmahasiswa.com/index.php/Jurihum/article/view/273

Fattima, E. T., Layanan, I., Sakit, R., & Layanan, K. (2024). *INOVASI LAYANAN DI RUMAH SAKIT (KAJIAN*. *7*, 14050–14059.

Fladyan Grace Wulur, Ida Fitriyani, & Vip Paramarta. (2023). Analisis Pengaruh Pemanfaatan Sistem Informasi Manajemen Pada Layanan Kesehatan Rumah Sakit: Literature Review. *Jurnal Ilmu Kedokteran Dan Kesehatan Indonesia*, *3*(2), 187–202. https://doi.org/10.55606/jikki.v3i2.1725

Ilham, B. A. (2022). Sistem Informasi Manajemen (Sim) Sebagai Sarana Pencapaian E-Government. *Jurnal Stie Semarang*, *14*(2), 184–195. https://jurnal3.stiesemarang.ac.id/index.php/jurnal/article/download/564/382/

Kristanti, yuliana erna, & Ain, R. Q. (2021). Informasi Manajemen Rumah Sakit. *Muhammadiya Public Health Journal*, *1*(3), 179–193.

Maya Saufinah Pane, Nirmaya Fanisya, Silvi Roma Rizkina, Yesy Prinkawati Nasution, & Dewi Agustina. (2023). Sistem Informasi Manajemen Rumah Sakit (SIMRS) Untuk Meningkatkan Mutu Pelayanan Kesehatan Di

Indonesia. *Detector: Jurnal Inovasi Riset Ilmu Kesehatan*, *1*(3), 01–14. https://doi.org/10.55606/detector.v1i3.1980

Nasution, W. R. H., Nasution, M. I. P., & Sundari, S. S. A. (2022). 9 PENDAPAT AHLI MENGENAI SISTEM INFORMASI MANAJEMEN. *Jurnal Inovasi Penelitian*, *3*(4), 87–94.

Puspitasari, E. R., & Nugroho, E. (2021). Evaluasi implementasi sistem informasi manajemen rumah sakit di rsud kabupaten temanggung dengan menggunakan metode hot-fit. *Journal of Information Systems for Public Health*, *5*(3), 45. https://doi.org/10.22146/jisph.37562

Rusli, S. (2022). Implementasi Sistem Informasi Manajemen Rumah Sakit Dalam Pengolahan Data Rumah Sakit. *JKM (Jurnal Kesehatan Masyarakat) Cendekia Utama*, *10*(2), 158. https://doi.org/10.31596/jkm.v10i2.1036

Saputra Mokoagow, D., Mokoagow, F., Pontoh, S., Ikhsan, M., Pondang, J., & Paramarta, V. (2024). Sistem Informasi Manajemen Rumah Sakit dalam Meningkatkan Efisiensi: Mini Literature Review. *COMSERVA : Jurnal Penelitian Dan Pengabdian Masyarakat*, *3*(10), 4135–4144. https://doi.org/10.59141/comserva.v3i10.1223

Sitepu, M., & Kosasih. (2024). *Analisis Loyalitas Pasien dan Kepuasan Pasien : Pendekatan Kajian Literatur dengan Kualitas Pelayanan Rumah Sakit sebagai Variabel Intervening*. *4*(4), 2047–2058.

Sodani, M. P. (2020). Inovasi Pelayanan Elektronik Sistem Kesehatan Lamongan (E-SIKLA) dalam Meningkatkan Layanan Kesehatan di Puskesmas Kedungpring Kabupaten Lamongan. *Publika*, *8*(4), 1–11. https://ejournal.unesa.ac.id/index.php/publika/article/view/35600/31855

Utami, P. (2023). Transformasi Administrasi Publik: Inovasi Dan Adaptasi Menuju Efisiensi Dan Pelayanan Publik Berkualitas. *PAPATUNG: Jurnal Ilmu Administrasi Publik, Pemerintahan Dan Politik*, *6*(2), 1–9. https://doi.org/10.54783/japp.v6i2.726

Yuliaty, F., Manajemen, M., Sakit, R., & Sangga, U. (2024). *Strategi Peningkatan Efisiensi Operasional Rumah Sakit Melalui Pendekatan Lean Management : Kajian Literatur*. *4*, 9718–9730.

Yuliaty, F., Triyana, Y., Wirawan, C., & Sya'bandyah, F. (2022). Faktor-Faktor Yang Mempengaruhi Keputusan Pasien Untuk Berkonsultasi Melalui Aplikasi Telemedicine. *Kompleksitas: Jurnal Ilmiah Manajemen, Organisasi Dan Bisnis*, *11*(2), 61–68. https://doi.org/10.56486/kompleksitas.vol11no2.265