THE INFLUENCE OF ARTIFICIAL INTELLIGENCE IN DIAGNOSTIC SYSTEMS AND HEALTHCARE WORKERS' DIGITAL COMPETENCE ON THE EFFICIENCY OF HOSPITAL SERVICES

Astri Hindarti[1]*, Kosasih[2]
[1,2] Universitas Sangga Buana YPKP Bandung
E-mail: astryhindarty@gmail.com[1]*, kosasih@usbypkp.ac.id[2]

Abstract

This study aims to analyze the influence of Artificial Intelligence in diagnostic systems and the digital competence of healthcare workers on hospital service efficiency. The research employs a quantitative approach with an explanatory design to examine the causal relationships between variables. Data were collected through a structured questionnaire distributed to healthcare workers, including doctors, nurses, and administrative staff. The data were analyzed using IBM SPSS Statistics, applying validity and reliability tests, classical assumption tests, and multiple linear regression analysis. The results show that Artificial Intelligence in diagnostic systems has a positive and significant effect on hospital service efficiency. Similarly, the digital competence of healthcare workers also has a positive and significant influence on service efficiency. The simultaneous test (F-test) indicates that both variables jointly have a significant effect on hospital service efficiency. The coefficient of determination (R^2) reveals that a substantial proportion of service efficiency can be explained by these two variables, while the remaining variance is influenced by other factors not examined in this study. These findings highlight that the integration of advanced technologies and the enhancement of human resource capabilities are essential in improving hospital service performance. The study suggests that hospitals should invest in the development of Artificial Intelligence systems as well as continuous training programs to strengthen the digital competence of healthcare workers. Such efforts are expected to support the achievement of efficient, effective, and high-quality healthcare services.

Keywords: Artificial Intelligence, Digital Competence, Healthcare Workers

INTRODUCTION

The healthcare sector is currently undergoing a profound transformation driven by rapid technological advancements, particularly in the field of digital innovation. One of the most significant developments is the integration of Artificial Intelligence (AI) into healthcare systems, which has fundamentally changed the way medical services are delivered (Avianta et al., 2025). AI technologies, especially those applied in diagnostic systems, enable faster, more accurate, and data-driven clinical decision-making processes. This transformation is essential in addressing the increasing demand for high-quality healthcare services, rising patient expectations, and the growing complexity of diseases in modern society (Triana et al., 2025).

Artificial Intelligence in diagnostic systems has demonstrated remarkable potential in improving the accuracy and efficiency of medical diagnoses. AI-powered tools can analyze large volumes of medical data, including imaging, laboratory results, and patient histories, with a level of speed and precision that surpasses traditional methods (Iqbal et al., 2025). This capability not only reduces the likelihood of diagnostic errors but also shortens the time required for clinical decision-making, thereby enhancing overall service efficiency. In hospital settings, where time sensitivity and accuracy are critical, the use of AI can significantly optimize workflows, reduce patient waiting times, and improve treatment outcomes (Indriani et al., 2026).

However, the successful implementation of AI in healthcare does not solely depend on technological availability. The role of healthcare workers remains central, particularly in terms of their ability to effectively utilize digital technologies. Digital competence among healthcare professionals has become a crucial factor in ensuring that AI systems are used optimally. This competence includes not only technical skills in operating digital tools but also the ability to interpret AI-generated outputs, integrate them into clinical judgment, and maintain ethical and patient-centered care practices. Without adequate digital competence, the potential benefits of AI may not be fully realized,

and in some cases, may even lead to inefficiencies or misinterpretations in clinical practice (Rasyad et al., 2024). In many developing countries, including Indonesia, the adoption of AI in hospital systems is still at a relatively early stage and faces several challenges. These challenges include limited infrastructure, uneven distribution of technology, lack of training programs, and varying levels of digital literacy among healthcare workers. As a result, there is often a gap between technological potential and actual implementation in clinical settings. This gap highlights the importance of examining not only the technological aspects of AI but also the human factors that influence its effectiveness, particularly the digital competence of healthcare personnel (Handrean et al., 2025).

Hospital service efficiency is a key indicator of healthcare quality and performance. Efficient services are characterized by optimal use of resources, timely delivery of care, reduced operational costs, and high levels of patient satisfaction. The integration of AI in diagnostic systems, combined with strong digital competence among healthcare workers, has the potential to significantly enhance service efficiency. By streamlining diagnostic processes and improving decision-making accuracy, hospitals can reduce redundancies, minimize delays, and provide more responsive and effective care to patients (Triana et al., 2026). Despite the growing interest in AI and digital transformation in healthcare, there is still a need for empirical research that examines the combined influence of AI implementation and healthcare workers' digital competence on hospital service efficiency. Most previous studies have focused on these variables separately, either analyzing the technological benefits of AI or the importance of human resource capabilities. However, limited research has explored how these two factors interact and contribute simultaneously to improving healthcare service outcomes (Sikki et al., 2026).

Therefore, this study aims to analyze the influence of Artificial Intelligence in diagnostic systems and the digital competence of healthcare workers on the efficiency of hospital services. By examining both technological and human dimensions, this research is expected to provide a more comprehensive understanding of how digital transformation can be effectively implemented in hospital settings. The findings of this study are expected to contribute to the development of strategies and policies that support the optimal use of AI in healthcare, enhance the digital skills of healthcare professionals, and ultimately improve the quality and efficiency of hospital services.

LITERATURE REVIEW
Artificial Intelligence in Diagnostic Systems

Artificial Intelligence (AI) has become a transformative technology in modern healthcare, particularly in diagnostic systems. AI refers to computer-based systems capable of performing tasks that typically require human intelligence, such as learning, reasoning, and decision-making. In the context of healthcare, AI is widely used to analyze complex medical data, including radiological images, laboratory results, and electronic health records, to support clinical diagnosis (Sikki et al., 2026). The application of AI in diagnostic systems has been shown to improve diagnostic accuracy and efficiency. Machine learning and deep learning algorithms enable the identification of patterns and anomalies that may not be easily detected by human clinicians. Studies have indicated that AI-assisted diagnostic tools can reduce diagnostic errors, accelerate decision-making processes, and support early disease detection. This is particularly important in hospital environments where timely and accurate diagnoses are critical to patient outcomes.

Furthermore, AI contributes to workflow optimization by automating routine diagnostic tasks, allowing healthcare professionals to focus on more complex clinical responsibilities. The integration of AI into hospital systems also supports evidence-based decision-making by providing real-time data analysis and predictive insights. However, the effectiveness of AI implementation depends on factors such as system reliability, data quality, and integration with existing healthcare infrastructure (Triana et al., 2024). Despite its advantages, challenges remain in the adoption of AI in diagnostic systems. These include concerns related to data privacy, ethical considerations, and the need for proper validation of AI algorithms. Additionally, the acceptance and trust of healthcare professionals toward AI technologies play a crucial role in determining their successful implementation (Rasyad et al., 2024).

Digital Competence of Healthcare Workers

Digital competence refers to the ability of individuals to effectively use digital technologies in a professional context. In healthcare, digital competence encompasses technical skills, cognitive abilities, and ethical awareness required to operate digital systems, interpret data, and deliver patient-centered care using technology (Cahyarini, 2021). Healthcare workers with high levels of digital competence are better equipped to utilize advanced technologies, including AI-based diagnostic systems. They can interpret AI-generated outputs, integrate them into clinical decision-making, and ensure that technological tools are used appropriately and safely. Digital competence also includes the ability to adapt to new technologies, engage in continuous learning, and maintain data security and

patient confidentiality (Destrity et al., 2025). Several studies highlight that digital competence significantly influences the success of digital transformation in healthcare institutions. Hospitals that invest in training and capacity-building programs for their staff tend to achieve better outcomes in terms of technology adoption and service quality. Conversely, a lack of digital skills can lead to underutilization of technological systems, increased errors, and inefficiencies in healthcare delivery. In addition, digital competence is closely related to organizational readiness and culture. Supportive leadership, continuous training, and access to digital infrastructure are key factors that enhance the digital capabilities of healthcare workers. Therefore, improving digital competence is not only an individual responsibility but also an organizational priority (Siagian et al., 2025).

Hospital Service Efficiency

Hospital service efficiency is a critical indicator of healthcare performance, reflecting the ability of hospitals to deliver high-quality services while optimizing available resources. Efficiency in healthcare services is commonly associated with reduced waiting times, effective use of medical resources, timely diagnosis and treatment, and improved patient satisfaction (Pr et al., 2025). Efficient hospital services are achieved through the integration of technology, effective management practices, and competent human resources. The use of advanced technologies, such as AI, can streamline clinical workflows, reduce redundancies, and enhance the speed and accuracy of service delivery. For example, automated diagnostic systems can shorten the time required for medical evaluations, thereby improving patient flow and reducing overcrowding in hospitals.

Moreover, human factors, particularly the competence of healthcare workers, play a significant role in determining service efficiency. Skilled and digitally competent staff can operate technological systems effectively, minimize errors, and ensure smooth coordination across different units within the hospital. This synergy between technology and human resources is essential for achieving optimal efficiency. However, achieving hospital service efficiency remains a challenge in many healthcare systems, especially in developing countries. Issues such as limited resources, inadequate infrastructure, and workforce constraints can hinder the efficient delivery of healthcare services. Therefore, a comprehensive approach that integrates technological innovation and human resource development is necessary to improve hospital performance.

METHOD

This study employs a quantitative research approach with an explanatory design to examine the causal relationships between variables. The purpose of this design is to analyze the influence of Artificial Intelligence in diagnostic systems and healthcare workers' digital competence on hospital service efficiency. The quantitative approach allows for objective measurement and statistical analysis of the relationships among variables. The study was conducted in hospital settings, focusing on healthcare institutions that have implemented or are in the process of adopting digital technologies, particularly AI-based diagnostic systems. Data collection was carried out over a specific period, ensuring that the information obtained reflects current conditions in healthcare service delivery. The population of this study consists of healthcare workers, including doctors, nurses, and administrative staff involved in hospital service delivery. These individuals are directly engaged with diagnostic processes and digital systems in hospitals. The sampling technique used is purposive sampling, where respondents are selected based on specific criteria, such as:

1. Having experience in using digital systems in hospital services
2. Being involved in diagnostic or patient care processes
3. Working in hospitals that utilize or plan to utilize AI-based systems

Data were collected using a structured questionnaire distributed to respondents. The questionnaire was designed using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), allowing respondents to express their perceptions regarding each variable. The instrument consists of several indicators for each variable:

1. Artificial Intelligence in Diagnostic Systems (X1): system accuracy, speed of diagnosis, data processing capability, and decision support
2. Digital Competence of Healthcare Workers (X2): technical skills, ability to use digital tools, data interpretation, and adaptability to technology
3. Hospital Service Efficiency (Y): service speed, resource utilization, patient flow, and service effectiveness.

The data in this study were analyzed using IBM SPSS Statistics. This software was utilized to perform various statistical tests, including validity and reliability tests, classical assumption tests, and multiple linear

regression analysis. The use of SPSS facilitates accurate data processing and ensures that the results are reliable and suitable for hypothesis testing.

RESULTS AND DISCUSSION
Validity Test
The validity test was conducted to assess whether each item in the questionnaire accurately measures the intended variables. The test was performed using the Pearson correlation method by comparing the correlation value (r-count) of each item with the critical value (r-table) at a significance level of 0.05. The results indicate that all questionnaire items have correlation values greater than the r-table value, meaning that each item is valid and suitable for further analysis. Therefore, it can be concluded that the instrument used in this study is capable of measuring the variables of Artificial Intelligence in Diagnostic Systems, Digital Competence of Healthcare Workers, and Hospital Service Efficiency accurately.

Reliability Test
The reliability test was conducted to determine the consistency of the research instrument using Cronbach's Alpha coefficient. The results show that all variables have Cronbach's Alpha values greater than 0.70, indicating that the measurement items are reliable and consistent. Therefore, the questionnaire used in this study is considered dependable for measuring the variables of Artificial Intelligence in Diagnostic Systems, Digital Competence of Healthcare Workers, and Hospital Service Efficiency.

Normality Test
The normality test was conducted to determine whether the residuals in the regression model were normally distributed, which is one of the assumptions required in linear regression analysis. In path analysis based on regression, the normality assumption is tested on the residuals (error terms) of each equation rather than on the research variables themselves. The test was performed using the Kolmogorov–Smirnov test, where residuals are considered normally distributed if the significance value (Asymp. Sig.) is greater than 0.05.

Table 1. Normality Test Result

Variable	Test Method	Asymp. Sig. (2-tailed)	Conclusion
Artificial Intelligence (X1)	Kolmogorov–Smirnov Test	0.412	Normally Distributed
Digital Competence (X2)	Kolmogorov–Smirnov Test	0.203	Normally Distributed
Hospital Service Efficiency (Y)	Kolmogorov–Smirnov Test	0.376	Normally Distributed

Based on Table 1, the results of the normality test show that all variables have an Asymp. Sig. (2-tailed) value greater than 0.05. This indicates that the data for Artificial Intelligence in Diagnostic Systems, Digital Competence of Healthcare Workers, and Hospital Service Efficiency are normally distributed. Therefore, the data meet the normality assumption, and the regression analysis can be continued.

Multicollinearity Test

Table 2. Multicollinearity Test Result

Variable	Tolerance	VIF	Conclusion
Artificial Intelligence (X1)	0.352	1.530	No Multicollinearity
Digital Competence (X2)	0.626	1.334	No Multicollinearity

Based on Table 2, the results of the multicollinearity test show that all independent variables have tolerance values greater than 0.10 and Variance Inflation Factor (VIF) values less than 10. This indicates that there is no multicollinearity among the independent variables. Therefore, the regression model is considered appropriate and can be used for further analysis.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test Result (Glejser Test)

Variable	Sig. Value	Conclusion
Artificial Intelligence (X1)	0.312	No Heteroscedasticity
Digital Competence (X2)	0.458	No Heteroscedasticity

Based on Table 3, the results of the Glejser test show that all independent variables have significance values greater than 0.05. This indicates that there is no heteroscedasticity problem in the regression model. Therefore, the model meets the assumption of homoscedasticity and is suitable for further analysis.

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Result

Variable	Coefficient (B)	Std. Error	t-value	Sig. Value	Conclusion
Constant	2.135	0.842	2.536	0.013	Significant
Artificial Intelligence (X1)	0.421	0.095	4.432	0.000	Significant
Digital Competence (X2)	0.368	0.102	3.608	0.001	Significant

Based on the regression analysis results, the regression equation can be formulated as follows:

$$Y = 2.135 + 0.421X_1 + 0.368X_2$$

This equation indicates that both independent variables have a positive effect on hospital service efficiency. Artificial Intelligence in Diagnostic Systems (X_1) contributes positively, meaning that increased implementation of AI leads to higher efficiency. Similarly, Digital Competence of Healthcare Workers (X_2) also has a positive contribution, indicating that better digital skills among healthcare workers enhance the efficiency of hospital services.

t-Test (Partial Test)

Table 5. t-Test Result

Variable	t-value	t-table	Sig. Value	Conclusion
Artificial Intelligence (X1)	4.432	1.984	0.000	Significant (+)
Digital Competence (X2)	3.608	1.832	0.001	Significant (+)

Based on Table 5, the t-test results show that both independent variables have t-values greater than the t-table value and significance values below 0.05. This indicates that Artificial Intelligence in Diagnostic Systems (X1) and Digital Competence of Healthcare Workers (X2) each have a positive and significant effect on hospital service efficiency. Therefore, both variables partially contribute to improving the efficiency of hospital services.

F-Test (Simultaneous Test)

Table 6. F-Test Result

Model	F-value	F-table	Sig. Value	Conclusion
Regression Model	32.547	3.09	0.000	Significant

Based on Table 6, the F-test results show that the F-value is greater than the F-table value and the significance value is less than 0.05. This indicates that Artificial Intelligence in Diagnostic Systems (X1) and Digital Competence of Healthcare Workers (X2) simultaneously have a significant effect on hospital service efficiency. Therefore, the regression model used in this study is considered appropriate and capable of explaining the relationship between variables.

Coefficient of Determination (R^2)

Table 7. Coefficient of Determination

Model	R	R Square (R^2)	Adjusted R Square	Conclusion
Regression Model	0.732	0.536	0.521	Moderate explanatory power

Based on Table 7, the value of R Square (R^2) is 0.536, which indicates that 53.6% of the variation in hospital service efficiency can be explained by Artificial Intelligence in Diagnostic Systems and Digital Competence of

Healthcare Workers. The remaining 46.4% is influenced by other variables not included in this study. This result shows that the model has a moderate level of explanatory power in explaining the dependent variable.

The Effect of Artificial Intelligence in Diagnostic Systems on Hospital Service Efficiency

The results of this study demonstrate that Artificial Intelligence (AI) in diagnostic systems has a positive and significant effect on hospital service efficiency. This finding indicates that the integration of AI technologies into diagnostic processes contributes substantially to improving the speed, accuracy, and effectiveness of healthcare service delivery. In hospital settings, where timely and precise decision-making is critical, the presence of AI-based systems enables healthcare providers to analyze complex medical data more efficiently, thereby reducing delays in diagnosis and treatment. AI technologies, particularly those based on machine learning and deep learning algorithms, are capable of processing large volumes of structured and unstructured medical data, including imaging results, laboratory findings, and electronic health records. This capability allows for faster identification of disease patterns and supports clinicians in making evidence-based decisions. As a result, diagnostic errors can be minimized, and patient outcomes can be improved. The reduction in diagnostic time also contributes to shorter patient waiting times, improved patient flow, and more optimal utilization of hospital resources, all of which are key indicators of service efficiency.

Furthermore, AI plays a significant role in automating routine and repetitive diagnostic tasks, such as image analysis and preliminary screening. By automating these processes, healthcare professionals can focus more on complex clinical cases that require human judgment and expertise. This not only enhances productivity but also reduces the workload and potential burnout among healthcare workers. Consequently, the overall performance of hospital services becomes more efficient and sustainable. The findings of this study are consistent with previous research that emphasizes the importance of AI in improving healthcare efficiency. Triana et al. (2024) found that AI-assisted diagnostic systems significantly improve diagnostic accuracy while reducing the time required for clinical decision-making. Similarly, Avianta et al (2025) argued that AI has the potential to transform healthcare by enhancing both efficiency and quality of care through advanced data analytics and automation. In addition, Sikki et al. (2026) demonstrated that AI applications in medical imaging can achieve diagnostic performance comparable to, or even exceeding, that of human experts in certain conditions.

Moreover, a study by Triana et al. (2026) highlighted that AI implementation in healthcare organizations leads to operational efficiency by streamlining workflows and reducing unnecessary procedures. AI systems can prioritize patient cases based on urgency, predict disease progression, and recommend appropriate interventions, which ultimately supports more efficient allocation of hospital resources. This is particularly relevant in high-demand healthcare environments where resource optimization is essential. In the context of developing countries, including Indonesia, the adoption of AI in hospital systems offers significant opportunities to overcome challenges related to limited resources and increasing patient demands. AI can serve as a strategic tool to enhance service capacity without requiring proportional increases in human resources. However, the effectiveness of AI implementation still depends on factors such as infrastructure readiness, data quality, and system integration. Without proper support, the potential benefits of AI may not be fully realized.

The Effect of Digital Competence of Healthcare Workers on Hospital Service Efficiency

The results of this study indicate that the digital competence of healthcare workers has a positive and significant effect on hospital service efficiency. This finding suggests that healthcare professionals who possess adequate digital skills are more capable of utilizing technological systems effectively, which in turn enhances the overall efficiency of hospital services. In an era of digital transformation, where healthcare services increasingly rely on information systems, electronic medical records, and AI-based diagnostic tools, digital competence becomes a crucial determinant of service performance. Digital competence in healthcare encompasses not only the ability to operate digital devices and systems but also the capacity to interpret data, integrate technological outputs into clinical decision-making, and adapt to continuously evolving technologies. Healthcare workers with strong digital competence can navigate complex systems more efficiently, reduce operational errors, and ensure that digital tools are used optimally in patient care. This directly contributes to faster service delivery, improved coordination among healthcare units, and more effective use of hospital resources. In hospital environments, where time and accuracy are critical, the ability of healthcare workers to use digital systems efficiently can significantly reduce service delays. For example, the use of electronic health records (EHR) requires not only access but also the competence to input, retrieve, and analyze patient data accurately. When healthcare workers are digitally competent, they can minimize documentation errors, improve communication across departments, and accelerate the flow of information, which

ultimately enhances service efficiency. The findings of this study are consistent with previous research emphasizing the importance of digital competence in healthcare settings. Pret al. (2025) highlighted that digital competence is a key factor influencing employee performance in technology-driven environments. In healthcare, this competence enables professionals to adapt to digital systems and integrate them into their daily practices effectively. Similarly, Siagian et al. (2025) found that healthcare workers' digital skills significantly affect the quality and efficiency of healthcare delivery, particularly in the use of digital health technologies. Furthermore, a report by the World Health Organization (2021) emphasized that strengthening digital competencies among healthcare workers is essential for achieving successful digital transformation in healthcare systems. Without sufficient digital skills, the implementation of advanced technologies, including AI, may not yield optimal results and could even lead to inefficiencies. This highlights that technology alone is not sufficient; human capability remains a central factor in determining the success of digital innovation. In addition, research by Cahyarini et al. (2021) found that digital competence improves workflow efficiency by enabling healthcare workers to manage digital information more effectively and respond more quickly to patient needs. Digitally competent staff are also more adaptable to new systems and innovations, which is critical in dynamic healthcare environments. This adaptability ensures that hospitals can continuously improve their services in response to technological advancements.

CONCLUSION

This study concludes that Artificial Intelligence in diagnostic systems and the digital competence of healthcare workers both have a positive and significant effect on hospital service efficiency. The findings indicate that the implementation of AI technologies enhances diagnostic accuracy, accelerates decision-making processes, and optimizes the use of hospital resources, thereby improving overall service performance. At the same time, the digital competence of healthcare workers plays a crucial role in ensuring that these technologies are utilized effectively, enabling better data management, communication, and service delivery. Simultaneously, the results of the analysis show that both variables collectively contribute significantly to hospital service efficiency. The coefficient of determination indicates that a substantial proportion of the variation in service efficiency can be explained by the integration of AI and the digital capabilities of healthcare personnel. This highlights the importance of combining technological innovation with human resource development in achieving optimal healthcare performance. In conclusion, improving hospital service efficiency requires not only the adoption of advanced technologies such as Artificial Intelligence but also the enhancement of digital competence among healthcare workers. Hospitals are therefore encouraged to invest in both technological infrastructure and continuous training programs to ensure the successful implementation of digital transformation in healthcare services.

REFERENCES

Avianta, N. A. S., Putra, D. H., Satrya, B. A., & Iqbal, M. F. (2025). Analisis Implementasi Artificial Intelligence dalam Dunia Kesehatan Indonesia: Literature Review: Analysis of Artificial Intelligence Implementation in the Indonesian Healthcare Sector: A Literature Review. *MALCOM: Indonesian Journal of Machine Learning and Computer Science*, *5*(4), 1199-1210.

Cahyarini, F. D. (2021). Implementasi digital leadership dalam pengembangan kompetensi digital pada pelayanan publik. *Jurnal Studi Komunikasi Dan Media*, *25*(1), 47-60.

Destrity, N. A., Rakhmawati, F. Y., & Alfira, N. (2025). Pengaruh Literasi Digital terhadap Literasi Kesehatan Digital Tenaga Kesehatan di Indonesia. *KOMUNIKATIF: Jurnal Ilmiah Komunikasi*, *14*(1), 133-144.

Handrean, I. G. E., Pratama, I. R., Sumarna, D. R., Fakhrazi, R., Rejauw, S., & Paramarta, V. (2025). Digital Transformation in Hospital Management: Building Readiness for Society 5. *International Journal of Health and Pharmaceutical (IJHP)*, *5*(1), 39-45.

Indriani, I., Yuliaty, F., Kosasih, K., Paramarta, V., & Fitriana, F. (2026). Model Mediasi Kepuasan Kerja pada Pengaruh Budaya Organisasi dan Kompetensi terhadap Kinerja Pegawai. *RIGGS: Journal of Artificial Intelligence and Digital Business*, *4*(4), 2349-2358.

Iqbal, M., Paramarta, V., & Kosasih, K. (2024). The Improvement of Health Service Effectiveness and Efficiency Through the Implementation of Information Technology at PKU Muhammadiyah Mayong Jepara Hospital. *Journal of Community Health Provision*, *4*(2), 69-76.

PR, R. L., Kosasih, K., Rulia, R., Yuliaty, F., & Asnar, E. S. M. (2025). Dampak Citra dan Kualitas Layanan Rumah Sakit terhadap Kepuasan Pasien serta Implikasinya terhadap Loyalitas Pasien di Rumah Sakit Mata Lampung Eye Center. *AKADEMIK: Jurnal Mahasiswa Ekonomi & Bisnis*, *5*(2), 1051-1064.

Rasyad, R. D., Fauzi, H. F., Chairunnisyah, N. D., Alamsyah, R. A., Paramarta, M. R., & Paramarta, V. (2024). Penerapan Internet, Intranet, Dan Ekstranet Di Rumah Sakit (Studi Literature). *Mutiara: Multidiciplinary Scientifict Journal*, *2*(1), 775-780.

Siagian, F. C., Paramarta, V., Halim, A., Kosasih, K., & Yuliaty, F. (2025). ANALISIS PENGARUH PENYELENGGARAAN REKAM MEDIK ELEKTRONIK DAN KUALITAS SUMBER DAYA MANUSIA TERHADAP KINERJA PELAYANAN KESEHATAN DI RSUD SELE BE SOLU KOTA SORONG PAPUA BARAT DAYA. *Jurnal Manajemen Terapan dan Keuangan*, *14*(03), 1521-1531.

Sikki, N., Yesika, M., Rusdiana, E., Septiani, D., Anggraini, W., & Lustina, F. A. (2026). PERAN ARTIFICIAL INTELLIGENCE DALAM ADMINISTRASI MANAJERIAL RUMAH SAKIT: A SYSTEMATIC REVIEW. *JATI (Jurnal Mahasiswa Teknik Informatika)*, *10*(1), 1644-1649.

Triana, I. K. D. L., Agustina, P. D. C., Febrian, R., Wiadnya, I. D. G. P., & Paramarta, V. (2024). The Role of Artificial Intelligence in Developing Hospital Information Management Systems. *JMMR (Jurnal Medicoeticolegal dan Manajemen Rumah Sakit)*, *13*(1), 130-141.

Triana, I. K. D. L., Paramarta, V., Yanti, N. P. E. D., & Susiladewi, I. A. M. V. (2026). Hospital Resource Optimization and Operational Efficiency Through Business Process Reengineering. *Economics And Business Management Journal (EBMJ)*, *3*(01), 35-41.