

# The Effect of Electronic Medical Record System Implementation and Professional Care Provider Competence on Electronic Medical Record Completion Performance Through Filing Compliance at Dr. R. Soeharsono Level III Hospital, Banjarmasin

Darminto<sup>1</sup>, Nurhikmah<sup>2</sup>, Syamsuddinnor<sup>3</sup>

Sekolah Tinggi Manajemen Indonesia (STIMI) Banjarmasin.

Corresponding Author: Darminto

DOI: <https://doi.org/10.52403/ijrr.20251017>

## ABSTRACT

The purpose of this study was to analyze the effect of electronic medical record (EMR) implementation and professional care provider competency on electronic medical record completion performance through medical record filing compliance at Dr. R. Soeharsono Level III Hospital, Banjarmasin. This study used a quantitative approach with a descriptive analytical design and cross-sectional methods.

The population was all 138 care providers, the sample were 103 respondents, it was determined using the Slovin formula. Data collection was conducted through a closed-ended questionnaire using a Likert scale, and data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS software.

The results of this study indicate that the implementation of the EMR system has a positive and significant impact on filing performance, primarily through aspects of ease of use, accessibility, and technical support. However, the system did not significantly impact filing compliance. Professional Care Provider competency had a negative impact on compliance, indicating that professionals with high competency tend

to be less compliant if the system is perceived as inconsistent with clinical practice. Meanwhile, compliance did not significantly impact and did not mediate the correlation between competency and filing performance.

Recommendations: Hospital management is advised to improve the integration of electronic medical record systems and conduct regular training for healthcare workers. Care Providers are expected to continue developing digital competencies to support documentation quality. Information system developers need to pay attention to ease of use and connectivity between systems. Future research could consider additional variables such as workload and organizational support to gain a more comprehensive understanding of the factors influencing EMR compliance and filing performance.

**Keywords:** Electronic Medical Records, Professional Care Provider competency, Performance, Compliance, Hospital.

## INTRODUCTION

Law Number 44 of 2009 concerning Hospitals defines a hospital as an institution that provides comprehensive health services to individuals. This means that responsive

and optimal public health services are required, supported by technology. Healthcare professionals must have their medical records recorded completely, clearly, and integrated by healthcare professionals.

The implementation of electronic medical records (EMRs) is part of the digitalization of healthcare services aimed at improving efficiency, accuracy, and continuity of care. Hospitals are required to maintain complete and accurate EMRs in accordance with Minister of Health Regulation No. 24 of 2022 and Law No. 27 of 2022 concerning Personal Data Protection.

Electronic medical records are an essential component of the healthcare system, as they not only record a patient's clinical history but also serve as written evidence of the medical procedures performed. Thus, accurate and complete record-keeping by healthcare professionals serves as a legal basis and a form of accountability for healthcare institutions regarding the quality of care provided (Rubiyanti, 2023)

Consequently, the government, through the Ministry of Health, issued a follow-up to Minister of Health Regulation Number 24 of 2022 concerning Medical Records, a refinement of Minister of Health Regulation Number 269 of 2008, which stipulates that electronic medical record recording must be mandatory for all healthcare facilities. Therefore, if a healthcare facility, including a hospital, does not implement an electronic medical record system, the institution could potentially face legal consequences for violating the provisions stipulated in the regulation.

Although regulations regarding the implementation of EMR have been in place since 2022, data from the Ministry of Health indicates that only 60% of hospitals in Indonesia have implemented EMR. It is estimated that by 2024, 70% of hospitals in Indonesia will have implemented EMR. According to the Indonesian Hospital Association (PERSI), this is due to the disparity in the availability of technological

infrastructure and differences in human resource competency levels across Indonesia (PERSI, 2023)

Meanwhile, in South Kalimantan province, data from the South Kalimantan Provincial Health Office showed that in 2022, 40% of 63 hospitals had implemented EMR, and by 2023, it is estimated that 55% of hospitals will have implemented EMR. It is hoped that 70% of hospitals will implement EMR. Therefore, the Health Office, together with hospitals in each region, will continue to strengthen healthcare workers and strive to ensure equitable distribution of technology facilities across Indonesia. According to data released by the Ministry of Health, there will be 3,168 hospitals across Indonesia by 2024. One area with unequal implementation of EMR is Banjarmasin City. According to data from the Banjarmasin City Health Office, as of January 2024, 28 hospitals had implemented EMR: 14 hospitals (50%) had implemented EMR independently, 8 hospitals (28.5%), and 6 hospitals (21.5%) had not implemented EMR. The total percentage of EMR implementation, both independently and integrated, was 78.8%.

One hospital in Banjarmasin that has implemented the practice of completing EMR in full is Banjarmasin Level III Hospital. This hospital has been using electronic medical record documentation since August 1, 2023. However, there are still issues with the documentation, particularly in the inpatient department. Generally, in the inpatient unit, the electronic medical record is incomplete, resulting in data that lacks specificity, clarity, accuracy, and timely completion. The practice of electronic medical record completion in the field still does not fully meet the standards stipulated in Minister of Health Regulation Number 24 of 2022, specifically Articles 16 and 17, which require medical records to be compiled in a complete, clear, accurate, and timely manner to ensure the integrity of patient data.

The initial study, conducted by researchers, involved 30 files using a random sampling

method, where each unit in the population had an equal chance of being selected, without regard to specific categories or levels. The review included components of the Integrated Patient Progress Notes (CPPT), initial patient admission assessment, medication administration assessment, nutritional assessment, and discharge summary. The data was collected ten times each month, and it was found that many were incomplete. The completeness of the CPPT data was only 17 out of 30 samples (56.67%), nutritional assessment data was 7 out of 30 samples (23.33%), medication administration assessment data was 5 out of 30 samples (16.67%), and discharge

summary data was 19 out of 30 samples (63.33%). All patient data should be 100% complete.

Based on a report from the medical records unit at Dr. R. Soeharsono Level III Hospital in Banjarmasin, several deficiencies were still found in the completeness and accuracy of electronic medical records. These findings were reinforced by data from the Patient Safety and Quality Improvement (PMKP) unit, which showed that, in the managerial area indicator, electronic medical record completion in the inpatient unit from October to December 2024 was still suboptimal, with many data entries incomplete.

**Table 1.1 Data on Completeness of Inpatient Medical Records at Dr. R Soeharsono Class III Hospital, Banjarmasin, October-December 2024**

Yes	Month	Σ Form	Complete	Percentage	Incomplete	Percentage
1	October	866	570	65,8%	296	34,2%
2	November	832	572	68,8%	260	31,2%
3	December	852	575	67,5%	277	32,5%
	<b>Sum:</b>	<b>2550</b>	<b>1717</b>	<b>67,3%</b>	<b>833</b>	<b>32,7%</b>

**Source: Secondary Data from the Medical Records Unit of Dr. R. Soeharsono Hospital, Banjarmasin, October-December (2024).**

Based on Table 1.1, data on the number of completed forms at Dr. R. Soeharsono Hospital, Banjarmasin, from October to December 2024, totaled 2,550 completed medical records (MRs). Of these, 1,717 (67.3%) were completed completely, and 833 (32.7%) were incomplete. This indicates that a significant proportion of MMRs remain incomplete, even though ideally all medical records should be completed to 100%. This does not meet the requirements of Minister of Health Regulation Number 24 of 2022, which mandates completeness in patient medical records. Incompleteness in completing the EMR is caused by various factors, such as the level of compliance of the EMR provider with regulations and Standard Operating Procedures (SOPs) for completing the EMR, which are also determining factors for this lack of compliance, both due to low awareness of the importance of medical documentation and workload pressure. Based on the background description above, the researcher was motivated to conduct a

study entitled "The Effect of the Implementation of an Electronic Medical Record System and the Professional Competence of Care Providers on the Performance of Completing Electronic Medical Records Through Compliance with Electronic Medical Record Filing at Dr. R. Soeharsono Level III Hospital, Banjarmasin." The objectives were:

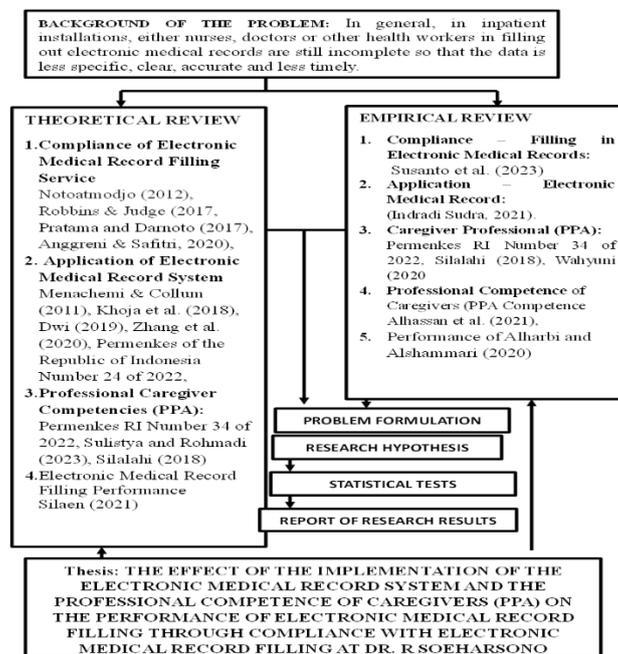
1. To analyze the effect of the implementation of an electronic medical record system on compliance with electronic medical record filing at Dr. R. Soeharsono Level III Hospital, Banjarmasin.
2. To analyze the effect of the professional competence of care providers on compliance with electronic medical record filing at Dr. R. Soeharsono Level III Hospital, Banjarmasin.
3. To analyze the effect of the implementation of an electronic medical record system on the performance of filling electronic medical records at Dr.

R. Soeharsono Level III Hospital, Banjarmasin. Dr. R. Soeharsono Hospital, Banjarmasin.

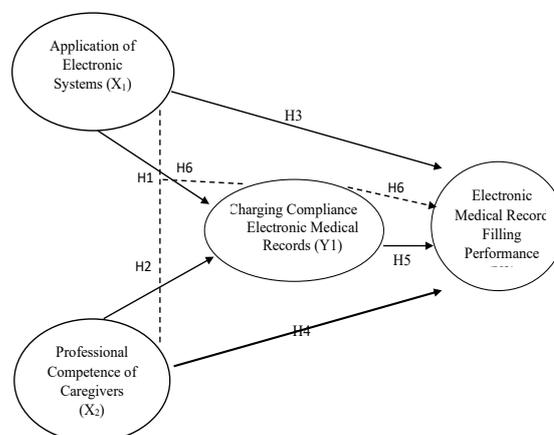
4. To analyze the influence of professional competence of care providers on the performance of electronic medical record filling at Dr. R. Soeharsono Hospital, Banjarmasin.
5. To analyze the influence of compliance with electronic medical record filling on performance at Dr. R. Soeharsono Hospital, Banjarmasin.
6. To analyze the influence of the implementation of an electronic medical

record system and professional competence of care providers on the performance of electronic medical record filling through compliance with electronic medical record filling at Dr. R. Soeharsono Hospital, Banjarmasin.

Framework of Thinking, According to Sugiyono (2019), a framework of thinking is a line of thought or research flow that serves as a pattern or basis for researchers' thinking in conducting research on the intended object.



Conceptual framework



## HYPOTHESIS

H1: There is a significant effect between the implementation of the electronic medical

records (EMR) system on compliance with electronic medical record filling at Dr. R. Soeharsono Level III Hospital, Banjarmasin.  
H2: There is a significant effect between the professional competence of care providers on compliance with electronic medical record filling at Dr. R. Soeharsono Level III Hospital, Banjarmasin.

H3: There is a significant effect between the implementation of the electronic medical records (EMR) system on the performance of electronic medical record filling at Dr. R. Soeharsono Level III Hospital, Banjarmasin.

H4: There is a significant effect between the professional competence of care providers on the performance of electronic medical record filling at Dr. R. Soeharsono Level III Hospital, Banjarmasin.

H5: There is a significant effect between compliance with electronic medical record filling and the performance of electronic medical record filling at Dr. R. Soeharsono Level III Hospital, Banjarmasin.

H6: There is a significant effect of the simultaneous implementation of an electronic medical record (EMR) system and the professional competence of care providers on the performance of electronic medical record filling, through compliance with electronic medical record filling, at Dr. R. Soeharsono Level III Hospital, Banjarmasin.

## **LITERATURE REVIEW**

Electronic Medical Records (EMR) are mandatory for all healthcare facilities under Ministerial Regulation No. 24 of 2022, with the aim of improving service quality, data accuracy, and health system integration. Article 27 paragraph (1) states that EMR comprises administrative documentation (patient identity and registration) and clinical documentation (complete medical service records). EMR data must be managed accurately, securely, and in a timely manner, and accessed only by authorized medical personnel, in line with the principles of confidentiality and accountability in healthcare services (kemenkes, 2022).

Professional Care Providers (PPA), consisting of doctors, nurses, and other medical personnel, are required to maintain the quality of medical data in terms of accuracy, completeness, and consistency. Furthermore, EMRs are also obligated to maintain the privacy and confidentiality of patient information in accordance with the professional code of ethics. These professional values influence how they address conflicts between data security regulations and the need to utilize data in services (Skyvell Nilsson et al., 2018)

Professional Competencies of Care Providers (PPA) The professional standards for Medical Records and Health Information (PMIK) in Indonesia, as stipulated in the Decree of the Minister of Health Number HK.01.07/MENKES/312/2020, outline the essential competencies that a medical recorder must master. These competencies serve as a crucial foundation, including for Professional Care Providers (PPA) in the context of Electronic Medical Record (EMR) management (kemenkes, 2022).

Electronic Medical Record Completion Performance refers to the work results and work behaviors achieved in completing assigned tasks and responsibilities within a specific period. This means that performance includes elements of achievement standards that must be met. Therefore, those who meet the established standards are considered to be performing well, while those who fail to do so are categorized as performing poorly or not performing well (Kasmir, 2016)

Healthcare worker compliance with Electronic Medical Record (EMR) compliance is a critical factor influencing service quality, patient data security, and hospital administrative compliance. The good performance in completing medical records is measured not only by technical ability but also by compliance with applicable regulations and standard procedures in hospitals. In line with these findings, Kencana, Rumengan, and Hutapea (2019) found that incomplete inpatient medical records are often caused by healthcare

workers' workload, knowledge level, professional awareness, and hospital management oversight (Kencana et al., 2019). They emphasized the need to implement compliance improvement strategies through routine training, counseling on standard procedures, and an effective monitoring system, so that medical documentation is complete and supports safe, effective, and efficient patient care.

## **RESEARCH METHODS**

This study used a quantitative, descriptive-analytical approach and a cross-sectional design. The aim of this study was to analyze the correlation between the implementation of an electronic medical record (EMR) system and professional care providers on compliance with EMR filling in hospitals. In a cross-sectional design, data is collected at a specific point in time without any intervention or treatment for the research subjects. (Nursalam, 2020)

In this study, variables were classified into exogenous, endogenous, and mediating constructs using the PLS-SEM approach.

### **1. Exogenous (Independent) Variables (X)**

X1: Electronic System Implementation

X2: Professional Care Providers

The implementation of an Electronic Medical Record System and the Competence of Professional Care Providers are exogenous constructs that act as predictors. Electronic Medical Record Completion Performance is an endogenous construct influenced by other variables. Meanwhile, Compliance with Electronic Medical Record Completion serves as a mediating construct that bridges the correlation between exogenous and endogenous constructs. Each construct is measured through indicators that form a measurement model (Hair et al., 2021)

Professional Competence of Care Providers, which reflects the abilities, attitudes, and interests of healthcare workers in carrying out their duties professionally. Indicators of this construct include knowledge,

understanding, skills, values, work attitudes, and interest in service delivery. Creswell and Creswell (2018) state that variables such as competence can be classified as multidimensional constructs, reflecting complex individual characteristics and can be measured through several behavioral aspects. (Creswell & David Creswell, 2018)

### **2. Endogenous (Dependent) Variables**

Y1: Compliance with Electronic Medical Record Completion (EMRC)

Y2: Performance in Electronic Medical Record Completion (EMRC)

As a mediating construct, Compliance with Electronic Medical Record Completion (EMRC) represents the level of healthcare workers' compliance with documentation in accordance with applicable procedures and standards. This variable is assessed through indicators such as data completeness, timeliness of data entry, accuracy and validation of information, regulatory compliance, and the influence of psychological factors, workload, and the work environment.

Endogenous variables act as outputs or effects of a process that occurs due to the interaction of independent variables within the theoretical framework. This variable is used to assess the extent of direct and indirect influence exerted by other constructs in the model.

Electronic Medical Record Filling Performance: This variable is measured through five indicators: work quality, timeliness, initiative, technical ability, and communication. Overall, this model is built to analyze the direct and indirect influence of exogenous constructs on endogenous constructs, involving mediating constructs, as in PLS-SEM-based causal modeling (Hair et al., 2021)

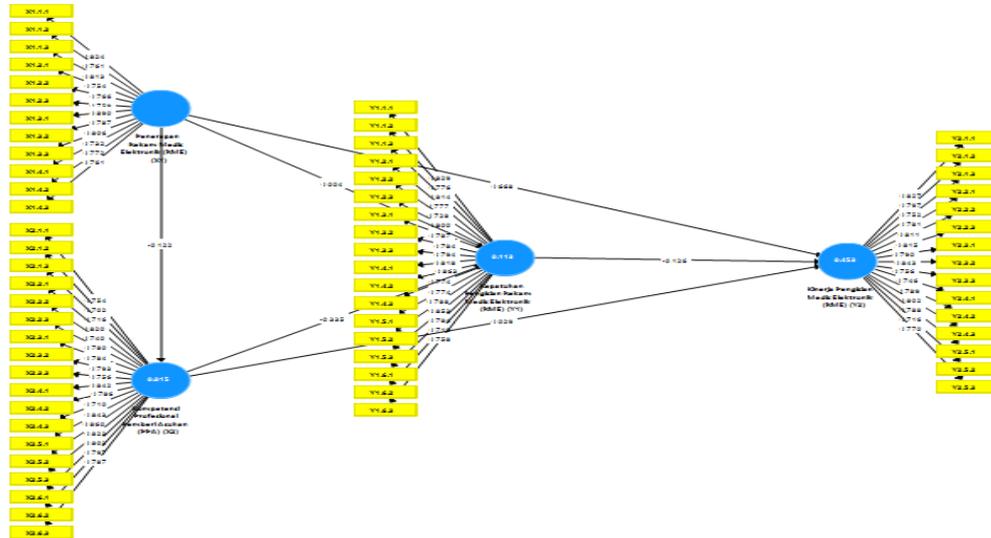
## **RESULTS**

### **A. Data Analysis**

- Evaluation of the Measurement Model (Outer Model)

This study used the PLS-SEM method to process the data, evaluating each variable. Testing is carried out in stages, starting with the evaluation of the measurement model

(outer model) to test the validity and reliability of the indicators for each latent construct.



**a. Validity Test**

In this study, data validity was measured using convergent validity (Outer Loading and Average Variance Extracted (AVE)) and discriminant validity (Cross Loading). Data validity testing using convergent validity, with outer loading and average variance extracted (AVE) indicators, demonstrated results that met the criteria. All indicators had outer loadings above 0.70, indicating a strong contribution to the construct, with the highest values being X1.3.1 (0.858), X2.5.2 (0.860), and Y1.5.3 (0.853), reflecting measurement consistency. The AVE values for most

constructs also exceeded the 0.50 threshold, such as Ease of Use (0.613), Knowledge (0.615), Data Completeness (0.622), and Work Quality (0.618). These findings indicate that the variance explained by the indicators is greater than the error variance, thus the constructs are declared to meet convergent validity.

**b. Reliability Test**

Reliability testing was conducted by considering the values of composite reliability. The following is the Cronbach's Alpha value.

Variables	Cronbach's Alpha	Composite Reliability	Limit Value
Implementation of Electronic Medical Records (EMDR) (X1)	0.943	0.950	0.7
Professional Competence of Care Providers (X2)	0.963	0.966	0.7
Compliance with Electronic Medical Records (EMDR) Completion (Y1)	0.964	0.967	0.7
Electronic Medical Records (EMDR) Completion Performance (Y2)	0.956	0.960	0.7

**B. Structural Model Evaluation (Inner Model)**

**a. Variance Inflation Factor (VIF)**

The results of the multicollinearity test indicate that all Variance Inflation Factor

(VIF) values are below the threshold of 5.0, thus concluding that there are no multicollinearity issues between indicators within the construct. The highest VIF values were recorded for Y2.1.2 (4.570) and X1.4.3

(4.554), but both are still within the tolerable limits. Conversely, indicators such as X1.4.1 (2.424) and Y2.3.3 (2.427) have relatively low VIF values, indicating that the

correlation between indicators is moderate and does not cause disruption to the model.

### b. R-Square

	R Square	R Square Adjusted
Electronic Medical Record (EMR) Compliance (Y1)	0.111	0.094
Electronic Medical Record (EMR) Performance (Y2)	0.450	0.434
Professional Caregiver Competence (X2)	0.016	0.006

The R-Square ( $R^2$ ) value describes the proportion of variation in the dependent variable that can be explained by the independent variables in the model. The RME Filling Performance variable (Y2) has an  $R^2$  of 0.450, meaning that 45% of its variation can be explained by the independent variable, while 55% is influenced by other factors outside the model; this value is in the medium category and indicates a fairly strong influence. The

RME Filling Compliance variable (Y1) has an  $R^2$  of 0.111 or 11.1%, which is in the low category, thus indicating many external factors that influence compliance. Meanwhile, the Professional Care Provider Competence variable (X2) shows a very low  $R^2$ , namely 0.016 (1.6%), indicating that this variable is exogenous and is not influenced by other constructs in the model.

### c. F-Square

	Kepatuhan Pengisian Rekam Medis Elektronik (RME) (Y1)	Kinerja Pengisian Rekam Medis Elektronik (RME) (Y2)	Kompetensi Profesional Pemberi Asuhan (X2)
Kepatuhan Pengisian Rekam Medis Elektronik (RME) (Y1)		0.026	
Kompetensi Profesional Pemberi Asuhan (X2)	0.123	0.002	
Penerapan Rekam Medis Elektronik (RME) (X1)	0.000	0.796	0.016

The implementation of RME (X1) has a very large effect on RME Filling Performance (Y2) ( $f^2 = 0.796$ ), while its effect on other variables is very small. Care Providers Competence (X2) has a moderate effect on RME Filling Compliance (Y1) ( $f^2 = 0.123$ ) but is very small on Y2. Meanwhile, Compliance (Y1) only has a

small effect on Performance (Y2) ( $f^2 = 0.026$ ). Thus, X1 is the dominant factor for performance, while X2 plays a greater role in compliance.

### d. Q-Square

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Kepatuhan Pengisian Rekam Medis Elektronik (RME) (Y1)	1836	1715.426	0.065
Kinerja Pengisian Medis Elektronik (RME) (Y2)	1530	1133.661	0.257
Kompetensi Profesional Pemberi Asuhan (X2)	1836	1819.962	0.009

The  $Q^2$  value for RME Filling Performance (Y2) of 0.257 indicates good predictive ability. The  $Q^2$  for RME Filling Compliance (Y1) of 0.065 is categorized as weak, but still

has predictive power. Meanwhile, the  $Q^2$  for Care Providers Competence (X2) is only 0.009, indicating the model has almost no predictive ability for this variable.

## **DISCUSSION**

Descriptive analysis, measurement model evaluation (outer model), structural model evaluation (inner model), and hypothesis testing were conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The main focus of this analysis was to understand the effect of the implementation of the Professional Care Provider (PPA) system and competencies on compliance and performance in completing Electronic Medical Records (EMR).

### **Electronic System Implementation (X1)**

The results of the descriptive analysis indicate that respondents' perceptions of the Electronic System Implementation are positive, as reflected in average scores above 4 for most of the measured indicators. This finding indicates that the implemented system meets user needs across various functional dimensions, such as ease of use, accessibility, availability of technical support, and system integration capabilities. One dimension that received high appreciation was ease of use, with average scores ranging from 4.039 to 4.196. This aligns with the research findings of Ngusie et al. (2024) emphasized that effort expectancy in the UTAUT3 model is a critical determinant in driving the adoption of electronic systems, particularly in the healthcare sector. In the hospital context, perceived ease of system operation is a key factor in facilitating continued use by healthcare professionals. (Ngusie et al., 2024)

### **Professional Competence of Care Providers (X2)**

Based on the descriptive analysis, the Professional Competence of Care Providers variable received a very good rating from respondents. All indicators showed an average score above 4, reflecting that healthcare professionals were deemed to possess adequate competence in carrying out their roles. This assessment encompassed the dimensions of knowledge, understanding,

skills, values, attitudes, and interests, with a moderate standard deviation, indicating consistency of perceptions across respondents. For Knowledge, Understanding, and Skills (4.088 – 4.235), a high score on this dimension indicates that caregivers possess strong technical and clinical capacity. This supports the Task–Technology Fit (TTF) approach, which emphasizes that the fit between individual competencies and the complexity of the tasks performed is key to the effective use of technology in healthcare. A meta-analysis by Thanthrige & Wickramasinghe (2025) showed that a match between professional skills and digital systems significantly improves performance and technology adoption in hospitals. (Thanthrige & Wickramasinghe, 2025) For Values and Attitudes (4.176 – 4.265), high scores on this indicator reflect the professional commitment, ethical responsibility, and work integrity of Care Providers.

### **Compliance with Electronic Medical Record Filling (Y1)**

Based on the results of the descriptive analysis, the variable Compliance with Electronic Medical Record Filling the EMR (EMR) showed an average score ranging from 3.422 to 3.853, categorized as adequate. Although the data completeness indicator recorded the highest score (3.853 for item Y1.1.1), this score does not indicate optimal compliance. Furthermore, the relatively high standard deviation (1.263–1.408) across all indicators indicates significant variation in perceptions among respondents, reflecting inconsistencies in EMR filling practices in the field. Other indicators, such as timeliness and accuracy of filling, averaged around 3.6–3.7, indicating that delays or errors persist in the recording process. The indicator for compliance with procedures and regulations had the lowest average score (3.422), suggesting the need to improve understanding and implementation of applicable operational standards. Theories and Studies Related to Behavioral Intention

and System Suitability: Research by Ngusie et al. (2024) using the UTAUT3 model showed that behavioral factors and performance expectations are important determinants of consistent use of electronic medical records systems.

### **Electronic Medical Record Completion Performance (Y2)**

Descriptive analysis showed that healthcare workers' EMR completion performance was considered good, with an average score between 3.725 and 4.059. The work quality indicator recorded the highest score in Y2.1.1 (4.059), reflecting accuracy and adherence to EMR completion standards. Perception uniformity was quite good, indicated by a standard deviation of 0.850–0.906. Although completion quality was considered good, the average score for timeliness of completion was lower (3.725–4.020). This indicates that efficiency in completing clinical documentation still requires improvement. These findings align with a study by Shan et al. (2023), who found that frequent workflow interruptions during EHR entry led to decreased recording speed and increased cognitive load for healthcare workers. (Shan et al., 2023) The study, conducted through direct observation at a specialist hospital between June and October 2021, recorded 2,871 interruptions during 145 shifts, affecting average task completion time by up to 84.7 minutes per shift. The high frequency of interruptions also impacted accuracy and overall performance. Measurement and Structural Model Evaluation The measurement model demonstrated good convergent and discriminant validity. Outer loadings  $>0.70$  and Average Variance Extracted (AVE)  $>0.50$  indicated the indicators' reliability in measuring the latent construct. Construct reliability was also high, with Cronbach's Alpha and Composite Reliability (CR)  $>0.90$  for all variables. The structural model indicates that system implementation has a significant and positive effect on performance ( $f^2 = 0.796$ ), while competence has a moderate effect on

compliance ( $f^2 = 0.123$ ), and compliance has only a small effect on performance ( $f^2 = 0.026$ ). The  $R^2$  value for performance is sufficient (0.450), but low for compliance (0.111), and very low for competence (0.016). This indicates that the model is better able to explain variation in performance than compliance. The  $Q^2$  value also supports these findings, with performance having a good predictive value (0.257), while compliance and competence have low values.

### **CONCLUSION**

Based on data analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM), this study concludes that the relationships between variables in the model vary in strength and direction, as follows:

The implementation of the Electronic Medical Records (EMR) system has a positive and significant effect on medical record completion performance, supported by ease of use, accessibility, technical support, and training. The Professional Competence of Care Providers (PPA) has a negative effect on compliance with the Electronic Medical Records (EMR), indicating that healthcare workers with high competency tend to be less compliant if the system is perceived as burdensome or inconsistent with clinical practice. Compliance with filing procedures has a negative effect on performance, indicating that rigid procedures and high administrative burdens reduce productivity. The competence of PPA does not have a significant direct effect on performance, and performance improvement is not solely determined by competence but also requires the support of a system, work environment, and aligned organizational policies. Compliance is not a mediator between competence and performance. The primary factor in improving performance is the quality of the implementation of the Electronic Medical Records (EMR) system. The implementation of the Electronic Medical Records (EMDR) system does not

have a significant effect on compliance, and compliance does not mediate effectively in improving the performance of filling out Electronic Medical Records (EMDR).

#### **Declaration by Authors**

**Acknowledgement:** None

**Source of Funding:** None

**Conflict of Interest:** No conflicts of interest declared.

#### **REFERENCES**

1. Creswell, J. W., & David Creswell, J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*.
2. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. <https://doi.org/10.1007/978-3-030-80519-7>
3. Kasmir, K. (2016). *Manajemen sumber daya manusia (teori dan praktik) / Kasmir | Perpustakaan Universitas Islam Negeri Sultan Syarif Kasim Riau (1st ed., Vol. 1)*. Rajawali Pers. <https://inlislite.uin-suska.ac.id/opac/detail-opac?id=27771>
4. kemenkes, K. K. I. (2022). Permenkes No. 24 Tahun 2022. In BN.2022/No.829, peraturan.go.id: 19 hlm. <https://peraturan.bpk.go.id/Details/245544/permenkes-no-24-tahun-2022>
5. Kencana, G., Rumengan, G., & Hutapea, F. (2019). Analisa Kepatuhan Pengisian Berkas Rekam Medis di Instalasi Rawat Inap Rumah Sakit X. *Jurnal Manajemen Kesehatan Yayasan RS.Dr. Soetomo*, 5(1), 27. <https://doi.org/10.29241/jmk.v5i1.127>
6. Ngusie, H. S., Kassie, S. Y., Zemariam, A. B., Walle, A. D., Enyew, E. B., Kasaye, M. D., Seboka, B. T., & Mengiste, S. A. (2024). Understanding the predictors of health professionals' intention to use electronic health record system: extend and apply UTAUT3 model. *BMC Health Services Research*, 24(1), 1–16. <https://doi.org/10.1186/S12913-024-11378-1/TABLES/10>
7. Nursalam. (2020). *Metodologi Penelitian Ilmu Keperawatan: Pendekatan Praktis (5th ed.)*. Salemba Medika.
8. PERSI, B. K. (2023). *Kemenkes Resmi Luncurkan Rekam Medis Elektronik Terintegrasi*. <https://www.persi.or.id/kemenkes-resmi-luncurkan-rekam-medis-elektronik-terintegrasi/>
9. Rubiyanti, N. S. (2023). Penerapan Rekam Medis Elektronik di Rumah Sakit di Indonesia: Kajian Yuridis. *ALADALAH: Jurnal Politik, Sosial, Hukum Dan Humaniora*, 1(1), 179–187.
10. Shan, Y., Shang, J., Yan, Y., & Ye, X. (2023). Workflow interruption and nurses' mental workload in electronic health record tasks: An observational study. *BMC Nursing*, 22(1), 1–13. <https://doi.org/10.1186/S12912-023-01209-9/FIGURES/1>
11. Skyvell Nilsson, M., Törner, M., & Pousette, A. (2018). Professional culture, information security and healthcare quality—an interview study of physicians' and nurses' perspectives on value conflicts in the use of electronic medical records. *Safety in Health* 2018 4:1, 4(1), 1–12. <https://doi.org/10.1186/S40886-018-0078-9>
12. Thanthrige, A., & Wickramasinghe, N. (2025). Analyzing the Determinants of Healthcare Technology Adoption Using the Task-Technology Fit (TTF) Model: A Systematic Review and Meta-Analysis. *Univerzitetna Založba Univerze v Mariboru*, 229–252. <https://doi.org/10.18690/UM.FOV.4.2025.15>

How to cite this article: Darminto, Nurhikmah, Syamsuddinnor. The Effect of electronic medical record system implementation and professional care provider competence on electronic medical record completion performance through filing compliance at Dr. R. Soeharsono Level III Hospital, Banjarmasin. *International Journal of Research and Review*. 2025; 12(10): 165-175. DOI: <https://doi.org/10.52403/ijrr.20251017>

\*\*\*\*\*