

Analysis of Healthcare Employees Acceptance of Digital Transformation in Inpatient Department Electronic Medical Record (EMR) Application at Private Hospital in Tangerang

Ricko Sony Siagian¹, Viany Utami Tjhin²

^{1,2} Information System Management Department, Bina Nusantara University, Indonesia

Article Info

Article history:

Received Jun 29, 2025

Revised Oct 19, 2025

Accepted Nov 11, 2025

Keywords:

Digital Transformation

Electronic Medical Record

Healthcare Information

Technology

Technology Acceptance

Model

UTAUT-2

ABSTRACT

This study examines the acceptance of healthcare professionals toward digital transformation through the implementation of Electronic Medical Records (EMR) in the inpatient department (IPD) at a private hospital in Tangerang. The research applies a combined analytical model of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT-2) and the Technology Acceptance Model (TAM). A total of 160 doctors, including specialists, formed the study population, with 115 respondents selected as samples. The findings indicate that healthcare professionals generally feel comfortable using the EMR system and have integrated it into their daily practice, although improvements in active utilization and system optimization are still required. Statistical analysis shows that Performance Expectancy, Effort Expectancy, System Quality, and Facilitating Conditions significantly influence Intention to Use, while Habit has no significant effect. Moreover, Intention to Use strongly impacts Use Behavior. These results highlight that enhancing system reliability, usability, and organizational support is essential to increase healthcare professionals' adoption and behavioral use of EMR in the inpatient department of private hospitals in Tangerang.

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Corresponding Author:

Ricko Sony Siagian,

Information System Management,

Bina Nusantara University,

K. H. Syahdan No. 9, Kemanggisan, Palmerah Jakarta 11480 Indonesia.

Email: ricko.siagian@binus.ac.id

1. INTRODUCTION

The advancement of the digital era has made consistent and high-quality data integration a crucial component for achieving digital transformation. Information technology is extensively utilized in the healthcare sector, ranging from health planning to providing diverse health data at both individual and community levels [1]. The role of information technology in healthcare can enhance the ease and speed of input, processing, and output, resulting in more comprehensive, faster, and more accurate information.

The Electronic Medical Record (EMR) systems for outpatient and inpatient departments are part of a digital transformation initiative implemented by a private hospital in Tangerang. Initially, the outpatient (OPD) and inpatient department (IPD) EMR systems were expected to assist the private hospital in Tangerang's business processes. However, in practice, only the outpatient EMR system has been deemed successful, while the inpatient department EMR system has not met expectations. This is evidenced by the higher adoption rate of the outpatient EMR compared to the inpatient EMR. Consequently, the inpatient EMR has faced resistance to digital transformation, leading to slower performance and productivity in healthcare services and business processes. This is demonstrated by the adoption rate of the inpatient EMR application, which only reached 10%–15% during the period from November 2022 to January 2023, significantly below the

desired target of 70%. Below is a graph showing the adoption rate of the outpatient EMR application, as shown in Figure 1.

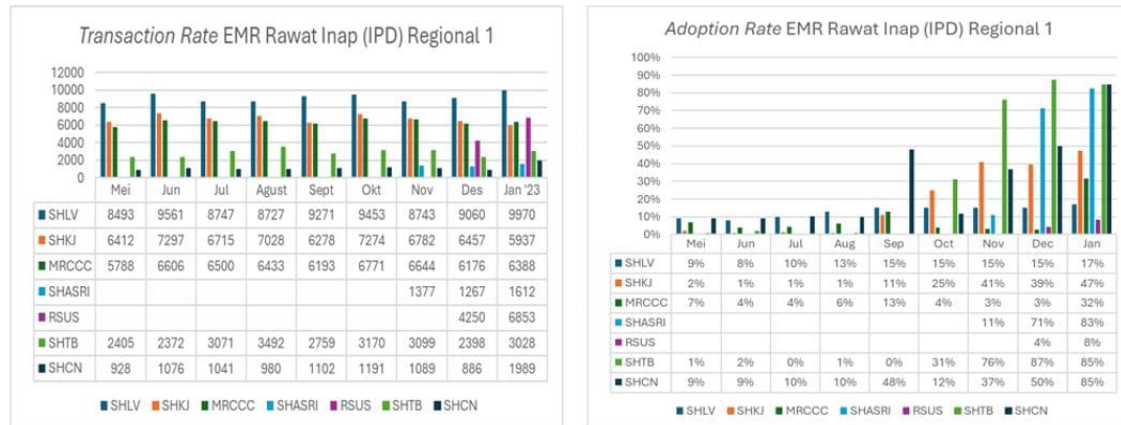


Figure 1. The Transaction Rate & Adoption Rate of IPD EMR Regional 1 (Source:database hospital)

Given this background, the author is interested in examining the implementation of healthcare digital transformation at a private hospital in Tangerang. The study employs a combination of TAM and UTAUT-2 models. TAM is selected because of its simplicity, emphasizing two core factors—perceived usefulness and perceived ease of use—while also being widely applied in prior studies with a solid theoretical foundation for analyzing user acceptance.

This research evaluates the impact of each construct from both models and compares the findings to measure healthcare professionals' acceptance of EMR services in the inpatient department. The results of this comparison will help determine whether TAM or UTAUT-2 provides a more suitable framework for analyzing healthcare professionals' acceptance of digital transformation in the hospital context.

2. RESEARCH METHOD

2.1. Research Model

The model used for this research is an analytical model combining two commonly used research papers regarding user acceptance, which are Unified Theory of Acceptance and Use of The Technology 2 (UTAUT-2) dan Technology Acceptance Model (TAM) [2].

Table 1. Comparison of UTAUT-2 and TAM Models

	UTAUT-2	TAM
Objective	To assess the likelihood of success of new technologies and to understand the drivers of	To better understand why users accept or reject certain technologies, and how user experience can be improved through technology design.
Measurement	3 Key Constructs - Performance Expectancy/PU - Effort Expectancy/PEU - Social Influence included - Facilitating Conditions 4 Moderators	2 Key Constructs - Perceived Usefulness/PU - Perceived Ease of Use/PEU
Expansions Model	Behavior intention, use behavior, performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit.	Subjective norm, image, Voluntaries of use, job relevance, intention to use TAM-3 Computer anxiety, enjoyment, intention to use

Based on the model comparison in Table 1 [3, 4], the UTAUT model was selected to assess the likelihood of success of inpatient EMR systems and to identify the key drivers of healthcare workers' acceptance. This study employed the extended UTAUT-2 model alongside TAM, which has been widely applied in EMR acceptance research and is recognized as a key framework for understanding predictors of technology adoption. TAM was also chosen because it explains why inpatient EMR systems are accepted or rejected, thereby providing insights to improve healthcare workers' satisfaction with their use.

In developing the research model, it is essential to first examine the structure of the original TAM and UTAUT-2 models and their interrelationships. Relevant variables are then identified based on the research context and objectives. In this case, the relevant variables are:

1. Performance Expectancy: The extent to which the inpatient EMR system will provide benefits to consumers.
2. Effort Expectancy: The level of ease associated with the use of the inpatient EMR system by health workers.
3. System Quality: The performance of the system, which refers to how well the ability of the inpatient EMR system can provide the information users need.
4. Facilitating Conditions: The extent to which facility conditions can support the use of IPD inpatient EMR by health workers in providing health services.
5. Habit: The extent to which users have developed automatic and repetitive habits towards using the inpatient EMR system.
6. Intention to Use: The intention of health care users to adopt and use inpatient EMR systems in providing health services to patients.
7. Use Behavior: The extent to which the behavioral attitudes of health workers use the inpatient EMR system at work [5].

With this explanation, the researcher proposes to apply the research model diagram as follows, as shown in Figure 2.

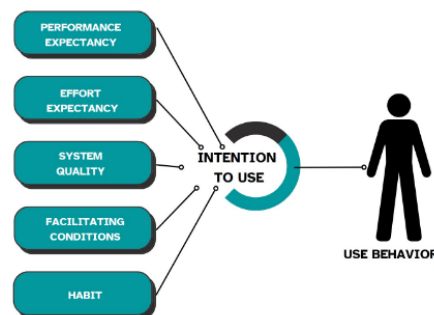


Figure 2. Research Model Diagram

The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) are widely applied frameworks for analyzing user behavior toward technology [7]. TAM emphasizes user attitudes and behaviors through constructs such as perceived usefulness, ease of use, and actual usage [8, 9], while UTAUT consolidates eight major theories, including TAM, to explain technology acceptance and usage behavior [8]. Integrating these two models allows researchers to obtain a more comprehensive understanding of users' attitudes, intentions, and behaviors, thereby supporting the effective design and implementation of technology systems across various fields [7].

Both TAM and UTAUT have been extensively used to evaluate the success of technology implementation [6, 7]. Their combined use provides valuable insights into how users perceive and adopt new technologies, enabling researchers and practitioners to enhance strategies for technology development and deployment [6, 7].

2.2. Variables

When selecting variables for TAM and UTAUT-2, it is important to align them with the specific needs of the research [10]. The chosen variables should be relevant to the research questions and study context. For instance, one study extended TAM by adding perceived enjoyment, compatibility, and ease of use [11], while another applied UTAUT-2 to electronic money usage and found that the habit variable had the strongest influence [12]. External factors such as social influence and facilitating conditions should also be considered [13]. Ultimately,

variable selection must be grounded in a thorough understanding of the research problem and context.

Accordingly, this study selects variables based on the context of health workers' acceptance of digital transformation in inpatient electronic medical record (EMR) applications, as well as prior research findings. The variables include performance expectancy, effort expectancy, system quality, facilitating conditions, habits, intention to use, and use behavior.

The research model consists of independent, mediating, and dependent variables.

A. Independent Variables

Independent variables are often referred to as stimulus, antecedent, predictor variables. Independent variables are variables that affect or cause changes or the emergence of dependent variables [14]. The independent variables in this study are as follows:

Benefit Expectancy / Performance Expectancy (PE)

Performance Expectancy is defined as the level at which health workers believe that using inpatient EMR (IPD) will provide benefits in the health services provided. The following are the indicators used in the performance expectancy variable as shown in Table 2 [15, 16].

Table 2. Performance Expectancy Indicators

No	Indicator Construct	Statement	Code
1	Perceived Usefulness	Health service process can be done faster	PE1
		The health service process can be done more easily	PE2
		Increased transparency of health services	PE3
2	Job Fit	Improving the quality of health care work	PE4
		Improving the effectiveness of health service work	PE5

Effort Expectancy (EE)

Effort Expectancy is defined as the level of ease obtained by health workers in using inpatient EMR (IPD) when providing health services. The following are the indicators used in the effort expectancy variable as shown in Table 3 [14-16].

Table 3. Effort Expectancy Indicators

No	Indicator Construct	Statement	Code
1	Perceived Ease of Use	Ease of learning the inpatient EMR system (IPD) by health workers	EE1
		Inpatient EMR interactions (IPD) that are clear and understood by health workers	EE2
2	Complexity	Simplicity of inpatient EMR system features (IPD) that are not complicated to use by health workers	EE3
3	Ease of Use	Ease of use of inpatient EMR system (IPD) by health workers	EE4
		Ease of operation of the inpatient EMR system (IPD) by health workers	EE5

System Quality (SQ)

System quality is defined as the performance of the inpatient EMR (IPD), which refers to how well the ability of healthcare digital transformation in the inpatient EMR system is hardware, software, policies, procedures in providing the information needs of health workers. The following are the indicators used in the system quality variables as shown in Table 4 [17-20].

Table 4. System Quality Indicators

No	Indicator Construct	Statement	Code
1	Accessibility	Use of an inpatient EMR system (IPD) that can always be used	SQ1
		Access the inpatient EMR system (IPD) without any failures	SQ2
2	Availability	Availability of inpatient EMR features (IPD) that users need	SQ3
3	Reliability	Reliability of inpatient EMR system (IPD)	SQ4
4	Stability	Inpatient EMR system stability (IPD)	SQ5

Facilitating Conditions

Facilitating Conditions defined as the degree to which health workers believe that the technical infrastructure facilities and related organizational infrastructure support the use of inpatient EMRs (IPD). The following are the indicators used in the facilitating conditions variable as shown in Table 5 [21, 22].

Table 5. Facilitating Conditions Indicators

No	Indicator Construct	Statement	Code
1	Perceived Behavioural Control	Availability of resources in the inpatient EMR system (IPD)	FC1
		Knowledge of inpatient EMR usage (IPD)	FC2
2	Facilitating Condition	Instructions and guidelines for using the inpatient EMR system (IPD)	FC3
		Inpatient EMR system usage training (IPD)	FC4

Habit (H)

Habit is defined as the extent to which health workers tend to carry out ordinary behavior automatically using inpatient EMR (IPD) in providing health services. The following are the indicators used in the habit variable as shown in Table 6 [15].

Table 6. Habit Indicators

No	Indicator Construct	Statement	Code
1	Prior Use	Habits of inpatient EMR system users (IPD)	H1
2	Addiction	The habit of trying new things on duty in the use of inpatient EMR (IPD)	H2
3	Behavior to be Automatic	Mandatory use of inpatient EMR system (IPD)	H3

Mediator Variables

Mediator variables are variables that mediate the relationship between independent and dependent variables [23]. The mediator variable in this study is Intention to Use (ITU). Intention to Use (ITU) is used to measure the behavioral tendency of health workers' intention to use the inpatient EMR system. It also determines the extent to which independent variables can influence health workers' intention to use the inpatient EMR system in providing health services to patients. The indicators used in the Intention to Use variable are shown in Table 7 [24].

Table 7. Intention of Use Indicators

No	Indicator Construct	Statement	Code
1	Usage Intention	Health workers intend to use the inpatient EMR system (IPD) in the future	ITU1
		Motivation in using the inpatient EMR system (IPD) because of its features	ITU2
2	Positive Word of Mouth	Planning to continue using the inpatient EMR system (IPD) more frequently	ITU3
		Recommendation on the use of inpatient EMR system (IPD) to other health workers	ITU4

B. Dependent Variable

The dependent variable is referred to as the dependent variable, which is the variable that is influenced or the result, due to the independent variable [12]. The dependent variable in this study is usage behavior (UB).

Use Behaviors is the use of outpatient EMR (OPD) and inpatient EMR (IPD) as the latest technology in health services. The following are the indicators used in the use behavior variable as shown in Table 8 [25].

Table 8. Use Behaviors Indicators

No	Indicator Construct	Statement	Code
1	Use Frequency	Use of inpatient EMR system (IPD) for daily healthcare process	UB1
2	Usage	Sense of pleasure and comfort in using the inpatient EMR system (IPD)	UB2
3	Usage Pattern	Continued use of inpatient EMR system (IPD)	UB3
4	Adoption Retention	Approved the implementation of an inpatient EMR system (IPD) for healthcare processes	UB4

2.3. Hypotheses

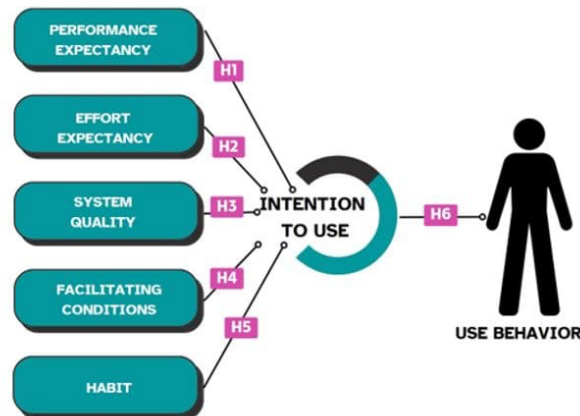


Figure 3. Proposed Research Method

Based on the research model used as shown in Figure 3, the hypotheses that will undergo testing are as such:

- **H1:** Performance Expectancy (PE) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR.
- **H2:** Effort Expectancy (EE) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR.
- **H3:** System Quality (SQ) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR.
- **H4:** Facilitating Conditions (FC) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR.
- **H5:** Habit (H) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR.
- **H6:** Intention to Use (ITU) is correlated to Use Behavior (UB).

2.4. Population and Samples

The study population consisted of 160 doctors, including medical specialists, from private hospitals in Tangerang, Banten, who had implemented inpatient EMR. Using Slovin's formula with a 5% margin of error, the sample size was set at 115. Data were collected from November 2022 to January 2023 through observation, brief interviews, and a structured questionnaire. A total of 115 valid responses were obtained (response rate 71.9%). Participation was voluntary, confidentiality was guaranteed, and informed consent was included at the beginning of the questionnaire.

3. RESULTS AND DISCUSSION

3.1. Measurement Model Assessment

Table 9. Reliability and Validity Test Results

Construct	Cronbach's Alpha	CR	AVE	R ²	F ² (Effect Size)	Result
Performance Expectancy (PE)	0.85	0.89	0.63	–	Small	Reliable & Valid
Effort Expectancy (EE)	0.81	0.87	0.61	–	Small	Reliable & Valid
System Quality (SQ)	0.83	0.88	0.65	–	Medium	Reliable & Valid
Facilitating Conditions (FC)	0.78	0.84	0.58	–	Small	Reliable & Valid
Habit (H)	0.76	0.83	0.57	–	Small	Reliable & Valid
Intention to Use (ITU)	0.86	0.90	0.66	0.668	–	Reliable & Valid
Use Behavior (UB)	0.84	0.88	0.64	0.484	–	Reliable & Valid

Before hypothesis testing, the measurement model was evaluated for reliability and validity. All constructs showed Cronbach's Alpha and Composite Reliability above 0.70 and AVE above 0.50, confirming internal consistency and convergent validity. Discriminant validity was established with all HTMT ratios below 0.90. The model explained 66.8% of the variance in Intention to Use (ITU) and 48.4% in Use Behavior (UB). Effect size analysis indicated a medium effect for System Quality and small effects for the other constructs. These results confirm the adequacy of the measurement model for further hypothesis testing, and the subsequent structural model results are presented in Table 9.

3.2. Hypothesis Results

According to the data analysis, the hypothesis results are obtained as shown in Table 10.

Table 10. Results Of Hypothesis

Impact	Original Sample	T Statistics	P Values
PE → ITU	0.156	2.386	0.017
EE → ITU	0.260	3.359	0.001
SQ → ITU	0.381	6.231	0.000
FC → ITU	0.202	3.250	0.001
HB → ITU	0.132	1.719	0.086
ITU → UB	0.696	10.504	0.000

H1 : Performance Expectancy (PE) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR. It was found that PE has a significant effect on ITU, with a T statistic value of 2.386 and a P-Value of 0.017. The T statistic value being greater than the T table value ($2.386 > 1.954$) and the P value being smaller than the alpha standard of 5% ($0.017 < 0.05$) indicate a significant influence of PE on ITU. Therefore, it can be concluded that the better the Performance Expectancy, the higher the Intention To Use.

H2 : Effort Expectancy (EE) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR. The analysis results show that EE has a significant influence on ITU, with a T statistic value of 3.359 and a P-Value of 0.001. Since the T statistic value is greater than the T table value ($3.359 > 1.954$) and the P value is smaller than the alpha standard of 5% ($0.001 < 0.05$), it can be concluded that EE significantly affects ITU. Thus, it can be interpreted that the better the Effort Expectancy, the higher the Intention To Use.

H3 : System Quality (SQ) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR. The analysis results show that SQ has a significant effect on ITU, with a T statistic value of 6.231 and a P-Value of 0.000. Since the T statistic value is greater than the T table value ($6.231 > 1.954$) and the P value is smaller than the alpha standard of 5% ($0.000 < 0.05$), it can be concluded that SQ significantly affects ITU. Thus, it can be interpreted that the better the System Quality, the higher the Intention To Use.

H4 : Facilitating Conditions (FC) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR. The analysis results show that FC has a significant effect on ITU, with a T statistic value of 3.250 and a P-Value of 0.001. Since the T statistic value is greater than the T table value ($3.250 > 1.954$) and the P value is smaller than the alpha standard of 5% ($0.001 < 0.05$), it can be concluded that FC significantly affects ITU. Thus, it can be interpreted that the better the Facilitating Condition, the higher the Intention To Use.

H5 : Habit (H) is significantly and positively correlated towards Intention to Use (ITU) on the utilization of inpatient EMR. The analysis results show that H does not have a significant effect on ITU, with a T statistic value of 1.719 and a P-Value of 0.086. Since the T statistic value is less than the T table value ($1.719 < 1.954$) and the P value is greater than the alpha standard of 5% ($0.086 > 0.05$), it can be concluded that H does not significantly affect ITU. Thus, it can be interpreted that Habit does not increase Intention To Use.

H6 : Intention to Use (ITU) berpengaruh terhadap Use Behavior (UB). The analysis results show that Intention To Use (ITU) has a significant effect on Use Behavior (UB), with a T statistic

value of 10.504 and a P- Value of 0.000. Since the T statistic value is greater than the T table value ($10.504 > 1.954$) and the P value is smaller than the alpha standard of 5% ($0.000 < 0.05$), it can be concluded that Intention To Use (ITU) significantly affects Use Behavior (UB). Thus, it can be interpreted that the better the Intention To Use (ITU), the higher the Use Behavior (UB).

Analysis of Direct and Indirect Effects

Based on the data analysis conducted, the direct and indirect effects of the research variables used in this study can be determined. The indirect effects in this study were analyzed by looking at the values of Original Sample, T-Statistics, and P- Values. The indirect effects can be considered significant if the P-Values < 0.05 (Hair et al., 2019). Below are the results of the indirect effects obtained in this study through Table 11 below :

Table 11. Results of Indirect Effect

Impact	Original Sample	T Statistics	P Values
EE → ITU	0.026	3.359	0.001
EE → UB	0.181	3.020	0.003
FC → ITU	0.202	3.250	0.001
FC → UB	0.140	3.144	0.002
H → ITU	0.132	1.710	0.086
H → UB	0.092	1.739	0.082
ITU → UB	0.696	10.504	0.000
PE → ITU	0.156	2.386	0.017
PE → UB	0.109	2.321	0.020
SQ → ITU	0.381	6.231	0.000
SQ → UB	0.265	5.447	0.000

From Table 10, it can be inferred that most relationships between variables in this model have a positive and significant impact, as indicated by the P-Values that are less than 0.05. The relationships between Habit (H) with Intention to Use (ITU) and User Behavior (UB) are not significant because the P-Values are greater than 0.05.

3.2. Discussion

3.2.1. Healthcare Professionals' Perspectives on the Implementation of Inpatient Department (IPD) EMR Healthcare Digital Transformation at Private Hospitals in Tangerang

Based on the results of the descriptive analysis of the research variables, it reveals the views of healthcare professionals on the implementation of inpatient department (IPD) electronic medical records (EMR) at private hospitals in Tangerang can be determined, which indicate that:

Table 12. Descriptive Analysis Performance Expectancy (PE)

Performance Expectancy (PE)												
Item	SD		D		N		A		SA		Average	Category
	F	%	F	%	F	%	F	%	F	%		
PE1	0	0.0%	3	2.6%	10	8.7%	68	59.1%	34	29.6%	4.16	Good
PE2	0	0.0%	3	2.6%	3	2.6%	75	65.2%	34	29.6%	4.22	Very Good
PE3	0	0.0%	0	0.0%	12	10.4%	60	52.2%	43	37.4%	4.27	Very Good
PE4	0	0.0%	3	2.6%	23	20.0%	61	53.0%	28	24.3%	3.99	Very Good
PE5	0	0.0%	3	2.6%	14	12.2%	70	60.9%	28	24.3%	4.07	Very Good
Average Mean Performance Expectancy (PE)											4.14	Very Good

In the descriptive analysis of the Performance Expectancy (PE) variable, as shown in Table 12, the average score is 4.14, which falls into the “good” category. The lowest score appears on the PE4 indicator, at 3.99, suggesting that users recognize the potential to improve their performance by using the IPD EMR system. Conversely, the highest score is on the PE3 indicator, at 4.27, indicating that users perceive clear benefits from using the IPD EMR system. Based on these results, the use of electronic medical records (EMR) in the IPD at private hospitals in Tangerang reflects healthcare professionals' perception that the system provides significant benefits, particularly in improving performance quality. However, there remains a need to strengthen

perceptions of the efficiency and effectiveness gains that can be achieved through the IPD EMR system.

Table 13. Descriptive Analysis Effort Expectancy (EE)

Item	Effort Expectancy (EE)										Average	Category
	SD		D		N		A		SA			
	F	%	F	%	F	%	F	%	F	%		
EE1	0	0,0%	0	0,0%	13	11,3%	65	56,5%	37	32,2%	4,21	Very Good
EE2	0	0,0%	4	3,5%	17	14,8%	76	66,1%	18	15,7%	3,94	Good
EE3	0	0,0%	0	0,0%	16	13,9%	74	64,3%	25	21,7%	4,08	Good
EE4	0	0,0%	4	3,5%	28	24,3%	58	50,4%	25	21,7%	3,90	Good
EE5	0	0,0%	3	2,6%	24	20,9%	62	53,9%	26	22,6%	3,97	Good
Average Mean Effort Expectancy (EE)											4,02	Good

In the descriptive analysis of the Effort Expectancy (EE) variable, as shown in Table 13, the average score is 4.02, which falls into the “good” category. The lowest score is on the EE4 indicator, at 3.90, suggesting that the features of the IPD EMR system are perceived as simple and not complicated to use. Conversely, the highest score is on the EE1 indicator, at 4.21, showing that users find it easy to learn how to operate the IPD EMR system.

These results suggest that the use of EMR in the IPD at private hospitals in Tangerang, in terms of Effort Expectancy, reflects healthcare professionals’ views that the system is generally easy to learn and operate. However, some features are still perceived as less straightforward, indicating a need for further simplification and improved usability.

Table 14. Descriptive Analysis System Quality (SQ)

System Quality (SQ)												
Item	SD		D		N		A		SA		Average	Category
	F	%	F	%	F	%	F	%	F	%		
AQ1	0	0,0%	14	12,2%	34	29,6%	52	45,2%	15	13,0%	3,59	Good
AQ2	15	13,0%	45	39,1%	25	21,7%	19	16,5%	11	9,6%	2,70	Fair
AQ3	0	0,0%	27	23,5%	44	38,3%	37	32,2%	7	6,1%	3,20	Fair
AQ4	4	3,5%	1	0,9%	29	25,2%	68	59,1%	13	11,3%	3,75	Good
AQ5	11	9,6%	33	28,7%	32	27,8%	30	26,1%	9	7,8%	2,93	Fair
Average Mean System Quality (SQ)											3,24	Fair

In the descriptive analysis of the System Quality (SQ) variable, as shown in Table 14, the average score was 3.24, categorized as moderate. The lowest score appeared on indicator SQ2 (2.70), reflecting failures in accessing the IPD EMR system during healthcare service delivery. Conversely, the highest score was on indicator SQ4 (3.75), indicating that the IPD EMR system is generally reliable when providing healthcare services. Based on these results, it can be concluded that the use of electronic medical records (EMR) in the inpatient department (IPD) at private hospitals in Tangerang suggests that healthcare professionals perceive the system as generally reliable. However, deficiencies remain in accessibility and system stability, highlighting the need for improvements in availability and consistent performance.

Table 15. Descriptive Analysis Facilitating Condition (FC)

Table 15: Descriptive Analysis Facilitating Condition (FC)												
Item	SD		D		N		A		SA		Average	Category
	F	%	F	%	F	%	F	%	F	%		
FC1	4	3,5%	11	9,6%	47	40,9%	49	42,6%	4	3,5%	3,33	Fair
FC2	0	0,0%	12	10,4%	11	9,6%	59	51,3%	33	28,7%	3,98	Good
FC3	2	1,7%	12	10,4%	24	20,9%	61	53,0%	16	13,9%	3,67	Good
FC4	2	1,7%	9	7,8%	26	22,6%	66	57,4%	12	10,4%	3,67	Good
Average Mean Facilitating Condition (FC)											3,66	Good

The analysis of Facilitating Condition (FC) in Table 15 shows an average score of 3.66, categorized as “good.” The lowest score is on the FC1 indicator (3.33), indicating that respondents face difficulties contacting support staff when issues arise with the IPD EMR system. The highest score is on the FC2 indicator (3.98), reflecting consistent access to computers, laptops, or mobile

devices for using the system while providing patient care. Overall, these results suggest that healthcare professionals in private hospitals in Tangerang value the availability of technical support and hardware to access the IPD EMR system, although improvements are needed in the availability and responsiveness of support services.

Table 16. Descriptive Analysis Habit (H)

Item	SD		D		N		A		SA		Average	Category
	F	%	F	%	F	%	F	%	F	%		
H1	0	0,0%	0	0,0%	5	4,3%	70	60,9%	40	34,8%	4,30	Very Good
H2	0	0,0%	0	0,0%	10	8,7%	69	60,0%	36	31,3%	4,23	Very Good
H3	0	0,0%	0	0,0%	13	11,3%	67	58,3%	35	30,4%	4,19	Good
H4	0	0,0%	0	0,0%	15	13,0%	61	53,0%	39	33,9%	4,21	Very Good
Average Mean Habit (H)											4,23	Very Good

The descriptive analysis of the Habit (H) variable in Table 16 shows an average score of 4.23, categorized as “very good.” The lowest score is on the H3 indicator (4.19), suggesting that respondents tend to continue using the IPD EMR in their duties. The highest score is on the H1 indicator (4.30), indicating that using the IPD EMR has become a common practice among respondents. Overall, these results suggest that the use of EMR in the inpatient department (IPD) at private hospitals in Tangerang, in terms of habit, reflects that the IPD EMR system has become routine for most healthcare professionals, although there is still potential to further strengthen this habit to enhance system adoption and utilization.

Table 17. Descriptive Analysis Intention To Use.

Item	SD		D		N		A		SA		Average	Category
	F	%	F	%	F	%	F	%	F	%		
ITU1	0	0,0%	0	0,0%	1	0,9%	75	65,2%	39	33,9%	4,33	Very Good
ITU2	0	0,0%	0	0,0%	21	18,3%	64	55,7%	30	26,1%	4,08	Good
ITU3	0	0,0%	0	0,0%	1	0,9%	71	61,7%	43	37,4%	4,37	Very Good
ITU4	0	0,0%	1	0,9%	14	12,2%	58	50,4%	42	36,5%	4,23	Very Good
Average Mean Intention To Use (ITU)											4,25	Very Good

The descriptive analysis of the Intention to Use (ITU) variable in Table 17 shows an average score of 4.25, categorized as “very good.” The lowest score is on the ITU2 indicator (4.08), indicating that the features of the IPD EMR system motivate respondents to use it in their work. The highest score is on the ITU3 indicator (4.37), showing that respondents intend to continue using the IPD EMR. Overall, these results suggest that healthcare professionals in private hospitals in Tangerang have a strong intention to keep using the IPD EMR system, although efforts are still needed to strengthen motivation to use specific features through training or education.

Table 18. Descriptive Analysis Use Behavior

Item	SD		D		N		A		SA		Average	Category
	F	%	F	%	F	%	F	%	F	%		
UB1	0	0,0%	0	0,0%	1	0,9%	69	60,0%	45	39,1%	4,38	Very Good
UB2	0	0,0%	0	0,0%	18	15,7%	66	57,4%	31	27,0%	4,11	Good
UB3	0	0,0%	0	0,0%	1	0,9%	75	65,2%	39	33,9%	4,33	Very Good
UB4	0	0,0%	0	0,0%	1	0,9%	72	62,6%	42	36,5%	4,36	Very Good
Average Mean Use Behavior (UB)											4,30	Very Good

The descriptive analysis of the Use Behavior (UB) variable in Table 18 shows an average score of 4.30, categorized as “very good.” The lowest score is on the UB2 indicator (4.11), suggesting that respondents feel comfortable using the IPD EMR in performing their duties. The highest score is on the UB1 indicator (4.38), indicating that respondents routinely use the IPD EMR system while providing healthcare services. Overall, these results suggest that healthcare professionals in private hospitals in Tangerang generally feel comfortable and actively use the IPD EMR system in their work, although further efforts are needed to strengthen active use and optimize system utilization.

3.2.2. Factors Affecting the Intention and Utilization of Healthcare Digital Transformation EMR in the Inpatient Department (IPD) at Private Hospitals in Tangerang.

The hypothesis analysis reveals several factors that can influence the use of healthcare digital transformation EMR in the inpatient department (IPD) at private hospitals in Tangerang, as outlined below:

A. The Influence of Performance Expectancy on the Intention to Use

The analysis indicates that Performance Expectancy (PE) affects Intention to Use (ITU) with an original sample value of 0.156, showing a positive effect. The T statistic is 2.386, which exceeds the T table value ($2.386 > 1.954$), and the P-value is 0.017, which is below the 5% alpha level ($0.017 < 0.05$). These results indicate a significant influence of PE on ITU, thus supporting the hypothesis that Performance Expectancy (PE) has a positive and significant effect on Intention to Use (ITU).

B. The Influence of Effort Expectancy on Intention To Use

The analysis results show that Effort Expectancy (EE) affects Intention to Use (ITU) with an original sample value of 0.260, indicating a positive effect. The T statistic is 3.359, which exceeds the T table value ($3.359 > 1.954$), and the P-value is 0.001, which is below the 5% alpha level ($0.001 < 0.05$). These results indicate a significant influence of EE on ITU, thereby supporting the hypothesis that Effort Expectancy (EE) has a positive and significant effect on Intention to Use (ITU).

C. The Influence of System Quality on Intention To Use

The analysis shows that System Quality (SQ) affects Intention to Use (ITU) with an original sample value of 0.381, indicating a positive effect. The T statistic is 6.231, which exceeds the T table value ($6.231 > 1.954$), and the P-value is 0.001, which is below the 5% alpha level ($0.001 < 0.05$). These results indicate a significant influence of SQ on ITU, thereby supporting the hypothesis that System Quality (SQ) has a positive and significant effect on Intention to Use (ITU).

D. The Influence of Facilitating Condition on Intention To Use

The analysis results show that Facilitating Condition (FC) influences Intention to Use (ITU) with an original sample value of 0.202, suggesting a positive effect. The T statistic is 3.250, which exceeds the T table value ($3.250 > 1.954$), and the P-value is 0.001, which is below the 5% alpha level ($0.001 < 0.05$). These results indicate a significant influence of FC on ITU, thereby supporting the hypothesis that Facilitating Condition (FC) has a positive and significant effect on Intention to Use (ITU).

E. The Influence of Habit on Intention To Use

The analysis shows that Habit (H) affects Intention to Use (ITU) with an original sample value of 0.132, indicating a positive effect. However, the T statistic ($1.719 < 1.954$) and P-value ($0.086 > 0.05$) demonstrate that this effect is not significant. Thus, although Habit (H) positively influences Intention to Use (ITU), the effect is not significant in this study and does not support the proposed hypothesis.

F. The Influence of Intention To Use on Use Behavior

The analysis results show that Intention to Use (ITU) has an influence on Use Behavior (UB), with an Original Sample value of 0.696, suggesting a positive impact of Intention to Use (ITU) on Use Behavior (UB). the T statistic value of 10.504, which exceeds the T table value ($10.504 > 1.954$), and the P-Value is 0.000, which is less than the 5% alpha standard ($0.000 < 0.05$). This indicates a significant influence of Intention to Use (ITU) on Use Behavior (UB). Therefore, it supports the hypothesis that Intention to Use (ITU) has a positive and significant effect on Use Behavior (UB).

4. CONCLUSION

According to the findings, healthcare professionals at private hospitals in Tangerang, Banten, Indonesia, perceive significant benefits from using inpatient Electronic Medical Records (IPD EMR), particularly in improving performance quality. However, perceptions regarding potential enhancements still require substantial improvement. Overall, healthcare professionals are comfortable with the system and actively use it in their work, though further optimization and encouragement of active usage are needed.

The study identifies key factors influencing the adoption of inpatient EMR: Performance Expectancy, Effort Expectancy, System Quality, Facilitating Conditions, and Habit, all of which affect Intention to Use. In turn, Intention to Use directly influences Use Behavior.

For managerial Implications based on the analysis of research hypotheses regarding the factors influencing the usage of digital transformation in the form of inpatient Electronic Medical Records (IPD EMR) at Private Hospitals in Tangerang, Banten, Indonesia, the following are the managerial implications:

Performance Expectancy (PE)

Management must ensure that the EMR system provides clear and tangible benefits to users, such as improved work efficiency and healthcare service quality. Investment in features enhancing productivity and ease of medical data access will enhance users' intention to use this system. Conduct training and demonstrations for staff regarding the direct benefits of EMR usage to enhance their performance.

Effort Expectancy (EE)

Management must ensure that the EMR system is easy to use and does not add to the workload of the staff. A user-friendly system will encourage staff to use this technology more frequently. Adopt intuitive user interfaces and provide quick and responsive technical support to address user issues.

System Quality (SQ)

High system quality, including reliability, speed, and security, is crucial for enhancing user intention. Management should focus on maintaining and improving the quality of the EMR system. Conduct routine audits and system maintenance, as well as ensure reliable data backups and protection against cybersecurity threats.

Facilitating Condition (FC)

Management needs to ensure that adequate infrastructure and support are available to support EMR usage. This includes training, technical resources, and easy access to required hardware and software. Provide ongoing training, ensure the availability of necessary hardware, and build an IT team capable of providing technical support whenever needed.

Habit (H)

User habits play a crucial role in enhancing the intention to use EMR. Management should encourage the formation of technology usage habits through regular programs and reminders. Conduct periodic training sessions and provide incentives for users who consistently use EMR.

Intention To Use (ITU) towards Use Behavior (UB)

To translate intention into actual behavior in EMR usage, management must motivate users and provide appropriate encouragement for them to apply their intentions into action. Utilize change management strategies such as rewarding staff who actively use EMR and regularly monitor and evaluate EMR usage.

The theoretical implications of this study are threefold. First, it strengthens the UTAUT model by providing empirical evidence that Performance Expectancy, Effort Expectancy, System Quality, Facilitating Conditions, and Habit influence Intention to Use, which in turn affects Use Behavior. Second, it contributes to theory development by offering opportunities to expand existing models with additional variables in the context of healthcare digital transformation. Third, it provides an empirical contribution through data from private hospitals in Tangerang, Banten, Indonesia, thereby enhancing understanding of factors influencing technology adoption in the healthcare sector and enriching the scholarly literature on healthcare technology adoption.

4.1. Future Work

Future research can expand by involving multiple healthcare institutions in different regions, including both government and private hospitals, and other healthcare workers like nurses and administrative staff.

4.2. Limitation

This study is limited to private hospitals in Tangerang and only involves medical doctors as respondents. Broader scope including nurses and cross-location comparisons were not included.

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