

Examine the Obstacles to RME Implementation with the PIECES Method Based on the User's Perspective

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ABSTRACT

Karel Sadsuitubun General Hospital, similar to numerous other healthcare facilities, has adopted RME. Implementing RME is essential for enhancing the effective and efficient management of risks. The approach employed in this study is qualitative description with an emphasis on case studies. Data were gathered via semi-structured, in-depth interviews involving three informants: TPPRJ officers, TPPRI, and reporting officers. Employing purposive sampling, the interviews explored six aspects, revealing seven key points concerning obstacles encountered in implementing RME at Karel Sadsuitubun Hospital. These barriers include RME system performance, system speed, features in the RME system, accuracy of system information, data integrity, technical constraints, resources and financing systems, and data security in the system. The implementation of the RME system in this hospital still faces various problems such as system performance, system speed, data integrity, technical constraints, resources and financing systems, and data security.

INTRODUCTION

The rapid development of information technology in various sectors, including the health sector, requires every hospital to apply information technology in supporting health services. One form of information technology health sector for the implementation of the RME system, but there are still several hospitals that experience obstacles in the implementation of RME. Based on the results of research (Silva & Dewi, 2023) at RST dr. Soedjono that the obstacles found in the implementation of RME are system performance, system speed, information accuracy, technical constraints, data security, output quality, data integrity, and ease of use of RME. With this, in the implementation of RME, there are still several shortcomings and problems other than to provide good quality.

Based on the results of research found from previous researchers, problems in the implementation of RME still experience many obstacles such as system performance that is not optimal, system speed that is still slow in response time, menus and features that are still lacking such as coding, technical obstacles such as lights off, internet outages and information accuracy such as blank data (Silva & Dewi, 2023).

The purpose of this study is to explore the problems of the application of RME based on the user's perspective. This research was conducted at Karel Sadsuitubun Langgur Hospital where there are still many obstacles in the implementation of Electronic Medical Records. The results of this study can be a form of qualitative evaluation for the development of RME implementation.

LITERATURE REVIEW

The existence of the RME evaluation carried out can define the good functioning of the system, namely by: (1) Assessing the technical capabilities of the entire information system (2). Assessing the success and failure of the implementation of information system operations (Agustina, 2018).

The form of evaluation in analyzing RME can be applied with various methods, one of which is PIECES is a framework method used to measure the value of a variable applied and information systems in service quality (Aditya & Jaya, 2022).

According to (Andriani, et al., 2022) Users are the main key to the success or failure of the implementation of an information system. By knowing the user's perception of the benefits felt when using RME, it can be the right information in maximizing RME. With this information, it can be considered in the further development of RME.

METHODOLOGY

The use of the method in this study is qualitative descriptive. Descriptive method involves creating a narrative description of a phenomenon in written form. This research is conducted gradually with the aim of providing a detailed picture, describing, explaining, and solving existing problems. The data will be presented in the form of descriptions that are easy to understand (Ikawati, Prisusanti, & Rusdi, 2023)

The design in this Method is a Case Study. According to Baxter & Jack, a case study is an approach that is carried out in detail about a matter applied in the health sector is RME or Electronic Medical Records.

According to Permenkes Number 24 of 2022 Article 3 Paragraph 1 concerning the implementation of RME, each Health Service Facility is required to hold an Electronic Medical Record. It has become a permanent rule in the being researched in the form of programs, activities, and others to obtain information in depth (Adlini, et al., 2022).

The collection technique used in the study was a semi-structured in-depth interview with 3 informants consisting of TPPRJ and TPPRI officers, reporting officers, and coding officers. With this, the researcher chooses to use the purposive sampling technique, by applying inclusion and exclusion criteria. The Inclusion Criteria include the use of RME for at least 1 year, medical record officers and for the Exclusion Criteria include officers who do not carry out the RME system (distribution, Assembling, filling)

RESEARCH RESULT

Based on the results of in-depth interviews with 5 Informants, namely the medical record officers themselves to be able to see an overview of the Obstacles in the application of RME with the PIECES method

Performance Aspect

Performance is an analysis of the performance of an information system and is also related to improving performance or more effective system performance results (Indrawati, et al., 2020).

The results of the interviews conducted by the researcher in this aspect are that the RME applied is still 30% such as the absence of coding, diagnosis results, and reporting. Therefore, conventional is still widely applied at Karel Hospital. This statement is supported by an interview with IT who explained that "... is still incomplete due to the lack of items for program performance..."

The appearance of the application is very easy to understand even for new officers. The process of finding patient data includes easy access, the functions of the application run according to what the officer wants, but there are still often slow application responses and errors, with this the response time still needs to be improved. This statement is supported by an interview with the Registration Officer "... It is very easy to understand, especially for new officers, but the application is sluggish and also often errors..."

Information Aspect

Information in this aspect is to see the accuracy, clarity and completeness of the information provided by the system (Prima & Adrianti, 2020)

The results of the interviews conducted by the researcher in this aspect are that the information produced is not in accordance with the needs, there are still shortcomings in the RME feature. For patient information, there are still those that have not been called accurate because there is blank data, including primary data because it does not use the patient's identity card and the one who

registers the patient is not the patient's immediate family (neighbors), apart from that it is fairly accurate because the patient is registered based on the patient's identity card. For the presentation of information that does not make it difficult for officers, the application is very easy to understand. And the information obtained cannot be trusted if the patient is not registered based on the identity card for treatment. The results of the interview with the registration officer were "... sometimes the patient's guardian comes only with a letter of introduction without bringing an identity, and we have told him to go back but his house is very far from the village. Sometimes the neighbors also deliver because the patient is in an emergency..."

Economic Aspect

The Economic aspect assesses whether the current procedures can still be increased in benefits (their usefulness) or the cost of implementation can be reduced (Huda & Megawaty, 2021)

The results of the interviews conducted by the researcher in this aspect are that the implementation of 100% RME requires a very high cost, so it is still 30% in the implementation of RME. Cost savings for filling officers, assembling officers have not saved because the source of costs needed in manual recording is in forms (all types of forms) and register notebooks. One of the reasons for the waste of cost sources is also the lack of computers. Based on the results of the rme that has been implemented, 30% can be felt the comparison between conventional and manual, namely cost savings and time efficiency. According to the results of the interview obtained from the registration officer, namely "... There are still often routine expenses for form purchases, and it's more complicated to have to record 2x because the computer is less so it takes more time..."

Control Aspect

Control is an analysis used to compare systems that are analyzed based on the integrity of the system, ease of access, and data security (Nurchayati & Husaini, 2022).

The results of the interview conducted by the researcher in this aspect are that the access rights of officers are still the same for outpatient registration officers, emergency room outpatient officers, and filling officers, namely being able to edit patient identities and register patients. Security is not good because one officer who has a Username and Password is still used by another officer. Officers who have a Username and Password are old officers for new officers who have not yet created a Username and Password. In this aspect, it is still not good enough because every Username and Password is needed for each officer to prevent the security of patient data. The following is based on the results of the interview with the registration officer is "... Very often suddenly logged out because of one account that is used together, and I think it is also unsafe because it can be accessed by many officers..."

Efficiency/Efficient Aspect

Efficiency means a relationship with the source how it can be used optimally (Sintawati & Hartati, 2020).

The results of the interviews conducted by the researcher in this aspect are that the use of RME makes it easier in terms of cost and time, but there is still a manual process. For new patients, the officer must rewrite the patient's identity on the form. Sometimes there are still frequent network problems and lights off which results in longer waiting times for patients and time to search for patient files. The following is based on the results of the interview with the registration officer, namely "... In the current time, which is already part of the electronic time is more efficient than before which is still manual but still often turns off the lights and applications that error When it is still in the service process..."

Service Aspect

The Service aspect describes the situation about the service provided by the running system. Some of the weaknesses of system data services have been identified, namely there are systems that produce inaccurate products, there are systems that produce inconsistent products, systems that produce products that are not trustworthy, and systems that are not easy to learn (Fardela & Aziz, 2023).

The results of the interviews conducted by the researcher in this aspect are a good level of accuracy in finding the patient's files and identities required by the officers. RME provides convenience in service with efficient time. RME is easy to learn and use for users. The following based on the results of the interview with the registration officer is "... I like that this electronic system is very helpful in the service process where what used to be manual was very time-consuming..."

DISCUSSION

Based on these 6 aspects from the results of the interview, the researcher summarized the obstacles in the implementation of RME at Karel Sadsuitubun Langgur Hospital formed in 8 points, namely:

1. The performance of the RME system is still experiencing obstacles because some or 30% are still manual systems such as reporting, coding, retention, and diagnostic results that are still written in the form.

Success in the development of RME is not only independent of the system that has been created. The system that is prepared must be in accordance with the needs of the user, with which the performance of the system is not yet in accordance with the needs of the user (Pratama & Darnoto, 2017).

2. RME System Speed, still experiencing network problems, lights off and applications that often crash with this slowing down the service.

Response speed, meaning how the system can respond to user commands, so with that internet access speed problems are often hampered, it is hoped that in the future there will be improvements related to problems that often occur (Franki & Sari, 2022).

3. Features in the RME system, still have incompleteness in coding, diagnostic results, and reporting.

in the operation of electronic medical record systems and also electronic medical record systems that must be equipped with features that suit user needs (Sapriadi & Lase, 2023).

It is hoped that the hospital will add features to the electronic medical record that are tailored to the needs of users to maximize the use of electronic medical records (Sapriadi & Lase, 2023).

4. Accuracy of information in the system, for patient identities is still inaccurate because there are several patients who are registered not based on the patient's identity card, and there are still frequent duplication of patient identities in different medical records.

5. Data integrity, the medical record unit has been integrated with other internal systems, namely part of the poly such as Dental, Orthopedics, Internal Medicine, Surgery, KIA, Laboratory, radiology, Cashier.

6. Technical Constraints, there are still often obstacles, namely networks, lights off and frequent errors.

7. Resources and Financing System in the system are still an obstacle due to the lack of officers in indexing. And for financing in filling, it still uses forms, medical record documents, and for registration has minimized the use of paper.

8. Data Security in the system, still experiencing obstacles where Username and Password are only owned by a few officers, namely old officers, for new officers have not been given Username and Password. Editing access rights can still be done by other officers other than the registration officer, and there is no information for the results of the edits made.

CONCLUSIONS AND RECOMMENDATIONS

The RME system that has been partially implemented still suffers from shortcomings and many obstacles such as performance in the system, speed in the system, data integrity, technical constraints, resources and financing systems, as well as data security.

The suggestion given in this study is that the results summarized by the researcher can be used as material for evaluation related to the shortcomings and obstacles found so that it is easier to develop RME.

ADVANCED RESEARCH

Based on the results of this study, the researcher believes that there are still many shortcomings and incompleteness, such as the lack of data presentation in the form of diagrams or more detailed informant quotes, therefore it is hoped that future researchers will be able to make a more detailed presentation of data in the form of diagrams and informant quotes in order to maximize the results of the research.

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