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EVALUATION OF THE TRAN MEDIC APPLICATION ONLINE IN OUTPATIENT PATIENT REGISTRRTION AT ROYAL PRIMA GENERAL HOSPITAL MEDAN

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Abstrak

Pengelolaan data dan pelayanan pendaftaran merupakan komponen penting dalam mendukung sistem informasi rumah sakit. Pendaftaran online berbasis aplikasi Trans Medic merupakan sistem berbasis web yang memungkinkan digunakan secara bersamaan oleh beberapa pengguna. Penelitian ini bertujuan untuk mengevaluasi penggunaan aplikasi Trans Medic secara online dalam proses pendaftaran pasien rawat jalan di Rumah Sakit Umum Royal Prima Medan. Penelitian ini menggunakan pendekatan kualitatif dengan rancangan studi kasus. Informan dalam penelitian berjumlah sepuluh orang, terdiri dari satu staf pejabat, empat petugas pendaftaran, dan lima pasien. Pengumpulan data dilakukan melalui wawancara mendalam dan dianalisis menggunakan tahapan reduksi data, penyajian data, serta penarikan kesimpulan. Hasil penelitian menunjukkan bahwa hambatan yang dihadapi dalam penggunaan aplikasi adalah gangguan jaringan dan error aplikasi yang menyebabkan ketidakmampuan akses oleh pasien maupun petugas. Meskipun demikian, sumber daya manusia yang mengelola aplikasi dinilai sudah memadai dan memiliki pengetahuan serta keterampilan yang dibutuhkan. Aplikasi ini memberikan manfaat signifikan berupa kemudahan pendaftaran bagi pasien dan efisiensi kerja bagi petugas. Selain itu, Standar Prosedur Operasional (SPO) terkait penggunaan aplikasi telah tersedia dan berjalan dengan efektif.

Kata Kunci: *Aplikasi Trans Medic, online, sistem informasi, pelayanan, evaluasi sistem*

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Abstract

Data management and registration services are important components in supporting hospital information systems. Trans Medic application-based online registration is a web-based system that allows simultaneous use by multiple users. This study aims to evaluate the use of the Trans Medic online application in the outpatient registration process at Royal Prima Medan General Hospital. This research used a qualitative approach with a case study design. The informants in the study totaled ten people, consisting of one official staff, four registration officers, and five patients. Data were collected through in-depth interviews and analyzed using the stages of data reduction, data presentation, and conclusion drawing. The results showed that the obstacles faced in using the application were network disruptions and application errors that caused inability to access by patients and officers. Nevertheless, the human resources who manage the application are considered adequate and have the required knowledge and skills. This application provides significant benefits in the form of ease of registration for patients and work efficiency for officers. In addition, Standard Operating Procedures (SPO) related to the use of the application are available and running effectively.

Keywords: Trans Medic application, online, information system, service, system evaluation

INTRODUCTION

The era of digitalization in the health sector has fundamentally changed the paradigm of medical services, with public demands for access to fast, efficient, and quality services increasing (Nurhayati et al., 2022). This transformation is becoming increasingly relevant given the increasing mobility of the population and expectations for responsive health services (Imania Halwa El et al., 2021). This study aims to assess the effectiveness of the implementation of the online registration system at RSU Royal Prima Medan, which represents the adaptation efforts of private hospitals to the digitalization of health services in the Indonesian context. The state has a constitutional obligation to guarantee the basic rights of citizens to adequate and equitable health services, as mandated in the 1945 Constitution (Maulana & Avrillina, 2024). Hospitals, as primary health care institutions, play a strategic role in realizing the optimal quality of public health (Adam Anshari & Hasbullah, 2019). As an integral component of the public service



system, hospitals are required to meet public expectations for responsive and efficient services (Listiyono, 2015). However, the implementation of health services in hospitals faces significant challenges, especially the problem of prolonged queues in the registration process which hampers the overall efficiency of services (Adam Anshari & Hasbullah, 2019). Registration is the main gate in the flow of hospital services, both for outpatients, inpatients, and emergency units (Daroin et al., 2024).

The predominantly manual registration system exhibits significant structural weaknesses. These limitations include slow processes, high potential for data input errors, and reliance on limited human resources, which collectively affect service accuracy and efficiency (Razali, 2024). The consequence of this system is prolonged waiting times and accumulation of patients in waiting rooms, which contributes to patient dissatisfaction with hospital services (Prisusanti et al., 2024). Empirical studies in various hospitals show that registration waiting times can reach more than 60 minutes, far exceeding the standard service time set by the Indonesian Ministry of Health, which is 2-4 minutes depending on patient status. This disparity indicates an urgent need for technology-based solutions to optimize the registration process (Erni Okta & Antik, 2021). With these challenges, a web application-based online registration system emerged as a promising solution to improve the quality of hospital services (Wahyuni & Qotimah, 2022). This technology allows patients to register from any location without the need for physical presence at the hospital, thus reducing physical queues and accelerating service flow (Waworuntu et al., 2023).

The advantages of online registration systems include efficient data processing and storage and minimization of the risk of data input errors (Widjaja et al., 2021). Various studies have demonstrated that the implementation of online registration contributes to increased patient satisfaction, service transparency, and waiting time efficiency (Wijaya et al., 2025). The successful implementation of this system depends on supporting factors such as socialization to the community, technological infrastructure readiness, and user digital literacy (Imania Halwa El et al., 2021). RSU Royal Prima Medan, as one of the leading private hospitals in Medan City, has implemented an online registration system through the Trans Medic application in an effort to improve service quality. The hospital is committed to providing high-quality services to all segments of the community. Based on the initial observation, the online registration system can currently be accessed by existing patients who already have a medical record number, with features such as doctor selection and automatic queue



number assignment (Ngundju Awang et al., 2023; Sudarmanto et al., 2023). However, the implementation of this system faced several operational challenges that required comprehensive evaluation. These include the low success rate of online registration, the no-show phenomenon, and cases of patients not receiving services despite having registered online. This indicates a gap between the potential of the technology and its practical implementation in the field (Sihombing et al., 2025; Wijaya, 2024).

Therefore, this study aims to conduct a comprehensive evaluation of the effectiveness of using the Trans Medic application in outpatient registration at RSU Royal Prima Medan. This evaluation will identify barriers to implementation, analyze factors that affect system effectiveness, and formulate recommendations for improvement to optimize the use of online registration technology in improving the quality of health services.

LITERATURE REVIEW

Outpatient registration is a fundamental process that determines the quality of the overall patient experience in a hospital service system. This process includes collecting patient demographic data, verifying identity, filling out medical forms, and assigning queue numbers for doctor consultations (Lopulalan & Haryadi, 2022). As the first point of contact between patients and the service system, the effectiveness of the registration process has a direct impact on patients' perceptions of hospital service quality. Service standards set by the Indonesian Ministry of Health stipulate an ideal registration time of a maximum of 4 minutes for new patients and 2 minutes for existing patients (Anggara et al., 2022). Non-compliance with this standard indicates the need for innovation in the registration system to improve efficiency and accelerate patient access to needed medical services (Wulandari et al., 2024).

Queuing and waiting time problems are systemic phenomena in health care that have multidimensional implications for service quality. Prolonged waiting times not only reduce patient satisfaction but also impact on hospital operational efficiency and institutional image (Aseha et al., 2023). Empirical studies show that the average waiting time from registration to doctor examination in various hospitals can exceed 60 minutes, far beyond the ideal standard set (Liputra et al., 2022). Factors that contribute to this problem include limited administrative staff, inefficient manual recording systems, the risk of patient data recording errors, and duplication of information. This condition requires a system that is able to overcome queuing problems systematically and efficiently, so that patients



can receive services with shorter waiting times and a more positive service experience (Nugroho & Pramudita, 2024).

The digital revolution in the healthcare sector has catalyzed a fundamental transformation in information management and patient services through an online registration system that allows patients to register remotely using internet-connected devices (Nugroho & Pramudita, 2024). This system aims to cut waiting times, reduce crowds in the registration area, and improve the work efficiency of administrative staff. Web-based online registration technology allows integration with the Hospital Information System (SIMRS), thus accelerating the workflow from registration to medical services (Seta et al., 2023). The online system also makes it easy for patients to choose the desired visit schedule and doctor, and increases service transparency because patients can see doctor information and practice schedules directly. This digital transformation is expected to be a solution to various manual service barriers that have been the main complaints of patients (Rohman & Marsilah, 2022).

Various studies have shown that online registration systems have significant benefits in improving efficiency and patient satisfaction. Fajrini et al. (2022) mentioned that the implementation of a web-based appointment system (WAS) was able to drastically reduce waiting times in public hospitals in China. Research by Cao et al. in Imania Halwa El et al. (2021) also found that online registration increased patient satisfaction with the service process and decreased the number of no-show patients. In addition to shortening registration time, the system also increases transparency and allows patients to access real-time information regarding doctor schedules and the availability of consultation slots (Septian, 2021). The effectiveness of the online registration system is highly dependent on the level of socialization to patients, the availability of adequate technological infrastructure, and the ability of users to access digital technology (Farika Zulfa & Ervi Rachma, 2019).

Despite its significant potential benefits, the implementation of an online registration system faces various challenges that can hinder its effectiveness. One of the main obstacles is the lack of socialization from the hospital to patients about the existence and use of the system (Wahyuni & Qotimah, 2022). Limited digital literacy among patients, especially the elderly, is a challenge in itself because they are more comfortable using manual registration methods. Technical problems such as application glitches, data input errors, and schedule mismatches are also common and can reduce patient trust in the system (Nisa et al., 2023). There are also many patients who have registered online but still do not get services due to



mismatches between registration data and actual service systems. Hospitals need to conduct a thorough evaluation, not only on technical aspects, but also on organizational and human resource readiness in supporting the sustainability of the online registration system (Septian, 2021).

RSU Royal Prima Medan as one of the large private hospitals in Medan City has implemented an online registration system using the Trans Medic application which is designed to facilitate existing patients to register independently by choosing a doctor and getting a queue number directly. Although it has been implemented, there are still some problems in its implementation, such as many patients who still choose manual registration, failures in the registration process, and discrepancies between registration and services received. This indicates a gap between the system and the realization in the field, which requires a comprehensive evaluation. An evaluation of the effectiveness of the Trans Medic application is essential to understand the extent to which the system helps speed up service and improve patient satisfaction. This evaluation is also the basis for management to make system improvements, improve service quality, and design a more comprehensive and inclusive digital implementation strategy to optimize the use of technology in improving the quality of health services.

RESEARCH METHODS

This research uses a qualitative approach with a case study design that aims to evaluate the use of the Trans Medic online application in the outpatient registration process at RSU Royal Prima Medan (Hardani et al., 2020). The case study was chosen as a research design due to its ability to explore in-depth and comprehensive information about contemporary phenomena in a real-life context, especially in understanding the complexity of implementing an online registration system in a hospital environment. The research was conducted at RSU Royal Prima Medan from November to December 2022.

Informants were selected using a purposive sampling technique with specific predetermined criteria to ensure comprehensive data representation. The criteria for selecting informants included: (1) for PPID staff - having at least 2 years of experience in managing hospital information systems; (2) for registration officers - having direct experience in operating the Trans Medic application for at least 6 months and handling an average of 20-30 patients per day; (3) for patients - having used the Trans Medic application at least 3 times in the last 6 months and aged 18-65 years to ensure adequate technological capabilities. The total number of informants

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in this study was 10, consisting of one PPID staff member (10%), four registration officers (40%), and five patient app users (50%). This proportion was chosen to provide a balance of perspectives between service providers and end users of the system.

Data collection was conducted through triangulation of methods including in-depth interviews, direct observation and documentation. In-depth interviews were conducted using a validated structured interview guide, with a duration of 45-60 minutes per informant. Direct observation was conducted for 2 weeks to observe the online registration process and user interaction with the Trans Medic application. Documentation was conducted by collecting secondary data in the form of application usage reports, operational guidelines, and system technical documentation. The entire data collection process was conducted following strict ethical research protocols, including obtaining research permits, ethical clearance, and obtaining informed consent from all informants.

To ensure the validity and reliability of the research, several verification strategies were applied including: (1) source triangulation by comparing data from various informants, (2) method triangulation by combining interviews, observations, and documentation, (3) member checking by verifying data interpretations with key informants, (4) peer debriefing by involving other researchers to discuss findings and interpretations, and (5) audit trail by systematically documenting the entire research process. The credibility of the research was also strengthened through prolonged engagement in the field and persistent observation to understand the research context in depth. All data validity procedures were carried out consistently throughout the research process to ensure the quality and trustworthiness of the research findings.

RESULTS AND DISCUSSION

This study involved 10 informants, consisting of 1 PPID staff, 4 registration officers, and 5 patients using the Trans Medic application at RSU Royal Prima Medan. The results show that the main obstacles in using the online Trans Medic application in the outpatient registration process are network disruptions and system errors (errors) when accessing the application. These obstacles were experienced by both staff and patients, resulting in delays in the registration process and reduced service efficiency. One informant stated that network problems and application errors are the main obstacles in daily operations. Officers also reported that these technical constraints reduced patients' mobility and convenience in using the service. However, the hospital has taken steps to deal with these



issues by involving the IT team and organizing training for staff to resolve problems quickly. This is an important concern in the future development of the hospital's information system.

RSU Royal Prima Medan has implemented several corrective measures when there are problems in using the Trans Medic application. One of the strategies is to evaluate and repair the system immediately when problems are found. Regular evaluation of application performance and usage is also part of the service improvement efforts. Informants mentioned that the hospital always responds quickly to any technical issues that arise. An informant stated: "RSU Royal Prima Medan always routinely conducts evaluations; if there are problems, usually improvements are made to the system immediately." This is possible because the hospital has an internal IT team that is competent and responsive to technical issues. The existence of professional IT personnel is one of the main supporting factors in maintaining the sustainability and stability of the Trans Medic application system. This effort shows the hospital's commitment to maintaining the quality of digital-based services on an ongoing basis.

The results showed that the needs of human resources (HR) in using the Trans Medic application at RSU Royal Prima Medan were well met. The human resources involved in the application operation are considered to be in accordance with the required service standards, especially in the online outpatient registration process. Informants said that the number and competence of officers are currently sufficient. One informant stated: "HR needs have met the required standards." In addition, the hospital also provides training to officers to improve technical skills in operating the application. This was reinforced by another informant's statement: "Already, because human resources have been provided with trainings in the use of the Trans Medic application." The availability of competent and trained human resources is one of the important factors in supporting the smooth implementation of information technology in hospital services effectively and efficiently.

The human resources responsible for the operation of the Trans Medic application at RSU Royal Prima Medan are considered to have met the necessary criteria, both in terms of knowledge and technical ability. The officers assigned to this section have the appropriate competence in operating the application system, so as to support the smooth process of online outpatient registration. One informant said: "Already, because the officers who run the Trans Medic application are officers who are competent and have knowledge in using the Trans Medic application." In addition, the hospital actively conducts training to improve the quality and



skills of officers. This is also reinforced by another informant's statement: "It is because the human resources who work in the Trans Medic application section are human resources who have the ability to use the Trans Medic application, besides that the hospital continues to provide training to officers." This effort reflects the commitment of RSU Royal Prima Medan in developing HR capacity on an ongoing basis.

The use of the Trans Medic application provides significant benefits for officers at RSU Royal Prima Medan, especially in facilitating the administrative work process of outpatient registration. Officers feel that this application is able to improve work efficiency and speed up the service process. One informant stated: "It is very helpful because the Trans Medic application can make the work easier for officers." Ease of use is also a supporting factor for the successful implementation of this application. The menu in the Trans Medic application is considered intuitive and visually appealing, making it easier for officers to navigate and input data. Another informant added: "The menus are easy to use and the display is attractive and informative." Overall, this application provides operational convenience that has a positive impact on officer performance. This proves that the Trans Medic application does not only function as a technical tool, but also as an effective and efficient means of supporting health services.

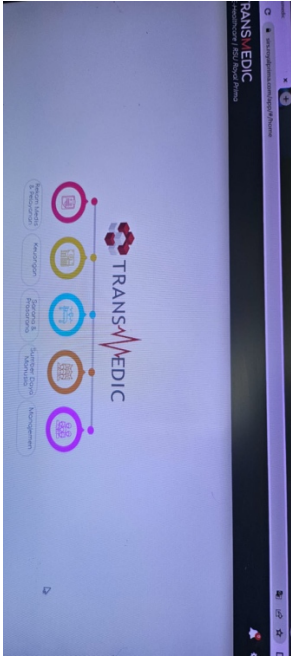
The benefits of the Trans Medic application are not only felt by officers, but also by patients as the main users. This application provides convenience in the online registration process, so patients no longer need to queue manually. This was conveyed by one of the informants: "So far I feel very helped." In addition to the ease of registration, patients also appreciate the application's interface, which is considered easy to access and provides complete information. Another informant stated: "Very easy and complete." The app makes it easier for patients to obtain information on medical services, including practice schedules and the types of services available at RSU Royal Prima Medan. The Trans Medic app improves patients' convenience in accessing health services. This positive patient experience is an indicator that the digitization of services through the Trans Medic application provides significant added value in supporting faster, more transparent and organized outpatient services.

According to patients, the advantages of the Trans Medic application are very significant in supporting more efficient health services. Patients feel facilitated in accessing information and scheduling medical examinations without having to come directly to the hospital. The informant stated: "Very helpful, where with the Trans Medic application I can easily get information about health and arrange a schedule to do an

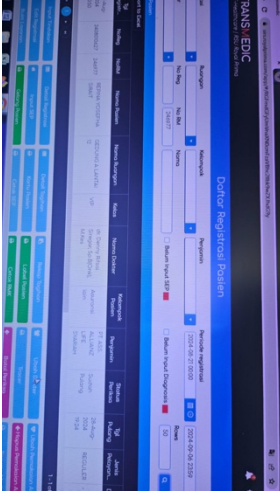
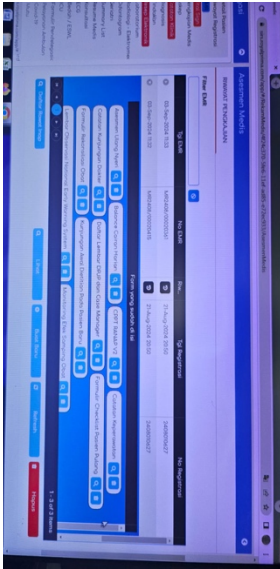


examination with a doctor.” Another informant also emphasized that the information available in the application is very complete and easy to access: “The information on the Trans Medic app can be easily accessed and the information displayed is also complete and accurate.” These findings suggest that the Trans Medic app makes a positive contribution not only in improving staff work efficiency, but also in improving patient satisfaction and convenience. This application successfully integrates digital service functions that are responsive to user needs within RSU Royal Prima Medan.

Table 1. Trans Medic Interface Documentation

Figure/Screenshot	Interface Description	Usage Phase	Detail Description
	Trans Medic Home Page Shows the main dashboard of the Trans Medic application with the system logo and 5 main navigation menus consisting of: Medical Records & Administration (pink icon), Finance (yellow icon), Facilities & Infrastructure (light blue icon), Human Resources (orange icon), and Management (purple icon). The interface uses a user-friendly design with easily identifiable icons.	Before Login/Early Access	The URL shows the application's home page (sirs.royalprima.com/app/#/home). This view is the main gateway to access the various modules of the hospital information system.
	Patient Registration List page Interface displays a comprehensive table for patient registration	During Use/Operation	The system displays real-time data of patients with active status. There are



	<p>management with search features by room, group, guarantor, and registration period. There are patient data with complete information such as Reg No., RM No., Patient Name, Room Name, Class, Doctor Name, Patient Group, Guarantor, Check Status, and Discharge Time. The date filter shows the period from 2024-06-21 to 2024-09-06.</p>		<p>advanced search and filter features that make it easier for officers to manage outpatient registration.</p>
	<p>Medical Assessment Page - Enforcement History
Interface displays the medical assessment module with a focus on diagnosis enforcement history. There is an EMR filter and a table showing EMR Date, EMR No, History, Registration Date, and Registration No data. The bottom section displays pre-filled forms with various assessment checklists such as "Pain Reassessment", "Daily Nutrition Plan", "Membership Screening", etc. with a check status indicating data completeness.</p>	<p>During Medical Data Usage/In put</p>	<p>The system demonstrates the ability to track patient medical history with accurate timestamps. Structured assessment forms facilitate medical personnel in complete and systematic documentation .</p>



The results showed that RSU Royal Prima Medan has established a specific Standard Operating Procedure (SPO) in using the Trans Medic application. The existence of this SPO was recognized by all informants from the hospital management as a guide in the implementation of online patient registration. The SPO regulates the registration flow from the initial access by the patient to the direct service process at the hospital. Informant 1 explained: "For the SPO itself, the initial registration is done by the patient by accessing the Trans Medic application, which after coming to the hospital, the officer will immediately provide services to patients who have first registered on the Trans Medic application." The existence of this SPO is an important guideline for officers in carrying out the online registration system consistently and according to standards. It also supports a service process that is faster, structured, and responsive to patient needs in the digital era.

Evaluation of the effectiveness of the implementation of Standard Operating Procedures (SPO) in the use of the Trans Medic application showed positive results. All informants from the management of Royal Prima Medan Hospital stated that the implementation of the SPO had been running effectively. The implemented SPO is considered to have been able to support the smooth process of online outpatient registration, in accordance with the initial objective of accelerating and simplifying services. This shows that RSU Royal Prima Medan not only has a written system, but has also implemented it consistently in daily operational practices. Based on the interview data, it can be concluded that the implementation of a structured and optimally executed SPO is one of the key factors in the successful implementation of the Trans Medic application. This effectiveness also shows the hospital's readiness to face the digitalization of health services more broadly and sustainably.

Technical Barriers in Application Implementation

The main obstacles in implementing the Trans Medic application at RSU Royal Prima Medan lie in the technical aspects, especially network constraints and frequent errors in the system when used by officers and patients. This problem is a big challenge because it can affect the efficiency and effectiveness of outpatient registration services. This is in line with the opinion of (Shamim-Uzzaman et al., 2021) which states that the implementation of telehealth systems in various health facilities often faces significant technical and operational obstacles. However, RSU Royal Prima Medan showed an adaptive response by conducting regular system evaluations and improvements. The existence of a competent IT team



allows improvements to be made quickly and precisely. This effort reflects the hospital management's commitment in supporting the implementation of digital technology as part of the transformation of health services oriented towards improving service quality and patient comfort.

Suitability of Human Resources with Application Needs

The need for human resources (HR) in using the Trans Medic application at RSU Royal Prima Medan shows satisfactory results. Based on the interview results, the available human resources have met the needs both in terms of number and relevant competencies. This is reinforced by the regular training provided to officers, so that they have the skills needed in operating the application. This finding is consistent with research (Harry et al., 2022) at RSU Muhammadiyah Siti Aminah Bumiayu which also noted the fulfillment of HR needs in digital services. In contrast, these results differ from the findings of (Girsang & Ginting, 2024) and (Antonius Garbitto, 2020) which state that the quality and quantity of human resources are still a challenge in the development of digital-based health services. This difference can be explained by the management strategy of RSU Royal Prima Medan which emphasizes the importance of training, competency development, and proper placement of the workforce according to service needs.

Application Benefits for Health Workers

The use of the Trans Medic application provides tangible benefits for officers at RSU Royal Prima Medan, especially in terms of work efficiency and easy access to information. This application allows officers to perform various service activities in a faster and more organized manner without having to open multiple systems. User-friendly and informative features support smooth workflow, including in the registration process, checking patient data, and printing important documents such as BPJS SEP. These results are in line with research (Aurel & Syaikhul, 2024) which emphasizes that digitalization through Trans Medic is able to support service decentralization, allowing services to be integrated in one application. Officers feel helped because the administrative burden becomes lighter and service time is more efficient. The implementation of the Trans Medic application also reflects the hospital's readiness to adopt information technology as part of a more responsive, fast and integrated service strategy.



Patient Perception of the Application

Patients as the main users of the Trans Medic application gave positive responses to the ease and benefits of using this application. The application is considered to facilitate the registration process without having to come directly to the hospital, reduce waiting time, and provide access to complete medical information. Information about doctors' schedules and available services can be accessed directly through the app, helping patients to plan visits more efficiently. This finding is consistent with research (Aurel & Syaikhul, 2024) which shows that online reservations through the app can reduce onsite queues and increase the availability of registration quotas at each polyclinic. This concept is also in line with the theory of service effectiveness according to (Novitasari & Fatmasari, 2018), which emphasizes the importance of services that are consistent, relevant, and tailored to local needs. The Trans Medic application has shown that digitizing services can improve patient satisfaction and accelerate access to health services.

Alignment with Global Digitalization Trends

The implementation of the Trans Medic application at RSU Royal Prima Medan reflects conformity with global trends in healthcare digital transformation. As stated by (Pooni et al., 2022) and (Omboni et al., 2020), telemedicine and digital-based healthcare applications are increasingly in demand due to their ability to improve efficiency and expand access to services. Features such as visit schedule selection, doctor assessment, and access to health information are becoming an important part of modern service systems. The Trans Medic app has accommodated these needs with an informative, accessible, and relevant interface. Through this system, patients are not only recipients of services, but can also play an active role in determining the choice of appropriate health services. Thus, RSU Royal Prima Medan shows readiness in adapting to technological changes and patient needs, while emphasizing its position as a progressive and quality-oriented health institution.

SPO Effectiveness in Application Implementation

The successful implementation of the Trans Medic application at RSU Royal Prima Medan cannot be separated from the role of Standard Operating Procedures (SPO) that are effectively implemented. This SPO is the main guideline in the online patient registration process and ensures that each stage of service runs according to predetermined standards. In accordance with the opinion of (Tami et al., 2021), SPO is an important element in ensuring consistency and quality of service in health institutions.



RSU Royal Prima Medan has compiled and implemented a comprehensive SPO in using the application, including the flow of registration, data verification, to direct services on site. The consistency of SPO implementation also reflects the management's commitment in maintaining the quality of digital services based on procedures. This SPO implementation plays a major role in minimizing errors, speeding up the service process, and increasing patient and officer satisfaction. Thus, SPO is an important foundation in structured and sustainable service digitalization.

CONCLUSION

Based on the research results regarding the evaluation of the use of the Trans Medic online application in outpatient registration at RSU Royal Prima Medan, it can be concluded that this application still faces obstacles, especially related to network constraints and system errors that cause inability to access both from the patient and officer side. Nonetheless, RSU Royal Prima Medan has adequate human resources (HR), with appropriate skills and knowledge, supported by regular training conducted by the hospital.

The use of the Trans Medic application has proven to provide significant benefits for both patients and staff. Patients experience convenience in the registration process and access to health services, while staff gain work efficiency through this digital system. The hospital has established Standard Operating Procedures (SPO) that support the effective implementation of the application and have been well executed. The strength of this study lies in its focus on directly evaluating the implementation of a digital health information system in a hospital setting. However, this study also has weaknesses, namely the limited scope of respondents and the lack of in-depth technical testing of the application system. Therefore, in the future, further technical evaluation and expansion of respondent participation are needed to obtain a more comprehensive picture.

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