

Research Article

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Management of the Outpatient Registration Service in Marthen Indey Hospital Jayapura

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Abstract: *When patients visit a hospital, the first place they go to is the outpatient registration area. This is where patients form their first impression of the hospital, so the process must run smoothly. Unfortunately, this is often not the case. Patients may experience long wait times, queue number issues, and computer errors, which can lead to frustration and complaints. To gain a better understanding of the outpatient registration process, we conducted a qualitative research study at Marthen Indey Hospital in Jayapura. We interviewed staff and observed the process in action. Our findings showed that patients had to register in person, and there were several issues with the system. For example, the queuing machine didn't differentiate between polyclinics, which caused long queues to build up. This, in turn, increased wait times for patients. Despite these challenges, we found that the outpatient registration process at Marthen Indey Jayapura Hospital was in line with standard operating procedures for new and returning patients. However, we believe that there is room for improvement. By addressing these issues and finding solutions, we can improve the patient experience and ensure that the hospital provides the best possible care.*

Keywords: *Management, Hospital, Registration, Outpatient.*

Introduction

Outpatient services are critical to a hospital's operations, as they provide immediate access to healthcare without the need for prolonged admission. Among these services, the outpatient registration system stands as a cornerstone of patient experience, especially as it is typically the first point of contact for individuals seeking medical assistance. A seamless and efficient registration process not only reflects the hospital's operational excellence but also significantly influences patient satisfaction and perception of care quality. Marthen Indey Hospital, located in Jayapura, Indonesia, serves as a prominent healthcare institution for the region, catering to a diverse patient population with varying needs and healthcare backgrounds. However, like many healthcare facilities, Marthen Indey faces challenges in managing its outpatient registration efficiently, which impacts patient flow, satisfaction, and overall service delivery.

According to the Indonesian Ministry of Health's regulation (Permenkes No. 3 of 2020), hospitals are expected to provide a comprehensive range of services, including outpatient, inpatient, and emergency care, all of which must adhere to set standards to ensure patient safety and satisfaction. These regulations emphasize the importance of structured and efficient processes in healthcare facilities, particularly in areas where patients engage with the system frequently, such as outpatient registration. Hospitals are mandated not only to meet basic healthcare needs but also to establish systems that align with technological advancements, patient rights, and service quality standards. However, despite the growing emphasis on healthcare quality, many hospitals struggle to meet these standards due to infrastructure limitations, staffing shortages, or outdated processes, especially in regions with limited healthcare resources.

At Marthen Indey Hospital, the outpatient registration service has been identified as a key area needing improvement. This facility currently operates with a manual registration system that requires patients to visit in person to secure a queue number and complete their registration before receiving care.

Although this system is in line with the hospital's standard operating procedures, it presents several challenges, including lengthy wait times, inefficient queuing due to the lack of department-specific queue numbers, and technical issues with computer systems. Patients often report dissatisfaction with the registration process, citing it as time-consuming and complicated, which can be discouraging, especially for first-time visitors or those unfamiliar with hospital procedures.

The main challenges of the outpatient registration system at Marthen Indey Hospital are multifaceted, involving both operational and patient experience dimensions. Operationally, the hospital relies on a queuing machine that does not differentiate between departments, leading to congestion as patients from all clinics line up together. This system design flaw creates bottlenecks and slows down service delivery, resulting in prolonged waiting times that could otherwise be avoided. Additionally, technical malfunctions and occasional computer errors disrupt the registration process, adding to patient frustration and potentially delaying care. For patients, the current system requires a physical presence at the hospital, which can be particularly inconvenient for those traveling long distances or those with mobility issues.

Addressing these registration challenges could offer substantial benefits to Marthen Indey Hospital, improving not only operational efficiency but also enhancing patient satisfaction and care experience. With a growing emphasis on patient-centered care, it becomes crucial for hospitals to adopt more streamlined, effective, and patient-friendly systems. Alternative approaches such as department-specific queue systems, online registration options, and mobile app integrations are increasingly adopted in hospitals globally, as they offer greater convenience and faster processing. This study explores the current outpatient registration process at Marthen Indey Hospital, evaluating its efficiency and identifying areas for improvement. Through this analysis, we aim to propose solutions that align with contemporary healthcare service standards and improve the registration experience for patients, thereby contributing to Marthen Indey Hospital's goal of providing quality, accessible, and patient-centered care.

This paper aims to shed light on the various facets of outpatient registration management at Marthen Indey Hospital by examining current practices, identifying key challenges, and recommending evidence-based improvements. Through a comprehensive analysis, we seek to contribute to the understanding of outpatient registration systems in Indonesian hospitals and provide actionable insights that can be adapted to enhance patient experience and optimize hospital operations.

Literature Review

The outpatient registration system in hospitals is a vital element of healthcare management, serving as the first point of interaction between patients and healthcare providers. A well-structured and efficient registration process is essential for managing patient flow, reducing wait times, and ensuring that clinical services are delivered smoothly. Numerous studies have examined the impact of outpatient registration on overall hospital efficiency, patient satisfaction, and quality of care. This section reviews relevant literature on the components, challenges, and advancements in outpatient registration systems, with a particular focus on developing countries where resource constraints often influence the efficiency of hospital services.

Importance of Outpatient Registration in Healthcare Delivery

Outpatient registration serves as the initial step in the patient care process, which involves capturing patient information, verifying eligibility, assigning medical records, and managing queues. The role of an efficient outpatient registration system is not only administrative but also critical for clinical safety, as it

ensures that patient information is accurate and accessible to healthcare providers throughout their visit (Smith et al., 2019). Studies have shown that streamlined registration procedures reduce bottlenecks, improve clinic capacity, and allow for better time management by healthcare professionals (Williams & Marlowe, 2020). In contrast, ineffective registration systems often result in patient frustration, longer wait times, and decreased overall satisfaction with hospital services, highlighting the importance of addressing inefficiencies in registration processes (Jones et al., 2021).

Challenges in Outpatient Registration Systems

Many hospitals, especially in developing countries, face significant challenges in managing outpatient registration efficiently. These challenges stem from limited resources, inadequate infrastructure, and outdated technology, all of which contribute to delays in patient processing and difficulties in data management. According to a study by Patel et al. (2021), hospitals with manual or semi-automated registration systems frequently experience issues such as long waiting times, overcrowded registration areas, and frequent disruptions due to technical malfunctions. Additionally, studies indicate that manual systems lack the flexibility needed to manage high patient volumes, as they require patients to physically wait in line, which can be particularly problematic for elderly patients or those with disabilities (Kim & Lin, 2022).

In the context of Indonesian hospitals, similar challenges have been documented. Research conducted by Anggraeni and Widodo (2020) on outpatient registration in public hospitals revealed that patients often face long queues and confusion about the registration process due to the lack of clear guidelines and department-specific queuing systems. These challenges underscore the need for a more structured approach that can accommodate the growing patient load and improve the accessibility of outpatient services. Moreover, inadequate staff training and lack of technological support exacerbate the problem, as employees struggle to manage patient data effectively under a manual system (Rahayu et al., 2021).

Technological Advancements in Registration Systems

With advancements in health information technology, hospitals worldwide are increasingly adopting electronic and digital registration systems to enhance efficiency and patient experience. Digital solutions, such as online registration portals, mobile applications, and self-service kiosks, allow patients to complete registration forms, upload required documents, and select their preferred appointment times remotely, thereby reducing the need for in-person visits (Chowdhury et al., 2022). Such systems not only streamline the registration process but also improve data accuracy and minimize errors associated with manual data entry (Alfaro et al., 2020).

In particular, the use of mobile applications has gained traction in countries with widespread smartphone usage. Research by Lee and Cho (2023) suggests that mobile-based registration systems can significantly reduce waiting times and improve patient satisfaction by allowing users to complete registration before arriving at the hospital. Additionally, department-specific queuing systems, where patients receive a queue number based on their clinic choice, have proven effective in managing patient flow and preventing overcrowding in centralized registration areas (Mendoza & Alvarez, 2021). This approach allows hospitals to better allocate resources by anticipating patient volume in specific departments and enables faster service provision.

However, the transition to digital systems is not without its challenges, particularly in low-resource settings. Studies indicate that implementing digital registration systems in hospitals requires significant financial investment and technological expertise, which may be out of reach for smaller facilities in developing regions (Nguyen & Tran, 2022). In Indonesia, for example, while some hospitals in urban areas have adopted online registration and department-specific queuing systems, many rural hospitals continue to rely on manual processes due to limited funding and technological support (Suharto & Iskandar, 2020). Therefore, while technological advancements offer promising solutions, their feasibility in developing countries is contingent upon factors such as government support, infrastructure availability, and staff readiness.

Patient-Centered Approaches in Outpatient Registration

Recent literature emphasizes the importance of patient-centered approaches in outpatient registration systems. These approaches prioritize the convenience and needs of patients, aiming to make the registration process less time-consuming and more transparent. Studies have shown that patient-centered registration practices—such as clear communication, easy-to-navigate procedures, and accessible options for vulnerable populations—lead to higher levels of patient satisfaction (Baker et al., 2021). By focusing on the patient's experience from the moment they enter the hospital, healthcare facilities can foster a more welcoming environment that alleviates the stress commonly associated with hospital visits.

Patient education is another critical component of a patient-centered registration system. In hospitals with complex registration processes, patients often benefit from clear instructions on registration steps, queue number systems, and departmental navigation. Research by Fernando and Li (2021) suggests that hospitals should invest in patient education materials, such as brochures and informational videos, to guide individuals through the registration process. This is especially relevant in multicultural settings, where language barriers may hinder understanding and increase frustration. Providing multilingual support and easy-to-read materials can greatly enhance the registration experience, making it more inclusive and accessible for all patients (Gomez & Silva, 2022).

Outpatient Registration in the Indonesian Healthcare Context

In Indonesia, the management of outpatient registration varies widely across hospitals, influenced by factors such as geographic location, hospital type, and available resources. Studies on outpatient registration in Indonesian hospitals indicate that although larger hospitals in urban areas may offer digital registration options, smaller facilities and rural hospitals are often limited to manual registration systems (Putra & Hartanto, 2019). A study by Setiawan and Nugroho (2020) on public hospitals in Indonesia found that, while hospitals in metropolitan areas had begun to implement queue management systems and online appointment scheduling, the majority of facilities in rural areas were constrained by budget limitations and staffing shortages.

Indonesian government initiatives aimed at improving healthcare accessibility have highlighted the need for enhanced outpatient services, particularly in underserved areas. The introduction of national health insurance (BPJS) has increased the number of patients seeking outpatient services, placing additional strain on hospital resources and underscoring the importance of an efficient registration process. However, limited budgets and infrastructure have slowed the adoption of digital systems in many regions, leaving hospitals reliant on traditional registration methods that often struggle to meet patient demand (Fauzi et al., 2022).

Method

This study employs a descriptive qualitative approach to assess the management of outpatient registration services at Marthen Indey Hospital in Jayapura. A descriptive method is used to provide an in-depth examination of the current registration processes, patient experiences, and operational challenges within the hospital's outpatient department. The aim is to capture a comprehensive view of the system as it functions in practice, identifying both strengths and areas for improvement based on firsthand observations and feedback from stakeholders involved in the registration process.

Research Design

A qualitative descriptive research design was selected for its suitability in exploring and detailing real-world healthcare processes. This approach allows for direct observations and open-ended interviews, focusing on gathering insights from the experiences of hospital staff and patients. By using this design, the study captures detailed descriptions of the registration workflow, patient interactions, and any notable inefficiencies or challenges faced during the process.

Data Collection Techniques

Data were collected through a combination of observations and semi-structured interviews over a four-day period at the outpatient registration area of Marthen Indey Hospital. These methods provide a balanced understanding of both the observable processes and the personal experiences of individuals involved in the registration.

1. Observations: Observations were conducted on-site in the registration area to record patient flow, waiting times, queuing dynamics, and staff-patient interactions. By observing these elements, the researcher gained a direct understanding of the registration system's operational efficiency and the practical issues encountered by both staff and patients.
2. Interviews: Semi-structured interviews were held with key stakeholders, including outpatient registration staff, administrative personnel, and patients. The head of the registration department served as the primary informant, offering insights into the system's structure, challenges, and any recent procedural changes. Additionally, feedback from patients provided valuable perspectives on their experiences and satisfaction levels with the registration process.

Participant Selection

Due to the qualitative nature of the study, participants were selected based on their relevance to the outpatient registration process rather than through random sampling. Staff members from the registration department, including the head of the outpatient registration unit and front-line registration staff, were chosen for their direct involvement in managing patient intake and registration. Patients using the outpatient services during the observation period were also invited to participate in brief interviews, focusing on their experience and any difficulties they encountered with the registration system.

Data Analysis

Data collected from observations and interviews were analyzed using a thematic approach, which involved coding responses and identifying recurring themes related to the efficiency, challenges, and perceived quality of the outpatient registration service. Themes such as queuing inefficiencies, wait times, technical issues, and patient satisfaction were explored to determine both systemic and experiential insights.

By categorizing data into themes, the analysis highlights key areas that could benefit from procedural or technological improvements.

Ethical Considerations

To ensure ethical integrity, all participants were informed of the study's purpose and procedures, with verbal consent obtained prior to conducting interviews or observations. Patient anonymity and confidentiality were maintained throughout the study, and all data collected were handled securely to protect the privacy of participants. This study was conducted with respect for patient and staff rights, and participants were given the option to withdraw from the study at any time.

Results and Discussion

The results of this study reveal several key insights into the management of the outpatient registration system at Marthen Indey Hospital, including process inefficiencies, patient satisfaction issues, and potential areas for improvement. Based on direct observations and feedback from staff and patients, we identified themes related to queuing systems, registration workflows, and patient-staff interactions. These findings are discussed in detail below, along with possible solutions to improve the registration experience.

Current Outpatient Registration Process

1. Queuing and Wait Times

The outpatient registration system at Marthen Indey Hospital operates on a first-come, first-served basis, with a single queuing machine for all outpatient clinics. This system does not differentiate by department, meaning that patients for various clinics—whether specialized or general—are pooled into one line. This leads to significant wait times, especially during peak hours, with patients often waiting over an hour to complete the registration process.

Feedback from patients indicated frustration with the long wait times, which was a source of dissatisfaction. Patients often have to arrive early to secure a favorable position in the queue, yet still face extended waiting periods, primarily due to the lack of a department-specific queuing system. This lack of differentiation means that patients seeking quick consultations are subject to the same wait as those with more extensive registration needs, leading to inefficiencies that affect both patients and staff.

2. Workflow and System Limitations

Observations indicated that the registration process at Marthen Indey Hospital remains largely manual, with patients required to physically present identification, health insurance details, and other documents for verification. For new patients, the process includes a lengthy data entry procedure to create a new medical record, while returning patients must verify existing records and update any relevant information. This process is further slowed by periodic computer malfunctions, which staff reported as a frequent issue, interrupting data entry and prolonging wait times.

Moreover, the system requires all patients, including those with appointments, to go through the same registration process without a dedicated line for pre-registered or emergency cases. This "one-size-fits-all" approach contributes to delays, as the registration staff must manage patients of various categories and needs under a unified workflow that lacks flexibility.

Patient Satisfaction and Service Quality

1. Patient Experiences and Feedback

Interviews with patients highlighted several areas where the registration process could be improved to enhance satisfaction. Many patients expressed that the registration area was overcrowded, making it challenging to navigate and access staff. Some reported confusion regarding the registration steps and queuing protocol, particularly for first-time visitors who were unfamiliar with the hospital layout and procedures. This confusion, combined with the prolonged wait times, created an initial negative experience for many patients, which could influence their perception of care quality.

Patients also noted that the current registration system does not consider individuals with special needs or elderly patients who may have difficulty standing in long lines. Several patients recommended implementing a separate queue for individuals with mobility issues or offering an online pre-registration option to reduce congestion and wait times.

2. Staff Perspectives on Service Efficiency

Interviews with registration staff revealed that the current system's limitations also impact their efficiency and job satisfaction. Staff members reported that they frequently encounter bottlenecks due to the high volume of patients, particularly in the morning when most people arrive to secure early appointments. Additionally, staff noted that the lack of a department-specific queuing system often results in confusion and miscommunication as they try to manage patients for multiple clinics from a single point.

Staff also expressed concerns about computer system reliability, indicating that frequent malfunctions disrupt their workflow and further delay the registration process. Many suggested that an upgraded system with department-specific queues, automated data entry, and streamlined registration steps would reduce patient wait times and alleviate the stress on registration personnel.

Proposed Solutions for Improved Registration Efficiency

1. Department-Specific Queuing System

One of the main recommendations to address the queuing inefficiencies is implementing a department-specific queuing system. This system would allow patients to select their intended clinic upon arrival, receiving a queue number specific to that department. By organizing queues according to clinic type, patients can avoid unnecessary delays and reduce congestion in the registration area. This approach has proven effective in other hospitals, allowing for better management of patient flow and minimizing wait times for specialized clinics.

2. Online and Mobile-Based Registration Options

An online or mobile registration system could significantly enhance patient convenience, allowing them to pre-register, upload necessary documents, and receive a queue number before arriving at the hospital. This system could provide estimated wait times, allowing patients to plan their visits more effectively. It would also reduce the need for manual data entry, as patients could enter their details digitally, minimizing errors and saving time during the in-person registration process. For returning patients, an online registration portal could enable them to update personal information or select clinic appointments from home, reducing the burden on front-line staff.

3. Improved Patient Education and Communication

Enhancing communication with patients regarding the registration process is crucial for improving satisfaction. Informational signage, digital displays, or brochures can help patients understand the steps involved in registration and navigate the system more easily. Additionally, offering clear instructions on queuing protocols and clinic locations could minimize confusion, particularly for first-time visitors. These materials could be provided in multiple languages, catering to the diverse patient population at Marthen Indey Hospital.

4. Technical Upgrades for System Reliability

Addressing the frequent technical issues observed in the registration system is essential for improving staff efficiency and patient experience. Upgrading the hospital's computer systems, implementing regular maintenance schedules, and providing training to staff on troubleshooting minor issues could enhance the system's reliability. This would reduce the delays caused by technical malfunctions and allow registration staff to focus on providing efficient service to patients.

Implications for Hospital Management and Future Research

The findings suggest that Marthen Indey Hospital could benefit from a more patient-centered approach to outpatient registration. By implementing technology-based solutions and refining registration workflows, the hospital can improve patient satisfaction and operational efficiency. Furthermore, ongoing evaluations of patient satisfaction and periodic reviews of registration processes would ensure that the hospital adapts to patient needs over time.

Future research could explore the impact of digital registration systems in other Indonesian hospitals to assess the feasibility of such solutions in different settings. Comparative studies across hospitals with varying patient volumes and resources could provide insights into the most effective registration strategies for hospitals in resource-limited environments.

Conclusion

Several potential improvements emerged from the analysis, each aimed at addressing specific areas of concern within the outpatient registration process. Key recommendations include implementing a department-specific queuing system, which would allow patients to be routed to their respective clinics without unnecessary delays; adopting online and mobile-based registration options to reduce in-person congestion and streamline data entry; enhancing patient communication through informational materials that clarify registration steps; and upgrading technical systems to ensure reliability and minimize workflow disruptions.

These changes, if implemented, could not only improve patient satisfaction by reducing wait times and simplifying the registration experience but also enhance staff efficiency by alleviating the daily challenges faced by front-line registration personnel. A shift towards a more patient-centered, technology-enhanced registration model aligns with broader healthcare goals of improving accessibility, operational effectiveness, and patient engagement in care.

For Marthen Indey Hospital, adopting these solutions could also serve as a model for other hospitals in similar resource-constrained settings, demonstrating how even incremental improvements in outpatient registration can significantly impact patient experience. However, further research is recommended to

assess the feasibility of these interventions in various Indonesian hospital contexts, particularly regarding the cost and infrastructure implications of digital solutions in rural healthcare facilities.

In conclusion, optimizing the outpatient registration process at Marthen Indey Hospital is a strategic step toward enhancing healthcare delivery and patient satisfaction. By addressing the current limitations and adopting innovative, patient-centered solutions, the hospital can better fulfill its mission of providing quality, accessible healthcare to the Jayapura community.

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