



ANALYSIS OF OUTPATIENT SERVICE WAITING TIME IN THE JKN ERA AT X HOSPITAL PEKANBARU

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Abstract

The implementation of National Health Insurance (JKN) requires hospitals to provide fast and high-quality services to ensure patient satisfaction. However, outpatient services still face problems such as patient waiting times that exceed standards, indicating inefficiency in service flow and management. This condition has the potential to reduce service quality and the satisfaction of JKN participants. This study aims to determine and describe the waiting time for outpatient services in the JKN era at X Hospital Pekanbaru. This study uses a qualitative descriptive design with observation, interview, and document review techniques. Informants were selected purposively, and data analysis was conducted through triangulation and a problem-solving cycle including USG and fishbone analysis methods. The results indicate several problems in outpatient services at X Hospital Pekanbaru, namely long patient waiting times during registration, doctor examinations, and medication services, limited outpatient and registration staff, obstacles to online JKN registration, ineffective staff communication, and limited waiting room facilities. Problem prioritization using the USG method revealed that long service waiting times are the main problem because they directly impact service quality and patient satisfaction, influenced by limited human resources and inefficient service flows. Observation results showed that average patient waiting time reached 104.1 minutes, with 61.8% of patients waiting more than 60 minutes and only 17.5% being served according to ideal waiting time standards. The problem of long waiting times indicates that the quality of outpatient services at X Hospital Pekanbaru is not yet optimal and requires system improvements..

Keywords: National Health Insurance, Patient Satisfaction, Outpatient Clinic, Patient Waiting Time

Introduction

Health is the right of every Indonesian citizen as mandated in Article 28 H paragraph (1) of the 1945 Constitution of the Republic of Indonesia, which states that everyone has the right to live in physical and spiritual prosperity, reside, and obtain a good and healthy life, and has the right to obtain health services. This constitutional mandate was then responded to by the government by improving the health of Indonesian citizens through Law No. 36 of 2009 concerning Health and Law No. 40 of 2004 concerning the National Social Security System (SJSN), which includes health maintenance insurance.

Health development in Indonesia aims to improve public health comprehensively and equitably. One of the government's strategic efforts to achieve this goal is through the implementation of National Health Insurance (JKN) managed by BPJS Kesehatan since 2014. This program provides more equitable access to health services for all levels of society, including advanced outpatient services at referral health facilities such as hospitals (Nurhabibah et al., 2025).

One indicator that affects the quality of health services in the National Health Insurance (JKN) era is patient satisfaction with the health services obtained as JKN participants. Every JKN patient has the right to receive optimal, fast, and equal health services. It is important for hospitals to maintain service quality (Anelia & Modjo, 2023). Service waiting time is a quality indicator that significantly affects the satisfaction of JKN participant patients. Safitri et al. (2024) found a relationship between waiting time duration and the level of satisfaction of outpatient patients in various hospitals. Research at Majene District Hospital reported that patients who wait for services longer than the standard waiting time tend to have lower satisfaction levels (Sulaiman et al., 2025). According to Minister of Health Regulation No. 30 of 2022, the standard waiting time for outpatient services is no more than 60 minutes, calculated from patient registration until being served by a doctor.

A study conducted by Inuri (2020) on the effect of service quality on patient satisfaction at the West Java Provincial Occupational Health Regional General Hospital found that 27.9% of service quality (tangible, reliability, responsiveness, assurance, and empathy) affects patient satisfaction in hospitals. Research by Amalina et al. (2021) at the outpatient service unit of Bogor City Regional General Hospital found that overall BPJS Health patient satisfaction was 70%, with satisfaction from the tangible dimension at 56%, reliability dimension at 77%, responsiveness dimension at 65%, assurance dimension at 88%, and empathy dimension at 78%.

The author chose X Hospital Pekanbaru as the residency location to understand the main duties and functions of the outpatient clinic service division at X Hospital and their impact on patient satisfaction in obtaining health services using national health insurance or BPJS. The information obtained can become a valuable lesson and add to the author's experience. X Hospital, commonly referred to as General Hospital X, located in Pekanbaru City, is one of the health facilities collaborating with BPJS Kesehatan to serve patients who are JKN program participants.

Based on observations and interviews, the average patient waiting time reached 104.1 minutes, far exceeding the standard waiting time for services at first-level health facilities. The waiting time distribution shows that only 594 patients were served within 0-15 minutes, while 249 patients waited between 15-30 minutes and 455 patients waited 30-60 minutes. The most dominant category was >60 minutes, with 2,098 patients, representing the largest proportion of all visits.

Proportion analysis shows that 61.8% of patients experienced waiting times of more than 60 minutes, making it the most dominant category and indicating a significant level of service inefficiency. Only 17.5% of patients received service within 0-15 minutes, according to ideal waiting time standards. Meanwhile, the >15-30 minute category (7.3%) and >30-60 minute category (13.4%) represent a small portion of visits. This distribution shows that the majority of patients experience very long waiting times, indicating the need for queue management improvements, adjustments to the number of service personnel, and optimization of service flow to meet Minister of Health Regulation standards and improve patient satisfaction.

Method

This research uses a qualitative descriptive design with observation, interview, and document review techniques. The study was conducted at the outpatient clinic of X Hospital Pekanbaru from September to November 2024. Informants were selected purposively, consisting of outpatient clinic management, registration officers, doctors, nurses, and JKN patients. Data analysis was conducted through triangulation and a problem-solving cycle including the USG (Urgency, Seriousness, Growth) method for problem prioritization and fishbone analysis to identify root causes. Data validity was ensured through source triangulation and method triangulation. The research also utilized observation of patient flow, measurement of waiting times at each service point, and review of relevant documents including Standard Operating Procedures (SOPs), service reports, and patient satisfaction surveys.

Results

The research results indicate several problems in outpatient clinic services at X Hospital Pekanbaru. Based on observations conducted from September to November 2024, the average patient waiting time reached 104.1 minutes, far exceeding the standard of 60 minutes set in Minister of Health Regulation No. 30 of 2022. The distribution of waiting times shows that 61.8% of patients (2,098 patients) experienced waiting times of more than 60 minutes, 13.4% (455 patients) waited 30-60 minutes, 7.3% (249 patients) waited 15-30 minutes, and only 17.5% (594 patients) were served within 0-15 minutes according to ideal standards.

Table 1. Distribution of Patient Waiting Times at X Hospital Pekanbaru Outpatient Clinic

Waiting Time Category	Number of Patients	Percentage (%)
0-15 minutes	594	17.5
15-30 minutes	249	7.3
30-60 minutes	455	13.4
>60 minutes	2,098	61.8
Total	3,396	100.0

Based on interviews with informants and document analysis, several factors were identified as causing long waiting times. First, limited human resources, both in terms of quantity and distribution of work schedules. The number of registration officers and outpatient clinic staff is insufficient to handle the volume of patients, especially during peak service hours (08:00-10:00 WIB). Second, doctor delays in starting practice, often caused by concurrent duties in inpatient wards or emergency rooms. Third, inefficient service flow, where the registration process, medical record retrieval, and drug delivery are not yet optimally integrated. Fourth, low patient digital literacy regarding the use of the Mobile JKN application for online registration. Fifth, frequent disruptions to the Hospital Information Management System (SIMRS) and Mobile JKN, which slow down the registration and medical record retrieval processes. Sixth, uncomfortable waiting room conditions with limited seating capacity and inadequate ventilation.

Problem prioritization using the USG (Urgency, Seriousness, Growth) method identified long service waiting times as the main priority problem because it has a direct impact on service quality and patient satisfaction, and is influenced by several supporting factors including limited human resources, inefficient service flow, low patient digital literacy, and inadequate information technology infrastructure. Fishbone analysis revealed that the main contributing factors are Man (limited staff, doctor delays), Method (suboptimal SOP implementation, inefficient flow), Machine (SIMRS disruptions), Material (limited waiting room facilities), and Environment (uncomfortable waiting room conditions).

Discussion

The research findings show that the average waiting time at X Hospital Pekanbaru outpatient clinic (104.1 minutes) far exceeds the standard set in Minister of Health Regulation No. 30 of 2022, which stipulates that outpatient service waiting time should not exceed 60 minutes. This condition is consistent with research by Setiyawati et al. (2024) which found that long waiting times at outpatient clinics are influenced by human resource limitations, suboptimal service flow, and inadequate infrastructure. Research by Safitri et al. (2024) through meta-analysis also confirmed that waiting time has a significant effect on outpatient patient satisfaction.

Limited human resources, both in quantity and distribution, are the main factor causing long waiting times. The number of registration and outpatient clinic officers is insufficient to handle the volume of patients, especially during peak hours. This finding is supported by research using the WISN (Workload Indicator Staffing Need) method which shows the importance of calculating staffing needs based on actual workload (Cania, 2021). In addition, doctor delays in starting practice, often due to concurrent duties in inpatient wards or emergency rooms, further extend patient waiting times. Research by Putri et al. demonstrated that doctor delay patterns significantly affect outpatient service scheduling and patient waiting times.

Inefficient service flow, including registration processes, medical record retrieval, and drug delivery that are not yet optimally integrated, contributes to extended waiting times. Analysis of queue systems at hospital registration counters by Syamsudin and Sumarauw (2024) found that improving queue management systems and optimizing registration officer work schedules can significantly reduce waiting times. Implementation of online registration through the Mobile JKN application should be a solution, but low patient digital literacy and frequent SIMRS and Mobile JKN disruptions become obstacles. Research by Yohana et al. (2021) and Suhena et al. (2024) shows that successful online registration implementation requires adequate technological infrastructure support and intensive patient education.

Information technology infrastructure, particularly SIMRS, plays a crucial role in outpatient services. SIMRS disruptions that frequently occur at X Hospital slow down registration and medical record retrieval processes. Research by Handayani et al. (2017) emphasizes the importance of reliable hospital information systems for service efficiency. Salim et al. (2024) in their research on cloud-based outpatient registration information systems demonstrated that appropriate technology infrastructure can improve service speed and reduce waiting times. Technology infrastructure development must be supported by adequate investment and regular system maintenance.

Low patient digital literacy regarding the use of the Mobile JKN application for online registration is an obstacle that requires serious attention. Although the Mobile JKN application has been developed as a solution to reduce waiting times, many patients still prefer direct registration due to lack of understanding of technology use. Research by Sabrina et al. demonstrates that visual educational media can increase patient understanding of registration procedures. Effective communication between officers and patients is also important, as shown by research by Suwarni and Mariyana (2022) which found a relationship between nurse communication in health services and patient satisfaction.

Uncomfortable waiting room conditions, including limited seating capacity and inadequate ventilation, add to patient dissatisfaction during long waits. Research by Sudarmiyanti et al. (2025) on the relationship between physical environmental conditions of outpatient waiting rooms and visitor satisfaction found that physical environmental factors significantly affect patient satisfaction. Research by Savanti et al. (2019) also emphasized the importance of natural ventilation in waiting rooms to prevent Sick Building Syndrome. These findings are consistent with Pohan (2017) and Bustami (2011) who stated that the physical environment of services influences perceptions of quality and patient satisfaction.

Efforts to reduce waiting times need to be carried out in an integrated manner through: (1) adjustment of staff numbers and schedules based on workload, (2) optimization and enforcement of service flows according to SOPs, (3) strengthening of service infrastructure and information systems, (4) enhancement of patient education and assistance in using online registration, (5) budget planning oriented toward service efficiency, and (6) improvement of waiting room environmental comfort. Implementation of these measures is expected to reduce outpatient clinic service waiting times to meet quality indicators of outpatient services ≤ 60 minutes, as stipulated in Minimum Service Standards and National Health Service Quality Indicators, and impact the improvement of service quality and patient satisfaction.

Conclusion

The research results show that service waiting times at X Hospital Outpatient Clinic are still relatively long, especially in registration processes, waiting for doctor examinations, and medication retrieval, particularly during busy service hours. Long waiting times are influenced by limited human resources, doctor delays, suboptimal service flow, low patient digital literacy, SIMRS and Mobile JKN system disruptions, and uncomfortable waiting room conditions. Based on root cause analysis and brainstorming processes, it was determined that adjusting doctor practice schedules with peak patient visit hours is a priority solution, supported by implementing online registration fast track, Mobile JKN education, appointment arrangements and officer shifts based on workload, information technology capacity enhancement, real-time doctor schedule publication, and waiting room facility improvements. This series of interventions is expected to reduce service waiting times and improve the quality of X Hospital outpatient clinic services sustainably.

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