

Analysis of the Length of Waiting Time for Outpatient Services at BPJS FMC Hospital in October - December 2024

Renata^{1*}, Christin Angel², Anthonius Christopher Wisnu³, Erihka Silvia Siregar⁴

Universitas Pelita Harapan, Jakarta, Indonesia

Email: angln.renata24@gmail.com, tinangell87@gmail.com, acrumawas@gmail.com,
silviaerihka@gmail.com

Correspondence: angln.renata24@gmail.com*

Article Info	ABSTRACT
Submitted: 10-04-2025 Final Revised: 23-04-2025 Accepted: 28-04-2025 Published: 28-04-2024	This study aims to analyze the waiting time for BPJS outpatient services at FMC Bogor Hospital from October to December 2024. Employing a quantitative approach, data collection was conducted through direct observation, interviews with hospital staff, and documentation of patient waiting times from registration to the receipt of medical services. The findings indicate that the average waiting time for BPJS outpatients at FMC Bogor Hospital is 45 minutes, which exceeds the standard set by BPJS Kesehatan, namely 30 minutes. Several factors contribute to this prolonged waiting period, including high patient volumes, limited availability of medical personnel, and inefficiencies in administrative procedures. These conditions not only affect operational performance but also influence patient satisfaction. Based on the analysis, this study recommends improvements in patient flow management, increasing the number of medical staff, and implementing information technology systems to streamline administrative processes. These efforts are expected to optimize service efficiency and enhance the quality of healthcare delivery, particularly for BPJS participants relying on timely and accessible medical treatment. Keywords: waiting time, patient services, BPJS, FMC Hospitals, patient satisfaction

Attribution-ShareAlike 4.0 International (CC BY-SA 4.0)



Introduction

Bogor Family Medical Center (FMC) Hospital is located in Jl. Raya Jakarta-Bogor No.KM. 51, Cimandala, Sukaraja District, Bogor Regency, West Java 16710, is a private health facility committed to providing quality medical services to the community. This hospital has a strategic location on the main road connecting Bogor City and Jakarta City and the main gateway to the Bogor City Outer Ring Road, which connects Sentul with Bogor City, thus facilitating transportation access for patients from various majors.

To improve the quality of service, analysis of the waiting time for outpatient services is crucial. Optimal wait times not only improve patient satisfaction but also reflect the operational efficiency of the hospital (Fingky Rizki Wulandari et al., 2023; Muhammad Yunus et al., 2021; Nuraini & Wijayanti, 2018; Purnomo et al., 2021; Sun et al., 2017; Susilawati & Gunawan, 2022). Therefore, this study aims to analyze the waiting time for BPJS outpatient services at FMC Bogor Hospital from October to December 2024.

FMC Bogor Hospital has complete facilities, including an Emergency Installation (IGD), 22 Specialist Polyclinics, three central operating rooms, an Intensive Care Unit (ICU), a Neonatal Intensive Care Unit (NICU), a High Care Unit (HCU), a perina high care room, a Midwifery/Maternity Room, and a Treatment Room that accommodates 103 beds. With the support of modern medical equipment and experienced medical personnel, this hospital is committed to providing excellent health services.

Efficient and effective health services are one of the indicators of hospital quality. According to Rosita et al. (2021), in the context of outpatient services, the length of the waiting time is one of the important elements that can affect the level of patient satisfaction. Patients who have to wait too long to get medical care can feel frustrated, ultimately affecting their perception of hospital quality. Therefore, it is important to analyze and evaluate the length of the waiting time, especially for BPJS patients, one of the main patient groups receiving services at FMC Bogor Hospital.

FMC Bogor Hospital, as a hospital that serves BPJS Kesehatan participants, is obligated to provide services per the standards set by BPJS. However, there is often a discrepancy between patient expectations and the reality in the field related to the waiting time required to get services. Several factors, such as the level of patient density, the availability of medical personnel, service schedule management, and administrative factors related to the patient registration system and data processing, can cause this (Budo et al., 2020). In this study, an analysis will be carried out on the factors that affect the waiting time for outpatient services for BPJS patients at FMC Hospital and how the hospital can optimize the waiting time to improve the quality of services.

This research is important not only for the hospital itself but also for the community that uses BPJS services. By identifying the factors that affect the length of the waiting time, it is hoped that this study can provide recommendations that are useful for hospitals in improving the service process. In addition, the results of this study can also provide helpful information for BPJS Kesehatan in evaluating partner hospitals and improving the queue system, which can affect the overall quality of services.

Through an in-depth analysis of BPJS outpatient waiting time data at FMC Bogor Hospital, it is hoped that patterns or policies can be found that can be improved. The results of this study are expected to contribute to the development of hospital and BPJS policies to improve patient experience, especially in the context of efficient waiting times. This research is also expected to be a reference for other hospitals that want to identify and address similar problems in improving the quality of services to patients.

The increase in patient visits under the BPJS health insurance scheme at FMC Bogor Hospital has raised concerns regarding the efficiency of outpatient services. One of the most pressing issues

is the prolonged waiting time experienced by patients, which not only impacts their overall satisfaction but also indicates inefficiencies in hospital operations. While the hospital provides modern medical facilities and services, delays in patient registration, consultation queues, and specialist availability have become critical bottlenecks in ensuring timely care.

Furthermore, the waiting time often exceeds the 30-minute standard set by BPJS Kesehatan, reaching an average of 45 minutes. This discrepancy suggests the need for a thorough investigation into the causes of the delays, including administrative processes, service schedule management, and the availability of medical staff (Citraningtyas & Gayatri Jayanto, 2021; Deasi Wikandari & Mahmuluddin, 2021; Hardiyanti et al., 2017; Noviani, 2017; Sianturi et al., 2020). Identifying these problems is essential for implementing appropriate interventions to improve patient flow and service quality.

Given the growing demand for BPJS services and the public's dependence on affordable healthcare, addressing inefficiencies in outpatient service delivery is urgent. Patient delays are not only reduce trust in the healthcare system but also jeopardize patient health outcomes. Therefore, this research is necessary to provide evidence-based recommendations that support the hospital in optimizing its operational performance and aligning with national service standards.

A study by Fadillah et al. (2020) examined the causes of delays in returning outpatient medical records at Mitra Medika Hospital. Their findings indicated that administrative inefficiencies and understaffed departments contributed significantly to service delays. This supports the idea that hospital bureaucracy can significantly impact the overall waiting time and patient satisfaction.

Wirajaya and Rettobjaan (2021) highlighted the correlation between medical personnel availability and delays in inpatient services. Their study showed that limited staffing and scheduling conflicts often lead to long wait times, especially in specialist clinics, which aligns with the situation observed at FMC Bogor Hospital.

Maulida et al. (2023) investigated prescription waiting times for BPJS outpatients at Hospital X and found that high patient loads and lack of resources were the primary causes of prolonged waiting periods. Their findings underscore the importance of capacity planning and resource allocation in managing outpatient service flow effectively.

While previous studies have addressed the impact of administrative inefficiencies and medical staff shortages on healthcare service delivery, limited research has focused specifically on BPJS outpatient waiting times at privately operated hospitals such as FMC Bogor Hospital. This study aims to fill this gap by quantitatively analyzing patient flow and identifying contextual factors unique to private healthcare institutions.

This research contributes a novel perspective by integrating quantitative analysis of patient volume, specialist availability, and administrative processes in assessing BPJS outpatient waiting times at FMC Bogor Hospital. It also introduces regression modeling to determine the statistical significance of each factor, offering a data-driven approach to optimizing outpatient services under the BPJS scheme.

The objective of this study is to analyze the average waiting time for BPJS outpatient services at FMC Bogor Hospital from October to December 2024, identify the factors contributing to the delays, and propose strategic solutions to improve efficiency and patient satisfaction.

The findings of this research are expected to benefit both FMC Bogor Hospital and the wider healthcare system by providing actionable insights for improving service quality. The recommendations derived from this study may assist hospital management and policymakers in enhancing patient satisfaction, streamlining outpatient services, and ensuring compliance with BPJS Kesehatan standards.

Research Methods

This study uses a quantitative approach with a descriptive design to analyze the length of waiting time for BPJS outpatient services at FMC Bogor Hospital from October to December 2024. The data used in this study were obtained through direct observation of patient waiting times at outpatient polyclinics in collaboration with BPJS Kesehatan. In addition, interviews with administrative officers and medical personnel were conducted to find out more about the factors that affect waiting times, such as queue management, the number of patients, and the distribution of service schedules. The collected waiting time data will be statistically analyzed to determine the average waiting time, the distribution of waiting time, and the factors that significantly affect the length of the waiting time for the service. This analysis also uses regression analysis techniques to examine the relationships between variables affecting waiting time. The results of this study will be processed to provide recommendations for hospitals to improve the efficiency of BPJS outpatient services.

Results and Discussion

The results of this study provide an in-depth analysis of the length of waiting time for BPJS outpatient services at FMC Bogor Hospital from October to December 2024. Data collected through observation of patient flow in outpatient polyclinics and interviews with administrative officers and medical personnel revealed several important findings related to the efficiency of service delivery at this hospital.

The analysis showed that the average waiting time for BPJS patients at outpatient polyclinics during the study period was 45 minutes, with the shortest waiting time being 15 minutes and the longest being 120 minutes. This variation in waiting time is greatly influenced by several factors, including the number of patients registered on a given day, the availability of medical personnel, and the type of consultation needed. For example, patients who need to consult a specialist, such as cardiology or orthopedics, generally experience longer waiting times than those who only consult a general practitioner.

Table 1. Distribution of Waiting Time for BPJS Outpatients

Day	Average Wait Time (minutes)	Shortest Wait Time (minutes)	Longest Wait Time (minutes)
Monday	55	20	120

Day	Average Wait Time (minutes)	Shortest Wait Time (minutes)	Longest Wait Time (minutes)
Tuesday	40	15	100
Wednesday	42	25	110
Thursday	45	30	105
Friday	50	30	115
Saturday	38	20	90
Sunday	35	15	80

Table 1 shows the variation in wait times that occur on specific days. The average wait time on Mondays and Fridays tends to be longer than on other days. This is due to higher patient volumes on both days, which have implications for longer wait times. Several factors were identified as significant contributors to the variation in wait times, including:

1. **Patient Volume:** High patient volumes on certain days, such as Mondays and Fridays, increase wait times. On average, the number of patients on those days increased by 25%, which was directly proportional to the increase in wait times of about 30-40 minutes.
2. **Availability of Medical Personnel:** The availability of medical personnel is crucial. On days when some specialists are not available due to scheduling issues, patients have to wait longer to get a consultation. This has led to significant delays, especially in clinics with few medical personnel.
3. **Administrative Delays:** Administrative processes, such as patient registration and BPJS status verification, also contribute to wait times. Data shows that administrative barriers lead to an average additional waiting time of 10-15 minutes, especially when there is a technical problem with the BPJS verification system or when the patient has not completed the registration form correctly.

Using regression analysis, this study found that patient volume and availability of medical personnel were the most significant predictors of wait times. The regression model showed that for every 10 patients added on a given day, the average wait time increased by 8 minutes (p-value < 0.05). Similarly, the number of specialists available has been shown to reduce wait times; Each addition of a specialist will reduce the wait time by 12 minutes (P-value < 0.05).

Table 2. Effect of Patient Volume on Waiting Time

Number of Patients	Average Wait Time (minutes)	Wait Time Change (minutes)
1-20	30	-
21-40	40	+10
41-60	50	+10
61-80	60	+10

Table 2 shows that as the number of patients has increased, the average waiting time has also increased significantly. This confirms that the high volume of patients directly affects the increase in wait times.

Discussion

Factors Affecting Wait Time

Based on the study results, the factors that affect the length of waiting time for BPJS outpatient services at FMC Bogor Hospital are divided into three main categories: patient volume, availability of medical personnel, and administrative processes. The first and most significant factor is the volume of patients. Wait times become longer on days with more patients, such as Monday and Friday. This is in line with research conducted by Fadillah et al. (2020), which found that an increase in the number of patients could cause delays in the process of medical services. In addition, the availability of medical personnel also has a significant influence, where on days with a limited number of medical personnel, patient waiting times tend to increase.

The availability of medical personnel is crucial because when certain specialists are unavailable or doctors experience delays in dealing with some instances, patients have to wait longer to get services. This is also supported by the findings mentioned by (Wirajaya & Rettobjaan, 2021), which suggests that a lack of available medical personnel can lead to service delays, especially in specialist polyclinics. This situation highlights the importance of optimizing doctors' work schedules to be more efficient.

Meanwhile, administrative factors also have a considerable impact on waiting times. Based on the observation results, administrative obstacles regarding BPJS verification and patient registration extend the waiting time. Research by (Monoarfa, 2012) It also highlights the importance of efficiency in the registration process to speed up the flow of services. Time wasted in administrative processes, while not directly related to medical consultations, still affects patients' overall waiting time.

Comparative Analysis with Standard Lead Time

This study found that the average waiting time for BPJS patients at FMC Bogor Hospital was 45 minutes, longer than the standard set by BPJS Kesehatan, which is 30 minutes for outpatient services. This shows a discrepancy between the supposed waiting time and the reality in the field. This difference can be explained by several factors discussed earlier, such as the high volume of patients and the limited number of medical personnel available.

This comparison is reminiscent of research conducted by (Maulida et al., 2023) at Hospital X, which also recorded a longer waiting time than BPJS standards. They found that the main obstacle was a lack of hospital capacity in terms of facilities and medical personnel, which led to longer waiting times than recommended by BPJS. Despite this, FMC Bogor Hospital has made efforts to improve services, such as increasing the number of polyclinics and medical personnel, but the achievement of this waiting time standard still needs to be further improved.

According to research (Safitri, 2024), although hospitals have implemented various efficiency programs, such as queue management and improvement of the quality of administrative services, the main challenge remains in fluctuations in the number of patients, especially on busy days. Therefore, FMC Bogor Hospital needs to continue to innovate in terms of patient flow, such as using information technology to speed up the registration process or using an application-based queuing system to make it easier for patients to access services.

The Impact of Long Waiting Time on Patient Satisfaction

Long waiting times significantly impact patient satisfaction levels, which is one indicator of service quality in hospitals. The satisfaction survey results conducted in this study showed that although patients were satisfied with the quality of the medical services provided, they were not satisfied with the length of the waiting time they experienced. As many as 70% of patients interviewed revealed that they feel burdened by waiting times of more than an hour, despite the high quality of medical services provided.

This phenomenon is in line with research conducted by (Pipit Muliyah, Dyah Aminatun, Sukma Septian Nasution, Tommy Hastomo, Setiana Sri Wahyuni Sitepu, 2020) which suggests that long waiting times can reduce patient satisfaction levels, even if the medical services provided are optimal. This shows that even though hospitals can provide quality services, the overall patient experience is affected by non-medical factors such as wait times. Therefore, while wait times are an operational issue, their impact on patient satisfaction should not be overlooked.

Study by (Kurniawan et al., 2021) It also revealed that patients value efficiency in getting health services. Taking too long to get care can reduce comfort and increase stress for patients, which can ultimately lower their perception of the hospital as a whole. Therefore, it is important for FMC Bogor Hospital to minimize waiting times to improve the patient experience and their satisfaction.

Conclusion

Based on the results of research conducted at FMC Bogor Hospital, it can be concluded that the average waiting time for BPJS outpatient services during the period October to December 2024 is 45 minutes, which exceeds the standard waiting time set by BPJS Kesehatan, which is 30 minutes. Factors that affect wait times include high patient volume, limited medical personnel, and administrative processes that still need improvement. Although the hospital has adequate facilities and competent medical personnel, issues related to waiting time remain a significant challenge affecting patient satisfaction. Patient satisfaction with the medical services provided is not balanced with satisfaction related to time efficiency, which indicates an urgent need to improve patient flow management and administrative processes. To overcome the problem of long waiting times, FMC Bogor Hospital is advised to make several improvements, including by increasing the number of medical personnel, especially during peak hours, and optimizing doctors' work schedules to be more efficient. Information technology, such as online registration systems and app-based queue management, can also speed up administrative processes and reduce wait times. Hospitals must

also pay attention to capacity building at specialist polyclinics that often experience long queues and increase training for administrative officers to speed up the BPJS verification process. With these measures, it is hoped that waiting times can be reduced, improving patient satisfaction and the overall operational efficiency of the hospital.

References

- Budo, A., Tulus, F., & Tampi, G. B. (2020). Efektivitas Pelayanan Kesehatan Di Rumah Sakit Pancaran Kasih Manado. *Jurnal Administrasi Publik*, 6(94), 1–13. <https://ejournal.unsrat.ac.id/index.php/jap/article/download/29820/28875>
- Citriningtyas, M., & Gayatri Jayanto. (2021). Evaluasi Waktu Tunggu Pelayanan Resep Pasien Rawat Jalan Di Instalasi Farmasi Rsud Tagulandang. *Pharmacon– Program Studi Farmasi, Fmipa, Universitas Sam Ratulangi*, 10(129).
- Deasi Wikandari, & Mahmuluddin. (2021). Evaluasi Waktu Tunggu Pelayanan Resep Pasien Rawat Jalan Di Instalasi Farmasi Rsud Dr. R. Soedjono Selong. *Jurnal Farmasi Dan Kesehatan Indonesia*, 1(2). <https://doi.org/10.61179/jfki.v1i2.237>
- Fadillah, A. R., Nuraini, N., Erawantini, F., & Rachmawati, E. (2020). Analisis Penyebab Keterlambatan Pengembalian Berkas Rekam Medis Rawat Jalan di Rumah Sakit Mitra Medika Bondowoso. *J-REMI : Jurnal Rekam Medik Dan Informasi Kesehatan*, 2(1), 64–72. <https://doi.org/10.25047/j-remi.v2i1.2213>
- Fingky Rizki Wulandari, Puteri Fannya, Deasy Rosmala Dewi, & Daniel Happy Putra. (2023). Tinjauan Lama Waktu Tunggu Pelayanan Pasien Rawat Jalan Poli Jantung di Rumah Sakit Angkatan Laut Marinir Cilandak Tahun 2022. *Student Scientific Creativity Journal*, 1(4). <https://doi.org/10.55606/sscj-amik.v1i4.1548>
- Hardiyanti, S. A., Yuniwati, I., Divi Yustita, A., & Banyuwangi, P. N. (2017). Bentuk Petri Net Dan Model Aljabar Max Plus Pada Sistem Pelayanan Pasien Rawat Jalan Rumah Sakit Al Huda Genteng, Banyuwangi. *Jurnal UJMC*, 3(2).
- Kurniawan, Y. S., Priyanga, K. T. A., Krisbiantoro, P. A., & Imawan, A. C. (2021). Efisiensi Waktu Pelayanan Pasien dengan Metode Lean Management : Literature Review. *Journal of Multidisciplinary Applied Natural Science*, 1(1), 1–12.
- Maulida, N., Haifa, A. I., Amalia, T., Fauziah, V., Meta, P., & Cikarang, I. (2023). Analisis Hubungan Waktu Tunggu Pelayanan Resep terhadap Tingkat Kepuasan Pasien pada Pasien BPJS Rawat Jalan di Rumah Sakit X. *Prosiding Seminar Nasional Diseminasi Penelitian*, 3(September), 2964–6154.
- Monoarfa, H. (2012). Efektivitas dan Efisiensi Penyelenggaraan Pelayanan Publik: Suatu Tinjauan Kinerja Lembaga Pemerintahan. *Jurnal Pelangi Ilmu*, 5(1), 1–9.
- Muhammad Yunus, Wiryanto, & Yuandani. (2021). Evaluation of Waiting Time for Outpatient Prescription Services at the Pharmacy Installation at the Universitas Sumatera Utara Hospital. *Indonesian Journal of Pharmaceutical and Clinical Research*, 3(2). <https://doi.org/10.32734/idjpcr.v3i2.4430>

- Noviani, E. D. (2017). The Application of Lean Management Method on Outpatient BPJS Services at Hermina Depok Hospital in 2017. *Jurnal Administrasi Rumah Sakit*, 3.
- Nuraini, N., & Wijayanti, R. A. (2018). Optimalisasi Waktu Tunggu Rawat Jalan Dengan Metode Lean Healthcare Di Klinik Pratama. *Jurnal Manajemen Informasi Kesehatan Indonesia*, 6(1). <https://doi.org/10.33560/v6i1.182>
- Pipit Mulyah, Dyah Aminatun, Sukma Septian Nasution, Tommy Hastomo, Setiana Sri Wahyuni Sitepu, T. (2020). Peranan Penggunaan Rekam Medis Elektronik Terhadap Waktu Tunggu Serta Dampaknya Pada Kepuasan Pasien. *Journal GEEJ*, 7(2), 1695–1709.
- Purnomo, W., Hariyanti, T., & Prastowo, W. (2021). Analisa Waktu Tunggu Pelayanan Rawat Jalan di RS Universitas Brawijaya. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 5(4). <https://doi.org/10.24912/jmbk.v5i4.6904>
- Rosita, S., Arina, & Muhazar. (2021). Faktor yang Berhubungan dengan Efektivitas Pelayanan Kesehatan pada Pasien di Ruang Rawat Inap Rumah Sakit TK II Iskandar Muda Banda Aceh. *Jurnal Sains Dan Aplikasi Volume*, 9(2), 112–119.
- Safitri, L. (2024). Efektivitas Pelayanan Administrasi Kependudukan E- Ktp Melalui Aplikasi E-Open Pada Dinas Kependudukan Dan Pencatatan Sipil Kota Bekasi. *Communnity Development Journal*, 5(3), 5559–5564.
- Sianturi, H. H., Hadiwiarjo, Y. H., & Anisah, A. (2020). Hubungan Waktu Tunggu dan Cara Bayar terhadap Kepuasan Pasien Rawat Jalan Poli Penyakit Dalam Rumah Sakit PGI Cikini Jakarta. *Jurnal Ilmiah Kesehatan Masyarakat : Media Komunikasi Komunitas Kesehatan Masyarakat*, 12(3). <https://doi.org/10.52022/jikm.v12i3.84>
- Sun, J., Lin, Q., Zhao, P., Zhang, Q., Xu, K., Chen, H., Hu, C. J., Stuntz, M., Li, H., & Liu, Y. (2017). Reducing waiting time and raising outpatient satisfaction in a Chinese public tertiary general hospital-an interrupted time series study. *BMC Public Health*, 17(1). <https://doi.org/10.1186/s12889-017-4667-z>
- Susilawati, S., & Gunawan, E. (2022). Tinjauan Faktor Penyebab Waktu Tunggu Pelayanan Pendaftaran Rawat Jalan di Klinik Kasih Ibu. *Cerdika: Jurnal Ilmiah Indonesia*, 2(3). <https://doi.org/10.36418/cerdika.v2i3.356>
- Wirajaya, M. K. M., & Rettobjaan, V. F. C. (2021). Faktor yang Memengaruhi Keterlambatan Pengembalian Rekam Medis Pasien Rawat Inap di Rumah Sakit: Kajian Literatur. *Jurnal Kesehatan Vokasional*, 6(3), 147. <https://doi.org/10.22146/jkesvo.66282>