MEJORA : Medical Journal Awatara
Vol. 4, No. 3, Juli 2026, pp. 357- 362
ISSN: 30259584, DOI: 10.61434/mejora.v4i3.359

Evaluation of the Timeliness of Outpatient Medical Record Document Provision Based on Minimum Service Standards at Hospital

Loura Weryco Latupeirissa[1], Dede Setiawan[2], Tuti Herawati[3], Husni Hidayat Malik[4], Riantina Luxiarti[5]
louraweryco@stikesmahardika.ac.id [1], dedesetiawan@mahardika.ac.id [2], tutiheraw@stikesmahardika.ac.id [3], husnihm@mahardika.ac.id [4], riantina@mahardika.ac.id [5]
[12345] Insan Mahardika University, Cirebon, Indonesia

ARTICLE INFO

History of the article:
Received July, 28, 2026
Revised August, 02, 2026
Accepted August, 02, 2026

Keywords
Outpatient Medical Records
Document Provision Time
Health Information Management
Hospital Service Quality
Medical Record Services

ABSTRACT

Timely provision of outpatient medical record documents is an essential indicator of hospital service quality because it supports continuity of care, reduces patient waiting time, and improves operational efficiency. Delays in document retrieval may disrupt clinical workflows and affect the overall quality of healthcare services. This study aimed to evaluate the timeliness of outpatient medical record document provision at Hospital X, Cirebon Regency, Indonesia, based on the Indonesian Minimum Service Standards (MSS). A quantitative descriptive research design was employed. The study was conducted in May 2026 using direct observation of 100 outpatient medical record documents selected through consecutive sampling from a population of 11,626 outpatient visits. Data were collected using a structured observation checklist and analyzed descriptively by calculating frequencies, percentages, and measures of central tendency. The findings revealed that only 33.0% of outpatient medical record documents were provided within the required standard of ≤10 minutes, while 67.0% exceeded the standard. The mean document provision time was 10.53 minutes, with a minimum time of 2 minutes and a maximum of 43 minutes. These findings indicate that the outpatient medical record service at Hospital X has not yet fully complied with the Indonesian Minimum Service Standards. Strengthening filing management, optimizing document retrieval procedures, enhancing staff competency, and implementing continuous performance monitoring are recommended to improve the timeliness of medical record document provision and the overall quality of outpatient healthcare services.

Corresponding Author:
Loura Weryco Latupeirissa
Insan Mahardika University
Cirebon
louraweryco@stikesmahardika.ac.id

This work is licensed under a Creative Commons Attribution 4.0 International License.

INTRODUCTION

Medical records are fundamental components of healthcare systems because they contain comprehensive information regarding patients' identities, medical histories, diagnoses, treatments, and healthcare services provided during hospitalization or outpatient visits. Accurate and timely medical record services are essential to ensure continuity of care, support clinical decision-making, improve patient safety, and facilitate hospital management and health information systems. Efficient management of medical records also contributes to the overall quality and effectiveness of healthcare delivery by ensuring that patient information is readily available whenever needed [1], [2].

The timeliness of outpatient medical record document provision is recognized as one of the key indicators of healthcare service quality. Delays in retrieving and delivering medical record documents may prolong patient waiting times, disrupt clinical workflows, reduce physician productivity, and negatively affect patient satisfaction. According to the Indonesian Minimum Service Standards (MSS) for hospitals, outpatient medical record documents should be available within a maximum of 10 minutes from patient registration until the documents are ready for clinical services [3]. Therefore, continuous evaluation of medical record document provision is necessary to ensure compliance with national healthcare quality standards and to support the delivery of efficient outpatient services.

Previous studies have consistently reported that delays in outpatient medical record document provision remain a common challenge in Indonesian hospitals. Several operational factors have been identified, including increasing outpatient visits, inadequate numbers of medical record personnel, document misfiling, ineffective filing systems, and inefficient document distribution processes [4], [5]. These challenges not only increase patient waiting times but also reduce service efficiency and hospital performance. International studies have similarly emphasized that effective health information management, standardized operational procedures, and optimized document retrieval systems play significant roles in improving the timeliness of medical record services and enhancing healthcare quality [6], [7].

Although previous studies have investigated factors influencing medical record document provision, most have focused primarily on identifying operational barriers or evaluating filing systems in specific healthcare settings. Limited evidence is available regarding hospital compliance with the Indonesian Minimum Service Standards based on direct observation of routine outpatient medical record services. Furthermore, variations in hospital characteristics, patient volumes, and medical record management practices may influence document provision performance. Consequently, evaluating the current performance of outpatient medical record services in different hospital settings remains important for identifying opportunities to improve service quality and operational efficiency [5], [7].

Hospital X, located in Cirebon Regency, is one of the hospitals providing outpatient healthcare services to a large number of patients. Timely availability of medical record documents is essential to support effective clinical services and minimize patient waiting times. However, preliminary observations indicated that delays in medical record document provision still occurred during outpatient services. These delays may reduce service efficiency and hinder compliance with the Indonesian Minimum Service Standards. Therefore, an evaluation of the timeliness of outpatient medical record document provision is required to provide evidence for improving medical record management and outpatient service quality.

Based on these considerations, this study aimed to evaluate the timeliness of outpatient medical record document provision at Hospital X, Cirebon Regency, Indonesia, by comparing the observed document provision time with the Indonesian Minimum Service Standards. The findings are expected to provide practical recommendations for improving medical record management and enhancing the quality of outpatient healthcare services.

RESEARCH METHODS

This study employed a quantitative descriptive research design to evaluate the timeliness of outpatient medical record document provision at Hospital X, Cirebon Regency, Indonesia. A descriptive approach was considered appropriate because the study aimed to measure and describe the actual performance of medical record services without manipulating any variables or testing causal relationships. The evaluation was conducted by comparing the observed document provision time with the Indonesian Minimum Service Standards (MSS) for hospital services [8].

The research was conducted at Hospital X, Cirebon Regency, West Java, Indonesia. To maintain institutional confidentiality, the hospital's identity was anonymized throughout this study. Data collection was carried out in May 2026 through direct observation of the outpatient medical record service process during routine hospital operations.

The study population consisted of all outpatient medical record documents processed during the observation period, totaling 11,626 documents according to the hospital's monthly outpatient service records. The sample size was determined using the Slovin formula with a margin of error of 10%, resulting in a minimum sample of 100 outpatient medical record documents. A consecutive sampling technique was employed, whereby every outpatient medical record document meeting the inclusion criteria during the observation period was included until the required sample size was achieved. This sampling approach is commonly applied in observational health service research because it provides a practical representation of routine service activities while minimizing selection bias [9].

The study focused on a single research variable, namely the timeliness of outpatient medical record document provision. Document provision time was measured from the patient's registration at the outpatient registration unit until the corresponding medical record document became available for healthcare services. In accordance with the Indonesian Minimum Service Standards, document provision was classified as timely when completed within 10 minutes or less and delayed when it exceeded 10 minutes [3].

Primary data were collected through direct observation using a structured observation checklist specifically developed for this study. The checklist was used to record the medical record number, patient registration time, document availability time, document provision duration, and timeliness category. Secondary data regarding the monthly number of outpatient visits were obtained from the Medical Record Unit to describe the study population. Before data collection, the observation procedures were standardized to ensure consistency in time recording and data documentation [10].

The collected data were analyzed using descriptive statistical methods. Continuous variables were summarized using the mean, minimum, and maximum document provision times, whereas categorical variables were presented as

frequencies and percentages. The findings were subsequently compared with the Indonesian Minimum Service Standards to determine the level of compliance of outpatient medical record services. Data tabulation and descriptive analysis were performed using Microsoft Excel [11].

Prior to data collection, permission to conduct the study was obtained from Hospital X. All patient identifiers and institutional information were anonymized to ensure confidentiality and protect patient privacy. The study involved observation of routine operational activities without direct intervention in patient care and was conducted in accordance with ethical principles governing health services research, including confidentiality, privacy, and responsible management of health information [12].

RESULTS AND DISCUSSION

RESULTS

A total of 100 outpatient medical record documents were observed to evaluate the timeliness of document provision at Hospital X, Cirebon Regency, Indonesia. The provision time was measured from patient registration until the medical record document became available for healthcare services.

Table 1. Distribution of Outpatient Medical Record Documents Based on Timeliness of Provision

Timeliness	Frequency (n)	Percentage (%)
Timely (≤10 minutes)	33	33.0
Delayed (>10 minutes)	67	67.0
Total	100	100.0

Table 1 shows that 33 (33.0%) outpatient medical record documents were provided within the maximum time specified by the Indonesian Minimum Service Standards (≤10 minutes), whereas 67 (67.0%) documents exceeded the required provision time.

Table 2. Descriptive Statistics of Outpatient Medical Record Document Provision Time

Variable	Mean (minutes)	Minimum	Maximum
Document provision time	10.53	2	43

The average time required to provide outpatient medical record documents was 10.53 minutes. The shortest provision time was 2 minutes, while the longest provision time reached 43 minutes, indicating considerable variation in the document retrieval process.

Table 3. Compliance with the Indonesian Minimum Service Standards

Indicator	Standard	Result	Status
Medical record document provision time	≤10 minutes	67% delayed	Not Achieved

Based on the observed provision times, the outpatient medical record service at Hospital X did not meet the Indonesian Minimum Service Standards. More than half of the observed documents were provided beyond the required maximum time of 10 minutes.

DISCUSSION

The findings of this study indicate that the timeliness of outpatient medical record document provision at Hospital X has not yet met the Indonesian Minimum Service Standards (MSS). Of the 100 observed outpatient medical record documents, only 33.0% were provided within the required maximum time of 10 minutes, whereas 67.0% exceeded the established standard. In addition, the average document provision time was 10.53 minutes, indicating that the overall performance of the outpatient medical record service requires improvement. Timely availability of medical record documents is an important indicator of hospital service quality because it supports continuity of care, reduces patient waiting time, and improves the efficiency of healthcare delivery [13].

The delayed provision of outpatient medical record documents observed in this study may be associated with several operational factors commonly reported in hospital medical record services. These include high outpatient attendance, inefficient document retrieval processes, document misfiling, and limitations in human resources. Although the present study did not specifically investigate the determinants of delayed document provision, these factors have consistently been identified as major contributors to prolonged retrieval time in previous studies [14], [15]. Consequently, continuous monitoring of document provision time and regular evaluation of medical record workflows are essential to improve operational performance.

The results of this study are consistent with the findings reported [14], who found that delays in outpatient medical record document provision were primarily associated with increasing patient volume and inefficient filing management. Similarly [15] reported that ineffective document distribution and filing systems significantly affected the timeliness of medical record availability in outpatient services. Furthermore, previous studies have consistently demonstrated that document misfiling, ineffective filing systems, and inadequate human resources contribute to prolonged medical record retrieval time, which subsequently increases patient waiting time and reduces service efficiency [6], [7]. Similar findings were reported by Ikhwan and Halid [5], who showed that the implementation of an appropriate filing system significantly influences the timeliness of outpatient medical record document provision. The consistency of these findings indicates that delayed medical record provision remains a common challenge in many Indonesian healthcare facilities.

International evidence also supports the findings of this study. Albagmi [16] reported that improvements in electronic medical record (EMR) implementation and health information management contribute to more efficient clinical workflows, reduced patient waiting time, and enhanced healthcare service quality. Likewise, Juliansyah et al. [11] emphasized that digital transformation through EMR systems can improve operational efficiency by accelerating access to patient information and optimizing healthcare processes. These findings suggest that effective medical record management depends not only on standardized operational procedures and competent human resources but also on the gradual adoption of digital health information technologies. In the context of healthcare transformation in Indonesia, the adoption of Electronic Medical Records (EMR) is no longer merely an operational choice, but a regulatory requirement under the Indonesian Minister of Health Regulation (Permenkes) No. 24 of 2022. This regulation mandates all healthcare facilities in Indonesia to transition from paper-based systems to digital medical records. Accelerating full EMR implementation at Hospital X is critical not only to comply with national health policy but also to permanently eliminate physical retrieval bottlenecks—such as misfiling, manual document transport delays, and spatial storage constraints. Transitioning to a fully integrated EMR system allows clinical staff to access patient records instantaneously upon registration, effectively reducing document provision time to near-zero and enhancing overall outpatient workflow efficiency.

From a practical perspective, the findings of this study suggest that Hospital X should strengthen its medical record management practices to improve compliance with the Indonesian Minimum Service Standards. Several improvement strategies may be considered, including routine monitoring of document provision time, periodic evaluation of filing procedures, enhancement of staff competency through continuous training, optimization of document tracking mechanisms, and gradual adoption of digital health information systems where feasible. Previous studies have shown that these strategies contribute to improved operational efficiency, shorter patient waiting times, and better overall quality of outpatient healthcare services [16]–[18].

This study has several limitations. First, the study was conducted in a single hospital, limiting the generalizability of the findings to other healthcare settings. Second, the study employed a descriptive research design and therefore did not analyze the causal factors influencing delayed document provision. Future studies are recommended to employ analytical research designs to examine organizational, human resource, technological, and workflow factors affecting the timeliness of outpatient medical record services.

CONCLUSION

This study evaluated the timeliness of outpatient medical record document provision at Hospital X, Cirebon Regency, Indonesia, based on the Indonesian Minimum Service Standards (MSS). The findings demonstrate that the outpatient medical record service has not yet fully complied with the required national standard, indicating the need for improvements in document retrieval and service management to ensure timely availability of medical record documents for outpatient care.

The study provides empirical evidence regarding the current performance of outpatient medical record services and highlights the importance of continuous monitoring and quality improvement in health information management. To overcome operational delays and achieve compliance with national standards, Hospital X should adopt concrete managerial strategies:

1. Implementation of Color-Coding and Tracer Systems: Enhance physical filing management by deploying standardized color-coding on document folders and enforcing strict tracer protocols to minimize misfiling and accelerate manual document retrieval during peak operational hours.
2. H-1 Integration of Online Registration and Pre-Retrieval: Connect the hospital's online registration platform directly with the Medical Record Unit to enable staff to pre-retrieve and organize physical medical record documents on the day before scheduled outpatient visits (H-1).
3. Accelerated EMR Migration: Establish a clear digital roadmap aligned with Permenkes No. 24 of 2022 to transition to a fully digital Electronic Medical Record (EMR) system, ensuring long-term operational efficiency and seamless patient care delivery.

Future studies are recommended to investigate organizational, human resource, and technological factors influencing document provision timeliness using analytical research designs across multiple healthcare institutions.

REFERENCE

[1] Kementerian Kesehatan Republik Indonesia. *Peraturan Menteri Kesehatan Republik Indonesia Nomor 24 Tahun 2022 tentang Rekam Medis.*

[2] Kunnati, Laksono, B. T., Suhenda, A., & Rudi, A. (2026). *The Impact of Timely Medical Record Storage on Outpatient Service Efficiency at Tanjung Health Center*. Jurnal Persada Husada Indonesia.

[3] Yulianti, D., & Syaripudin, D. (2023). *Analisis Waktu Penyediaan Rekam Medis Rawat Jalan dalam Meningkatkan Efektivitas Pelayanan Rekam Medis di RSUD Majalaya*. Health Information: Jurnal Penelitian.

[4] Susilo, H. G., Kristijono, A., & Saputro, N. T. *Analisis Waktu Penyediaan Dokumen Rekam Medis Rawat Jalan Menurut Model 5M di RSUD Ungaran*. Indonesian of Health Information Management Journal (INOHIM).

[5] Ikhwan, I., & Halid, M. (2022). *Analysis of Differences in Timeliness of Providing Outpatient Medical Record Documents in the Terminal Digit Filling Filing System at Hospital*. JMMR.

[6] Iman, A. T., & Puspita, N. (2021). *Literature Review Faktor Penyebab Keterlambatan Penyediaan Rekam Medis Rawat Jalan*. Jurnal Rekam Medis dan Informasi Kesehatan

[7] Ikawati, F. R., Ansyori, A., & Prisusanti, R. D. (2021). *Tinjauan Literatur Analisis Faktor Penyebab Keterlambatan Penyediaan Rekam Medis Rumah Sakit di Indonesia*. Jurnal Rekam Medis dan Informasi Kesehatan Indonesia.

[8] Hidayat, A. W., & Prakoso, A. D. (2022). *Monitoring Analysis of the Speed of Outpatient Medical Record Services at X Hospital, Bekasi Regency*. International Journal of Health Sciences.

[9] World Health Organization (WHO). *Global Strategy on Digital Health 2020–2025.*

[10] World Health Organization. (2018). *Classification of digital health interventions v1.0: A shared language to describe the uses of digital technology for health*. Geneva: World Health Organization. WHO/RHR/18.06.

[11] Juliansyah, R., Aqid, B. M., Salsabila, A. P., & Nurfiyanti, K. (2024). *Implementation of EMR System in Indonesian Health Facilities: Benefits and Constraints*.

[12] Adrian, V., Sari, I. R., & Hikmahrachim, H. G. (2021). *Establishing Data Warehouse to Improve Standardize Health Care Delivery: A Protocol Development in Jakarta City*

[13] Chitikela, A. N. (2024). *Secure and Transparent Medical Record Management System Using Python and Blockchain*.

[14] Creswell, J. W., & Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 6th ed.

[15] Polit, D. F., & Beck, C. T. (2021). *Nursing Research: Generating and Assessing Evidence for Nursing Practice*.

[16] Albagmi (2021) – *The Effectiveness of EMR Implementation Regarding Reducing Documentation Errors and Waiting Time for Patients in Outpatient Clinics: A Systematic Review*

[17] Wurster, F., Fütterer, G., Beckmann, M., et al. *The Analyzation of Change in Documentation due to the Introduction of Electronic Patient Records in Hospitals—A Systematic Review.* Journal of Medical Systems, vol. 46, no. 8, 2022, Art. 54. DOI: 10.1007/s10916-022-01840-0.

[18] Nguyen, D. T., Bui, T. M. A., Chu, H. X., Pham, Q. A., Pham, H. T., Nguyen, T. P. T., Cao, H. Q., Vu, T. H., & Phung, T. H. (2022). *Patient satisfaction with healthcare service quality and its associated factors at one polyclinic in Hanoi, Vietnam*. *International Journal of Public Health, 67*, 1605055. https://doi.org/10.3389/ijph.2022.1605055.

[19] Prasetyo, W., & Sundari, S. (2025). Enhancing Health Service Efficiency through the *Implementation of Electronic Medical Records: A Health Management Perspective.*

[20] Kruse, C. S., Krowski, N., Rodriguez, B., Tran, L., Vela, J., & Brooks, M. (2022). *Telehealth and patient satisfaction: A systematic review and narrative analysis*. *BMJ Open, 12*(4), e054499. https://doi.org/10.1136/bmjopen-2021-054499.