

## Implementation of the Hospital on Tablet (HoT) Health Care Service Program at Jember Pulmonary Hospital

Muhammad Yazid Hidayatullah<sup>1</sup>, Selfi Budi Helpiastuti<sup>2</sup>, Franciscus Adi Prasetyo<sup>3</sup>

<sup>1,2,3</sup> Faculty of Social and Political Sciences, Master of Administrative Science Study Program,  
Universitas Jember

e-mail: <sup>1</sup>yazidhidayatullah13@gmail.com, selfibudihelpiastuti@unej.ac.id  
franciscusadi.fisip@unej.ac.id

### Abstract

*The rapid advancement of information technology has transformed healthcare service delivery, fostering innovations that enhance efficiency, responsiveness, and patient-centered care. This study explores the implementation of the Hospital on Tablet program at Jember Pulmonary Hospital, an initiative designed to improve service quality, accelerate medical documentation, and strengthen communication between healthcare professionals and patients. Employing a descriptive qualitative approach, data were collected through in-depth interviews, direct observations, and document analysis. The findings indicate that the Hospital on Tablet program significantly improved operational efficiency by reducing documentation time and providing real-time access to patient information. Furthermore, it enhanced interprofessional coordination and supported timely, evidence-based clinical decision-making. Despite these advantages, several challenges remain, including limited digital literacy among healthcare workers, reliance on stable internet connectivity, and the need for continuous system maintenance and updates. Overall, the Hospital on Tablet initiative demonstrates a positive impact on healthcare service performance and organizational responsiveness. Strengthening human resource capacity and technological infrastructure is essential to ensure the program's sustainability and scalability within the broader digital transformation of hospital services.*

**Keywords:** innovation, Hospital on Tablet, hospital digital transformation, service efficiency,

### Abstrak

Kemajuan pesat teknologi informasi telah mengubah penyelenggaraan pelayanan kesehatan, mendorong berbagai inovasi yang meningkatkan efisiensi, responsivitas, dan pelayanan yang berpusat pada pasien. Penelitian ini mengkaji implementasi program Hospital on Tablet di Rumah Sakit Paru Jember, sebuah inisiatif yang dirancang untuk meningkatkan mutu layanan, mempercepat dokumentasi medis, serta memperkuat komunikasi antara tenaga kesehatan dan pasien. Dengan menggunakan pendekatan kualitatif deskriptif, data dikumpulkan melalui wawancara mendalam, observasi langsung, dan analisis dokumen. Temuan menunjukkan bahwa program Hospital on Tablet secara signifikan meningkatkan efisiensi operasional dengan mengurangi waktu dokumentasi dan menyediakan akses informasi pasien secara real-time. Selain itu, program ini meningkatkan koordinasi antarprofesional dan mendukung pengambilan keputusan klinis yang tepat waktu dan berbasis bukti. Meskipun memiliki keunggulan, beberapa tantangan masih ditemukan, termasuk keterbatasan literasi digital di kalangan tenaga kesehatan, ketergantungan pada konektivitas internet yang stabil, serta kebutuhan pemeliharaan dan pembaruan sistem secara berkelanjutan. Secara keseluruhan, inisiatif Hospital on Tablet menunjukkan dampak positif terhadap kinerja pelayanan kesehatan dan responsivitas organisasi. Penguatan kapasitas sumber daya manusia dan infrastruktur teknologi menjadi hal yang penting untuk memastikan keberlanjutan dan skalabilitas program dalam kerangka transformasi digital pelayanan rumah sakit yang lebih luas.

**Kata kunci:** inovasi, Hospital on Tablet, transformasi digital, efisiensi pelayanan

## INTRODUCTION

Digital transformation in healthcare is increasingly recognized as a strategic necessity for improving service quality, efficiency, and accessibility. Hospitals are challenged to adapt to technological advances and changing patient expectations by integrating information and communication technology (ICT) into their service systems (World Health Organization, 2022). Recognizing this need, Jember Pulmonary Hospital launched the Hospital on Tablet program, an innovative service designed to digitalize medical documentation and improve communication among healthcare professionals.

This initiative aligns with Indonesia's Digital Health Transformation Strategy 2021–2025, which emphasizes the integration of digital systems in hospital operations (Ministry of Health of the Republic of Indonesia, 2023). The Hospital on Tablet program aims to optimize hospital workflow, minimize manual errors, and enable real-time access to patient data. This study analyzes the program's implementation, identifies its benefits, and discusses the challenges faced during its execution at Jember Pulmonary Hospital.

In accordance with Government Regulation Number 38 of 2017 on Regional Innovation, Article 2 Paragraphs (1) and (2), regional innovation aims to enhance the performance of local government administration. To achieve this objective, as stipulated in Paragraph (1), the targets of regional innovation are directed toward accelerating the realization of community welfare through:

- (a) improvement of public services;
- (b) empowerment and participation of the community; and
- (c) enhancement of regional competitiveness.

In line with these goals, the Provincial Government of East Java continuously strives to improve public service delivery by strengthening the performance systems of regional government agencies, departments, and integrated service units. Innovation has become a key approach to simplify public access to various services provided by local government offices within the province. In this context, innovation serves as a form of renewal and modernization in local governance practices. The issuance of East Java Governor Regulation Number 69 of 2021 further reinforces the implementation of

regional innovation and provides a regulatory framework for the development of innovation initiatives across East Java Province.

The Jember Pulmonary Hospital, as one of the Regional Technical Implementation Units (UPTD) under the East Java Provincial Health Office, plays a significant role in providing specialized healthcare services. As a Type B specialized hospital with Paripurna (excellent) accreditation status, Jember Pulmonary Hospital is committed to continuously improving service quality for the community.

To support this goal, the hospital developed an innovative digital health service known as Hospital on Tablet (HoT) — an electronic medical record application designed to streamline healthcare processes. The HoT program functions as a strategic tool for hospital management in delivering efficient and technology-based healthcare services. Its implementation encompasses several key components, including:

- a. Electronic Patient Card (E-KAPAS),
- b. Electronic Standard Operating Procedures (E-SOP),
- c. Electronic Medical Record (EMR),
- d. Electronic Prescription (E-Resep),
- e. Electronic Leave System (E-Cuti), and
- f. Quality Indicators (IMUT).

This program represents a significant milestone in enhancing institutional performance and healthcare service quality at Jember Pulmonary Hospital. By integrating digital innovation into daily operations, the hospital not only aligns with national and provincial policy directives on regional innovation but also exemplifies the transformative potential of technology in improving public sector service delivery in Indonesia.

## **LITERATURE REVIEW**

The literature review section contains a review of the literature, concepts, and theories used in the research, and can also be in the form of a review of a previous literature (state of the art). Namely the theory of innovative governance: *konsep dan aplikasi* by Sangkala (2014), the theory of E-Government by Sutabari (2012), the theory

of implementating public policy by (1980), the theory of implementating public policy: concept, theory, and case study (2014).

## **RESEARCH METHODS**

This study employs a qualitative research design with a descriptive approach. According to Sugiyono (2016), descriptive research is conducted to determine the value of an independent variable, either one or more, without making comparisons or examining relationships between variables. Qualitative research aims to understand phenomena experienced by research subjects holistically and describe them in words. Through this approach, the researcher was able to obtain and present objective data to explore and comprehend the implementation of the *Hospital On Tablet* health service program at Jember Lung Hospital.

Moleong (2016) states that the qualitative method is employed for several reasons. First, the qualitative approach is more suitable when dealing with multiple realities. Second, it allows for the direct presentation of the relationship between the researcher and the informants. Finally, this method is considered more sensitive and adaptable to various shared influences and value patterns present within the research context. The research period refers to the duration used by the researcher to conduct the study. According to Sugiyono (2011:25–26), the length of the research period may vary—either long or short—depending on when sufficient data saturation is achieved. This study was conducted from September 2025 to October 2025.

According to Afrizal (2016:128), the research location refers to the place where the study is conducted, which can also be understood as the setting or context of the research. In this study, the researcher determined that the research would be carried out at Jember Lung Hospital.

Determination of informants using Purposive sampling technique. Based on the opinion of (Creswell, 2016) that purposive is a technique for determining qualitative research informants with certain considerations and objectives.

The following are research informants that were determined by the researcher:

1. Director of Pulmonary Hospital

2. Head of the Administrative Division
3. Head of Service Division
4. Head of the Public Health and Research Development Division.
5. Head of the Information Technology Unit Of The Hospital.
6. Staff of Pulmonary Hospital Jember

Data from observation, in-depth interviews and documentation will then be analyzed using data analysis techniques using interactive data analysis according to (Miles, Matthew B. Huberman, A. Michael, and Saldana, 2014) and tested for validity using 4 criteria, namely data collection, data condensation, data presentation, drawing conclusions and verification

## **RESULTS AND DISCUSSION**

The implementation stage constitutes a crucial component of any policy process. Based on observations related to the implementation of the Hospital on Tablet (HoT) healthcare service program at Jember Pulmonary Hospital, this study employs the grand theory proposed by Syahrudin, combined with the theoretical framework of George Edward III.

Syahrudin views the implementation process from three perspectives: policymakers, field officials, and target groups. Meanwhile, George Edward III emphasizes four key aspects: communication, resources, disposition, and bureaucratic structure..

### **Policymakers**

Implementation can be examined and evaluated from the extent of efforts undertaken by policymakers—from the highest to the lowest level. The degree of effort exerted by policymakers influences the acceptance and compliance of field implementers and target groups. Two factors closely related to policymakers are communication and bureaucratic structure.

### **Communication Factor**

Based on the data obtained, the implementation of the Hospital on Tablet program at Jember Pulmonary Hospital has generally proceeded effectively.

Communication occurs among policymakers, implementing officials, and target groups. The program has been operating for several years and has undergone significant improvements due to feedback from implementers and users.

The program coordinators have also established collaborations with third parties through formal agreements outlining the respective responsibilities of each party. Given that the HoT program involves multiple divisions with distinct functions, the hospital's Information Technology Installation Unit—serving as the program's main coordinator—has conducted several outreach and monitoring activities.

Proactive outreach involves scheduled visits to socialize and monitor the program across departments. Challenges encountered during implementation have been effectively addressed through the creation of a WhatsApp group consisting of implementing officials and target groups, enabling immediate communication and problem-solving. In cases where issues cannot be resolved internally by the IT unit, coordination with third-party partners ensures that problems are addressed promptly without disrupting hospital services.

### **Bureaucratic Structure Factor**

According to George Edward III, the bureaucratic structure plays a vital role in policy implementation and in achieving policy objectives. It includes two essential elements: standard operating procedures (SOPs) and organizational structure (division of labor). Both are critical in defining workflows and responsibilities, ensuring smooth implementation. Findings indicate that the HoT program does not yet have a specific SOP; rather, its procedures align with existing operational standards for each hospital service. However, the partnership agreement with the third-party vendor includes several software modules designed according to the hospital's operational needs, such as:

1. Outpatient, Emergency, and Inpatient Registration Modules
2. Outpatient, Emergency, and Inpatient Billing Modules
3. Supporting Medical Billing Module
4. Patient Billing Payment and Deposit Refund Module
5. Service Fee Distribution Module

6. Pharmacy Warehouse Inventory Module
7. Pharmacy Supplier Payment Module
8. Unit Pharmacy Inventory Module
9. Pharmacy Inventory Distribution Module
10. Patient Payment and Refund Module
11. Outpatient, Emergency, and Inpatient Electronic Medical Record (EMR) Modules
12. Supporting Medical EMR Module
13. e-Prescription Module
14. V-Claim Module integrated with BPJS (Indonesia's National Health Insurance System)

These modules serve as operational references to ensure the smooth implementation of the HoT program. The bureaucratic structure for the program includes the hospital's Information Technology Installation Unit as the person in charge (PIC), supported by PT Lintang Kawuriyan. Since 2025, two technical experts from the vendor have also assisted the hospital's IT team. End users include specialist doctors, general practitioners, nurses, medical record staff, registration clerks, cashiers, and other supporting personnel. Consequently, all patient services are recorded electronically, and the data entered cannot be modified unless formal correction requests are made and coordinated with the hospital IT department.

### **Field Implementers**

Policy implementation can also be observed from the actions of field implementers. In the HoT program, field implementers include all hospital employees with access rights provided by the IT department, covering the entire process—from patient registration to completion of healthcare services.

### **Resource Factor**

Resources are a key determinant of successful program implementation, consisting of both human and physical (infrastructure) resources.

### **Human Resources.**

Human resources play a vital role in ensuring the success of the HoT program.

Based on data collected, Jember Pulmonary Hospital has adequate staffing for program implementation. As of 2025, the hospital employs 458 personnel, all of whom can operate the HoT system. Employees have access to various applications such as the Electronic Medical Record (EMR), Billing, and e-Prescription systems. Other systems, such as e-Leave, e-SOP, and e-Doctor Credentialing, are accessed using a general password shared among employees. Hospital staff—including general practitioners, nurses, and supporting personnel—work in three shifts, meaning the application operates continuously 24 hours a day, with access varying by user credentials. Specialist doctors and attending physicians (DPJP) have unrestricted access provided by the IT department, allowing continuous consultation and real-time patient monitoring, thereby ensuring comprehensive hospital services.

#### **Facilities and Infrastructure.**

Adequate infrastructure, both electronic and non-electronic, is essential for the successful implementation of the HoT program. Human resources and infrastructure must function synergistically—skilled staff require reliable tools, and sophisticated systems need competent users. Electronic facilities, such as PCs, laptops, and network infrastructure, are critical, as the HoT program is highly dependent on technology and internet connectivity. Jember Pulmonary Hospital is fully equipped with Wi-Fi and LAN connections, and each department is provided with maintained computer equipment. Annual budgets include provisions for hardware procurement and maintenance.

The hospital continues its partnership with a third-party vendor, allocating funds annually for system maintenance and upgrades. Supporting facilities such as office space, furniture, and utilities are also maintained through routine procurement processes. Overall, both human and infrastructure resources are sufficient to sustain the HoT program's implementation.

#### **Disposition Factor**

Disposition or attitude of implementers significantly affects the success of policy implementation. According to George Edward III (as cited in Syahrudin, 2020:62), effective implementation requires that implementers understand their tasks and possess

the competence to carry them out. Field observations revealed that staff generally display courteous behavior, adhering to the hospital's 5S (smile, greeting, salute, polite, and courteous) standard. Regular evaluations and monitoring are conducted to ensure compliance. However, some implementers demonstrate a lack of punctuality, as the system allows flexible access from any location. Although such flexibility supports efficiency, it must not compromise service standards regulated by the hospital and the National Health Insurance (BPJS).

Therefore, stronger leadership enforcement is needed to maintain discipline. Overall, implementers demonstrate adequate competence in operating the HoT system, supported by continuous training and supervision from the hospital IT unit.

### **Target Groups**

Target groups represent the recipients of policy outcomes and play a key role in determining implementation success. In the HoT program, the target group consists of all hospital employees; however, access to certain applications is limited to specific roles. The response of target groups is critical—positive responses facilitate implementation, whereas resistance may hinder it. Initially, the HoT program focused solely on electronic medical records (EMR) in 2004, even before regulatory frameworks existed. The regulation on EMR was later formalized through the Indonesian Ministry of Health Regulation No. 24 of 2022, mandating all healthcare facilities to adopt EMR by December 31, 2023.

This regulatory shift marked a significant transformation at Jember Pulmonary Hospital—from manual systems to digitalized operations—fostering a forward-looking mindset among staff. Observational data indicate that employees responded positively to the HoT program. Clear communication and structured task allocation from policymakers have greatly influenced acceptance among target groups. Employees feel involved in the program's development and progress, fostering a sense of ownership and motivation. Because many target group members also serve as implementers, they possess a clearer understanding of operational requirements and compliance expectations. Moreover, system-generated digital records reinforce accountability, as all

activities are automatically documented. Despite occasional technical challenges, strong policy support, adequate resources, and reliable facilities have ensured the program's continuity and overall success.

## **CONCLUSION**

Based on the analytical discussion regarding the implementation of the Hospital on Tablet (HoT) health service program at Jember Pulmonary Hospital, assessed through the perspectives of policymakers, field officers, and target groups according to George Edward III's grand theory, the following conclusions can be drawn:

### **Policy Formulation Aspect**

From the policymaker's perspective, communication has been effectively established. The outcomes of communication between field officers and target groups have been well understood and appropriately implemented, enabling the successful execution of the Hospital on Tablet program. Since its initial implementation, the program has undergone various adjustments and developments based on feedback and evolving regulations.

### **Bureaucratic Structure Dimension**

The implementation of the Hospital on Tablet program fulfills the bureaucratic structure dimension. The initiative originated from the hospital's structural leadership—ranging from the Director to section heads—and was accepted and operated by hospital staff with authorized access to the system. Field officers are responsible for supervising the program's operation, addressing challenges, and communicating necessary improvements or developments to the third-party vendor. Meanwhile, target groups are responsible for inputting data and utilizing the Hospital on Tablet system effectively.

### **Resource Dimension**

The implementation also meets the resource dimension, particularly in terms of human resources and infrastructure. The available resources adequately support the program's operational needs. However, while the existing human resources within the hospital's Information Technology Department are sufficient to operate the Hospital on Tablet program, they remain insufficient to independently develop new modules or

systems. This limitation arises because each staff member possesses specialized expertise in different areas, leaving gaps in the development capacity.

### **Disposition Dimension**

The implementation of the Hospital on Tablet program has been supported by positive attitudes and professional behavior among implementing actors. Disposition, or the behavioral commitment of implementers, is a key determinant of a program's success. As an online health service innovation, Hospital on Tablet requires high levels of attention and professionalism. The hospital staff's positive attitudes, professionalism, and dedication reflect the hospital's motto, "Serving with Heart," and its brand values of being Simple, Friendly, and Elegant.

### **Suggestion**

1. It is recommended that Jember Pulmonary Hospital maintain continuous communication with third-party partners to ensure the sustainability of the Hospital on Tablet program. This communication should focus on program replication and the development of new modules to further enhance the hospital's digital healthcare services.
2. The hospital should prioritize the fulfillment of infrastructural needs, particularly regarding physical space and facilities. Limited space currently hinders service development at Jember Pulmonary Hospital. Therefore, relocating operations to a new facility is the most viable solution to support the hospital's ongoing growth and improvement in healthcare service delivery.

## REFERENCES

- Abrori, A., Praptawati, D., Mala, I. S., & Rohmah, S. (2025).
- Albury, G. M., & D. (n.d.). *Innovation in the public sector*. London: Prime Minister Strategy Unit, Cabinet Office.
- Aplikasi model health care system dalam interprofessional collaboration. Bina Generasi: Jurnal Kesehatan
- Balqis, U. M., Hartati, S., & Ayu, S. A. (2022).
- Borins, S. (2006). *The challenge of innovating in government innovation*. Toronto: Arlington, The PricewaterhouseCoopers Endowment for the Business of Government.
- Cahyadi, A. (2003). E-government: Suatu tinjauan konsep dan permasalahan. *The Winners*, 4.
- Creswell, J. W. 2016. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Yogyakarta: Student Library.
- Dunn, W. N. (2003). *Pengantar analisis kebijakan publik*. University of Pittsburgh: Englewood Cliffs.
- Febriawati, H., Angraini, W., Yandrizar, Y., & Sarkawi, S. (2023).
- Hardiansyah. (2011). *Kualitas pelayanan publik: Konsep, dimensi, indikator, dan implementasinya*. Yogyakarta: Penerbit Gava Media.
- Ibad, S., & Ulum, M. C. (2022). *Inovasi pelayanan publik*. Malang: Intrans Publishing.
- Inayah, M., Penyami, Y., & Nugroho, P. (2022).
- Intening, V. R., Puspitasari, R., Sari, I. Y., Melati, N., & Wijayanto, F. (2024). Konsep hospital without walls pada pelayanan kesehatan. PREPOTIF: Jurnal Kesehatan Masyarakat.
- Kunjungan posyandu terhadap kunjungan berobat di Puskesmas Kota Bengkulu. Mitra Rafflesia (Journal of Health Science).
- Kurniawan, A. (2005). *Transformasi pelayanan publik*. Jakarta: Ghalia Indonesia.
- Langingi, A., et al. (2024).

- Makmur, Thahier, & Rohana. (2015). *Inovasi dan kreativitas manusia*. Bandung: PT Refika Aditama.
- Miles, M. B., & Huberman, M. (1992). *Analisis data kualitatif: Buku sumber tentang metode-metode baru*. Jakarta: UIP.
- Moleong, L. J. (2012). *Metodologi penelitian kualitatif*. Bandung: PT Remaja Rosdakarya.
- Nazir. (2014). *Metode penelitian*. Bogor: Ghalia Indonesia.
- Noventi, I., Ainiyah, N., Hasina, S. N., & Kartini, Y. (2024).
- Nugroho, R. (2012). *Kebijakan publik untuk negara-negara berkembang*. Jakarta: Elex Media Computindo.
- Optimalisasi peran kelompok lintas generasi (KLG) dalam posyandu lansia. *JAMAS: Jurnal Abdi Masyarakat*, 2(2), 539–545.
- Optimalisasi peran posyandu remaja dalam mewujudkan generasi sehat dan mandiri. *Jurnal Lintas Pengabdian Masyarakat*.
- Pengembangan program kesehatan masyarakat berbasis keluarga untuk meningkatkan status gizi balita. *Devote: Jurnal Pengabdian Masyarakat Global*.
- Penguatan program promosi kesehatan melalui deteksi dini hipertensi. *Jurnal Mitra Masyarakat*.
- Penyuluhan kesehatan melalui integrasi layanan primer pada posyandu untuk pencegahan stunting. *JGEN: Jurnal Pengabdian Kepada Masyarakat*, 3(1), 206–216.
- Peranan generasi muda terhadap lansia melalui kegiatan lintas generasi. *Jurnal Kreativitas Pengabdian Kepada Masyarakat*.
- Program NGAJENI (Ngajak Intergenerasi Jadi Inspirasi) untuk posyandu lintas generasi. *Jurnal Jarlit*.
- Purwanto, E. A., & Sulistyastuti, D. R. (2015). *Implementasi kebijakan publik: Konsep dan aplikasinya di Indonesia*. Yogyakarta: Gava Media.
- Risnah, R., Mukhtar, M., & Irwan, M. (2021).
- Rogers, E. M. (2003). *Diffusion of innovations*. New York: Free Press.

- Rohmawati, Z., Indriani, I., Linawati, S. L., Fatmawati, V., & Kyswantoro, Y. F. (2024).
- Rusli, B. (2015). *Kebijakan publik: Membangun pelayanan publik yang responsif*. Jawa Barat: CV Adoya Mitra Sejahtera.
- Sangkala. (2014). *Innovative governance: Konsep dan aplikasi*. Surabaya: Capiya Publishing.
- Sugiyono. (2016). *Metodologi penelitian kuantitatif, kualitatif, dan R&D*. Bandung: CV Alfabeta.
- Suharto, E. (2015). *Analisis kebijakan publik: Panduan praktis mengkaji masalah dan kebijakan sosial*. Bandung: Alfabeta.
- Syahrudin. (2020). *Implementasi kebijakan publik: Konsep, teori dan studi kasus*. Bandung: Nusa Media.
- Tambajong, N. J., Ratag, G. A. E., & Posangi, J. (2023).
- Thahier, R. (2014). Inovasi dan kreativitas manusia dalam manajemen. *Jurnal Administrasi Negara*, 20(2), 22–31.
- Winarno, B. (2007). *Kebijakan publik: Teori & proses*. Yogyakarta: Media Pressindo.