



# Strategic Health Service Communication to Strengthen Competitive Advantages in BPJS Partner Clinics

*Diana Hestya Ningsih<sup>1</sup>, Suci Marini Novianty<sup>2</sup>, Benny Siga Butar-butar<sup>3</sup>*

LSPR Institute of Communication and Business, Jakarta

## ARTICLE HISTORY

Received: February 6, 2025

Revised: April 15, 2025

Accepted: May 30, 2025

Available online: May 31, 2025

## KEYWORDS

Health Service Communication; Strategic Communication; Competitive Advantage; Digital Health Tools; BPJS Clinics

## CORRESPONDENCE

E-mail: 24284020002@lspr.edu

## ABSTRACT

Penelitian ini mengkaji komunikasi layanan kesehatan sebagai alat strategis untuk memperkuat keunggulan kompetitif klinik mitra BPJS di Jakarta, Bogor, Depok, Tangerang, dan Bekasi (Jabodetabek). Penelitian berfokus pada komunikasi yang bertujuan mengubah perilaku kesehatan masyarakat. Penelitian ini secara khusus meneliti praktik komunikasi dalam layanan klinis, termasuk komunikasi antarindividu, organisasi, dan digital yang membentuk pengalaman pasien, serta mempengaruhi daya saing klinik. Metode penelitian menggunakan campuran secara kuantitatif dan kualitatif, dengan data dikumpulkan melalui survei kepada 200 klinik mitra BPJS, wawancara dengan pemimpin bidang komunikasi BPJS, dan umpan balik pasien. Temuan menunjukkan bahwa komunikasi layanan kesehatan yang efektif, ditandai dengan kejelasan, empati, responsif, dan penyampaian di berbagai platform media dapat secara langsung meningkatkan indikator keunggulan kompetitif: kepercayaan, kepuasan, dan loyalitas pasien. Namun, perlu juga melakukan integrasi interaksi tradisional antara penyedia layanan dan pasien dengan platform digital, terutama aplikasi seluler JKN, karena secara signifikan dapat meningkatkan aksesibilitas layanan, penanganan keluhan, konsultasi jarak jauh, dan kelangsungan untuk perawatan. Klinik dengan sistem komunikasi yang kuat menunjukkan tingkat kepuasan pasien yang tinggi, efisiensi operasional, dan kepatuhan terhadap standar regulasi BPJS. Studi ini juga mengidentifikasi beberapa faktor yang mempengaruhi pencapaian komunikasi layanan kesehatan yang efektif, termasuk kompetensi komunikasi staf, kesiapan digital, kualitas infrastruktur, dan karakteristik demografis pasien. Indikator pengukuran yang digunakan dalam penelitian ini meliputi kualitas komunikasi yang dirasakan, ketahanan pasien, skor loyalitas, dan posisi kompetitif klinik. Meskipun manfaatnya telah terbukti, tantangan tetap ada, seperti literasi digital yang terbatas di kalangan pasien lanjut usia dan gangguan teknis secara periodik. Secara keseluruhan, studi ini menyimpulkan bahwa memprioritaskan komunikasi layanan kesehatan dalam kerangka kerja manajemen strategis, serta memanfaatkan inovasi digital seperti aplikasi JKN, merupakan hal esensial bagi klinik BPJS untuk mempertahankan daya saing dalam lingkungan kesehatan yang semakin kompleks.

## INTRODUCTION

Since the outbreak of the COVID-19 pandemic at the end of 2019, which spread to Indonesia in March 2020 and lasted until June 2023, both the global and Indonesian public have

increasingly realized the importance of improving healthcare services, enhancing health infrastructure, and ensuring the availability of skilled healthcare personnel to build a strong and sustainable national health system. Globally, the

demand for healthcare services continues to rise, supported by various healthcare facilities such as hospitals, private clinics, and community health centers (Puskesmas). These healthcare facilities, of course, require skilled medical professionals to deliver high-quality services. In Indonesia, where the population continues to grow, the number of hospitals remains inadequate to meet the public demand for healthcare services. Consequently, there is an increasing need for more accessible healthcare services, particularly those that are closer to the community, such as clinics and Puskesmas. The presence of clinics in Indonesia, particularly in the Jakarta region and surrounding areas like Bogor, Depok, Tangerang, and Bekasi, has experienced significant growth. This growth aligns with the increasing number of populations, which according to the Directorate General of Population and Civil Registration (Dukcapil) of the Ministry of Home Affairs, reached 282,477,584 people by the first half of 2024.

Data from the Ministry of Health of the Republic of Indonesia (Kemenkes) shows that in 2020, there were 2,959 hospitals (both general and specialized) across Indonesia, while the number of community health centers (Puskesmas), including both inpatient and non-inpatient facilities, reached 10,205. Meanwhile, the total number of primary clinics reached 3,325, including clinics with advanced health services that are equipped with more complete facilities and services than basic clinics. Moreover, recent data recorded in the Monitoring and Evaluation System (Sismonev) from the National Social Security Council (JSN) as of September 2023 shows that 415 primary clinics are operating in DKI Jakarta, marking a 6.4% increase from December 2022.

Looking at the available data, it is also necessary to assess the comparative numbers or ideal ratios for healthcare facilities such as hospitals, clinics, and Puskesmas, either based on the Ministry of Health's standards for ideal ratios or by comparing them with developed and developing countries. It must be acknowledged that several factors must be considered when determining an ideal ratio for Indonesia, aside from just population data. These factors include healthcare service standards and the national healthcare budget.

According to data from the Ministry of Health of the Republic of Indonesia, the ideal standard for the existence of hospitals is one hospital for every 100,000–250,000 population. The ideal ratio for 2024, with a population of 280 million, would be:  $280 \text{ million} \div 100,000 \text{ people} = 2,800 \text{ hospitals (minimum)}$  or  $280 \text{ million} \div 250,000 \text{ people} = 1,120 \text{ hospitals (maximum)}$ . For Puskesmas, the Ministry of Health's standard states that Puskesmas in Indonesia are designed to serve around 25,000–30,000 people per unit. The ideal number of puskesmas would be  $280 \text{ million} \div 25,000 \text{ people} = 11,200 \text{ puskesmas (minimum)}$  or  $280 \text{ million} \div 30,000 \text{ people} = 9,333 \text{ puskesmas (maximum)}$ .

As for clinics, according to the Ministry of Health's standard, one clinic typically serves a population of 10,000–30,000 people. These clinics include both general health and specialist clinics. For 2024, the ideal number of clinics is:  $280 \text{ million} \div 10,000 \text{ people} = 28,000 \text{ clinics (minimum)}$  or  $280 \text{ million} \div 30,000 \text{ people} = 9,333 \text{ clinics (maximum)}$ .

Therefore, the ideal number of clinics in Indonesia for 2024 should range between 9,333 and 28,000 clinics, depending on population density and local healthcare needs.

**Table 1.**  
*Ideal Ratio Summary in Indonesia (2024)*

Healthcare Facility	Population per Facility Ratio	Ideal Number for 280 Million Population
<b>Hospital</b>	1 hospital: 100.000 – 250.000 people	1.120 – 2.800 hospitals
<b>Clinic</b>	1 clinic: 10.000 – 30.0000 people	9.333 – 28.000 clinics
<b>Community Health Center (Puskesmas)</b>	1 puskesmas: 25.000 – 30.000 people	9.333 – 11.200 puskesmas

In regards of developed and developing countries, there are distinctive differences. World Health Organization (WHO) states that developed countries generally have more healthcare facilities per capita due to higher healthcare budgets and more advanced infrastructure. The ideal hospital ratio in developed countries is usually one hospital per 100,000–200,000 population. In Germany and Japan, the hospital-to-population ratio ranges from one hospital for every 150,000–200,000

population. For clinics, the ratio in developed countries is typically one clinic per 10,000–30,000 population. In the United States and European countries, primary care clinics or general health clinics usually serve smaller populations, with one clinic for around 20,000 population. The ideal ratio for community health centers (Puskesmas or primary care centers) is approximately 30,000–50,000 people per facility.

In developing countries, the establishment of healthcare facility ratios is generally hindered by limited healthcare budgets and uneven infrastructure distribution, resulting in lower ratios compared to developed countries. Nevertheless, the implementation of WHO's recommended standard ratios should refer to international health standards, with adjustments based on the local situation. The ideal clinic ratio in African and Asian countries is usually one hospital serving 250,000–500,000 people. Clinics typically serve 30,000–50,000 people. However, there is a unique role of clinics in many developing countries, where general clinics act as intermediaries between the community and hospitals.

In most cases, one clinic serves 25,000–30,000 people. This ratio, as seen in Indonesia, indicates that Puskesmas are vital healthcare facilities, particularly in rural areas. When comparing these ratios, international health organizations such as WHO (WHO - Global Health Observatory Data), the Organization for Economic Co-operation and Development (OECD Health Statistics), and UNICEF, which focuses on access to healthcare in developing countries, are involved in addressing global health issues. WHO specifically recommends better access to primary care and emphasizes the importance of increasing the number of facilities like clinics and Puskesmas in developing countries to alleviate the burden on major hospitals and ensure more equitable access to healthcare.

Moreover, research by Wulandari et al. (2023), using geographically weighted regression (GWR) analysis, shows that clinics are the most numerous healthcare facilities in Jakarta, highlighting the competitive nature and continued expansion of the clinical business sector in the region.

Clinics, as defined by Indonesian regulations, are healthcare facilities that provide individual medical services, including diagnostic, preventive, curative, and rehabilitative care, without requiring hospitalization. Clinics play an essential role in providing accessible healthcare services, especially for outpatient care and primary health services. However, there is ongoing debate regarding the quality and public perception of clinics in Indonesia.

Public perception of clinic facilities and service quality often remains low, with many viewing them as inferior to hospitals in terms of infrastructure and healthcare delivery. This perception is compounded by the uneven distribution of general practitioners and specialists in clinics, which can affect the level of care provided. The legal framework governing clinics in Indonesia, as outlined in the Health Law and various government regulations, sets the standards for clinic operations. These regulations include guidelines on the establishment, management, and service delivery of clinics, all aimed at ensuring clinics meet certain quality standards to compete effectively in the healthcare market.

Government regulations also emphasize the need for clinics to continuously improve their competitive edge by adopting quality improvement measures, enhancing service delivery, and leveraging technological advancements to meet patient needs. Although a regulatory framework exists, there is still a significant gap between the intended standards and the current state of clinic services. Many clinics struggle with limited resources, inadequate infrastructure, and a shortage of specialized medical personnel, hindering their ability to provide high-quality care. Various legal regulations support the government's collaboration with clinics as part of efforts to improve healthcare access and quality. These conditions indirectly enhance the competitive advantage of clinical businesses. Institutions such as BPJS Kesehatan also implement programs to realize this.

BPJS Regulation No. 1 of 2014 concerning the Implementation of Health Insurance stipulates that BPJS Kesehatan can collaborate with primary healthcare facilities (FKTP) such as clinics, Puskesmas, and individual medical

practices. This regulation enables clinics to become BPJS Kesehatan partners and provide services to patients under the BPJS funding system, automatically providing direct support for clinic revenue through partnership contracts. Clinics collaborating with BPJS Kesehatan will receive an allocation of patients registered as BPJS participants, significantly increasing the clinic's patient base. This creates greater business opportunities for clinics to grow, especially in areas with a high number of BPJS participants.

Furthermore, Minister of Health Regulation No. 71 of 2013 on Health Services in the National Health Insurance (JKN) encourages clinics to work closely with BPJS Kesehatan. BPJS Kesehatan's support helps clinics improve the quality of healthcare services, reduce healthcare costs for patients, and provide a competitive advantage by offering greater patient access and stable payments. From these conditions, clear benefits are expected from the collaboration between BPJS Kesehatan and clinics in the Jabodetabek area. These benefits include:

1. Increase in Patients and Revenue Through Capitation System: Clinics receive a fixed monthly income through the capitation system, where payment is based on the number of participants registered at the clinic.
2. Access to a Broader Patient Base: This access is vital in urban areas where competition between healthcare facilities is intense. By collaborating with BPJS Kesehatan, clinics can secure a consistent stream of patients without relying heavily on large-scale marketing campaigns, thereby increasing patient loyalty.
3. Reduction of Patient Cost Burden: This partnership enables clinics to offer more affordable services to the public, as BPJS Kesehatan covers the majority of healthcare costs.

However, BPJS clinic partnerships require clinics to comply with specific regulatory standards to ensure quality. For main clinics, these requirements include holding practice licenses (SIP), a tax identification number (NPWP), an accreditation certificate, and agreements to adhere to National Health Insurance (JKN) guidelines. Primary clinics, meanwhile, must also hold operational licenses,

cooperation agreements with supporting networks, and relevant professional licenses (SIP/SIK). Such standards are critical for meeting service quality indicators, maintaining patient trust, and strengthening their competitive position in the healthcare market. Nevertheless, based on findings and reports from the Ministry of Health and the Indonesian Clinic Entrepreneurs Association (APKI) regarding the BPJS Kesehatan-clinic partnership in supporting healthcare facilities in the Jabodetabek region, there are also significant challenges.

In general, there are two main challenges: 1) Administrative and service burdens, and 2) Reimbursement rates and quality of service. Although the capitation system provides income stability, one administrative challenge is the lack of sufficiently qualified administrative personnel to handle the strict and complex administrative burdens to meet service standards, which can lead to reduced BPJS payments or profits.

In many cases, clinics may face reimbursement issues from BPJS, either in terms of time or the amount received. If reimbursement rates do not match operational costs, clinics will struggle to maintain good service quality, affecting their competitiveness. Moreover, in the Jabodetabek region, with many healthcare facility options available, clinics risk losing patients and competitiveness.

In the context of increasing competition among clinics, especially BPJS partner clinics in urban areas, the core issue is no longer merely the availability of healthcare facilities, but the quality of health service communication delivered within clinical interactions. Health service communication refers to the strategic exchange of information between healthcare providers, staff, and patients during the service process, including explanation of procedures, responsiveness to complaints, appointment coordination, and digital communication flows.

Unlike broad public health communication aimed at changing population behaviour, health service communication operates at the point of care, shaping patient experience, satisfaction, and perceived service value. In BPJS clinics, where service differentiation is often limited by standardized tariffs and regulations, communication quality becomes a critical non-price factor that determines competitiveness.

Effective health service communication contributes directly to clinic competitiveness by fostering trust, satisfaction, and patient loyalty, three relational outcomes repeatedly identified as drivers of competitive advantage in the healthcare sector. Clear explanations, empathetic interactions, and timely responses help patients feel valued, reducing uncertainty and improving perceived service quality. The growing integration of digital communication tools such as the JKN Mobile app, WhatsApp, and online scheduling systems further reshapes how BPJS clinics engage with patients, enabling faster service, better information flow, and more consistent patient monitoring. As clinics increasingly compete for BPJS-registered patients in densely populated regions like Jabodetabek, those with strong communication systems gain distinctive advantages that translate into higher retention, stronger patient relationships, and improved service reputation.

Despite its critical role, the concept of health service communication remains underexplored in the context of BPJS clinic partnerships. Existing studies often focus on general service quality or access, without examining how communication, both interpersonal and digital, functions as a strategic tool for achieving competitive advantage. This research addresses that gap by analyzing how BPJS clinics in the Jabodetabek area implement health service communication, what strategies prove most effective, and what indicators (trust, satisfaction, loyalty, retention, digital integration) reflect its success. By framing communication as a strategic asset rather than merely a procedural function, this study positions health service communication as a central determinant of clinic competitiveness under BPJS policies.

As a significant component of the healthcare system, BPJS-only clinics cater specifically to patients under the national health insurance program. These clinics are essential in expanding healthcare accessibility for BPJS participants, especially in urban areas like Jabodetabek, where healthcare demand is high. Regulations, such as BPJS Regulation No. 1 of 2014, allow BPJS Kesehatan to partner with primary healthcare facilities (FKTP) and support clinics through capitation systems, which provide a fixed monthly income based on the

number of registered participants. These collaborations offer several benefits, including a stable patient base and the ability to reduce patient costs.

Still, BPJS-only clinics face unique challenges, including administrative burdens, service quality expectations, and reimbursement rates that may not cover operational costs fully. In areas like Jabodetabek, where competition among healthcare providers is intense, clinics that manage these challenges effectively are more likely to maintain a competitive edge.

The expansion of healthcare facilities, particularly clinics, is crucial for meeting the increasing demand for accessible healthcare services in Indonesia. As clinics play a pivotal role in providing primary care, especially in densely populated regions like Jabodetabek, enhancing their competitive edge through quality improvement, regulatory compliance, and leveraging government programs such as BPJS Kesehatan is vital.

Therefore, in this research, we would like to answer the following questions:

1. How does health communication play a role in increasing the competitive advantage of BPJS partner clinics in the Jabodetabek area?
2. What health communication strategies are effective in enhancing the competitive advantage of BPJS partner clinics in the Jabodetabek area?
3. How does health communication impact patient perception and loyalty among BPJS partner clinics in the Jabodetabek area?

The primary objective of this research is to identify the role of health communication in enhancing the competitive advantage of clinics in the Jabodetabek area. Additionally, the study aims to analyze effective health communication strategies that can be applied to clinics in this region. Lastly, it seeks to evaluate the impact of health communication on clinic performance, particularly in terms of competitive advantage and patient loyalty. Nonetheless, this research also provides practical guidelines for clinics in Jakarta to develop effective health communication strategies. It also adds to the existing literature in the field of health communication and clinic management, particularly within urban contexts such as Jakarta and surrounding areas. Furthermore, it helps

decision-makers in clinics understand the importance of communication in enhancing their business competitiveness.

## LITERATURE AND METHODOLOGY

The integration of health communication within strategic management frameworks is increasingly recognized as essential for enhancing the competitive advantages of clinical businesses. Porter's seminal work established that competitive advantage is achieved through three generic strategies: cost leadership, differentiation, and focus, where organizations create sustainable value propositions that distinguish them from competitors (Porter, 1985; Hill, 1988). In healthcare, particularly within clinic settings, differentiation is predominantly achieved through superior service quality, patient experience, and the effectiveness of communication between providers and patients (Murray, 1988). The measurement of competitive advantage in healthcare organizations requires comprehensive frameworks that integrate both financial and non-financial indicators, including patient satisfaction scores, retention rates, market share, and operational efficiency metrics (Kollberg & Elg, 2011; Peters et al., 2007). Clinics that leverage health communication strategically not only enhance patient satisfaction but also strengthen patient-provider relationships, which are critical for fostering loyalty and improving market positioning through measurable performance improvements (Chang et al., 2008; Elrod & Fortenberry, 2020).

In today's healthcare landscape, the dynamics are shifting from the VUCA (Volatile, Uncertain, Complex, and Ambiguous) environment to a BANI (Brittle, Anxious, Nonlinear, and Incomprehensible) context, where unpredictability is heightened, and adapting quickly to change is essential. This shift underscores the need for digital communication tools to meet the demands of increasingly complex patient needs (Cascio & Montealegre, 2016). Health communication, defined as the strategic use of communication to influence health decisions, plays a pivotal role in organizational success. It includes diverse activities, from patient-provider exchanges to public health initiatives and internal communications, facilitating patient

understanding of diagnoses, treatment options, and care plans. This communication not only improves health outcomes but also boosts the clinic's reputation and competitiveness in an expanding market (Fortenberry, 2010; Arora, Rutten, Gustafson, Moser, & Hawkins, 2007).

Porter's framework is highly relevant in examining health communication's role in clinical businesses, as superior communication practices enhance patient care and differentiate a clinic from competitors. Research shows that clinics excelling in health communication are better positioned to retain and attract patients, largely through positive word-of-mouth, driven by patient satisfaction and loyalty (Dutta-Bergman, 2005; Lupton, 2013). Personalized communication that addresses patient preferences and needs can significantly increase the perceived value of services, differentiating the clinic within its competitive landscape.

Furthermore, the diffusion of innovation theory, developed by Rogers (2003), applies here, as clinics adopting digital health communication tools, such as teleconsultations and electronic patient portals, often gain a competitive advantage. Digital health communication is reshaping patient engagement by providing quick access to services and real-time responses, critical for building patient trust in an era where rapid, data-informed decisions are expected. The JKN mobile app, as part of BPJS Kesehatan's initiative, exemplifies how digital tools support health communication and strategic goals, including efficient complaint management, simplified registration, and teleconsultations, which enhance patient experience and clinic loyalty.

Strategic management involves aligning organizational resources with environmental demands, which for clinics means incorporating health communication into the overall strategic plan. By doing so, clinics ensure that their communication supports broader objectives, such as improving patient experience, increasing operational efficiency, and expanding market share (Thompson, Strickland, & Gamble, 2010). This alignment is critical as patient expectations and healthcare regulations evolve, requiring a proactive approach to communication that addresses patient concerns promptly and comprehensively.

Effective health communication also strengthens brand identity within the healthcare sector. Balmer and Greyser (2006) highlight that corporate communication aligns organizational goals with patient expectations, essential for building a strong, trustworthy brand. Clinics with a robust communication strategy not only attract new patients but also foster lasting relationships with existing ones, reinforcing competitive advantage. Additionally, Fortenberry and McGoldrick (2016) emphasize that well-developed internal and external communication strategies help clinics streamline operations, reduce misunderstandings, and ensure team alignment, all of which contribute to delivering high-quality care and maintaining competitiveness.

Although previous studies show that health communication improves patient satisfaction, loyalty, and service reputation, these works do not specifically explain how health service communication functions as a strategic tool to build competitive advantage within BPJS clinic partnerships, where pricing, service standards, and reimbursement structures are regulated. This gap shows that clinics cannot rely solely on medical quality or infrastructure; instead, they require strategic health service communication. Including interpersonal, organizational, and digital, to differentiate themselves, build trust, and sustain competitiveness in the BPJS system. This research addresses that specific need.

In conclusion, integrating health communication into clinic strategic management frameworks is essential for achieving and sustaining competitive advantages. The effective use of both digital and traditional communication approaches differentiates clinics in the market, improves patient satisfaction and loyalty, strengthens brand identity, and increases operational efficiency. As the healthcare landscape becomes more complex, clinics that prioritize digital health communication are better positioned to navigate industry challenges and maintain a competitive edge (Elrod & Fortenberry, 2020; Thompson, Peteraf, Gamble, & Strickland, 2022).

This research adopts a mixed-methods approach, integrating both qualitative and quantitative methods to provide a comprehensive understanding of the role of health communication in enhancing the competitive

advantage of BPJS clinic partners. By combining surveys, interviews, and documentation reviews, the study gathers diverse insights into health communication practices and their impact on clinic competitiveness within the Jabodetabek area.

The quantitative component of this research involves a survey distributed to BPJS clinic partners. Purposive sampling was employed to select BPJS partner clinics across the Jabodetabek region. The selection criteria included: (1) clinics that accept BPJS patients, (2) operational clinics within the researchers' geographical reach, and (3) willingness to participate in the study.

The sampling frame was compiled from the BPJS Kesehatan online facility directory for the Jabodetabek region. We employed purposive sampling to ensure information-rich cases relevant to health service communication. Inclusion criteria covered active BPJS FKTP status, direct outpatient service delivery, managerial/clinical respondent availability, and at least one form of digital or structured communication (e.g., JKN Mobile, WhatsApp business line, online booking, or teleconsultation). To enhance external relevance, we applied maximum variation across city, ownership type, clinic size, accreditation status, and level of digital adoption.

A total of 200 BPJS partner clinics participated in the survey, representing clinics distributed across Jakarta, Bogor, Depok, Tangerang, and Bekasi areas. We set city-level quotas to reflect the concentration of clinics and service demand in this metropolitan area: Jakarta (n=70), Bekasi (n=40), Tangerang (n=40), Bogor (n=25), and Depok (n=25). Where a targeted clinic declined or did not meet criteria upon screening, controlled substitution was performed within the same city and attribute cell to maintain quota integrity.

The survey questionnaire was distributed to clinic managers and healthcare providers through online platform. Data collection was conducted over a period of September – October 2024 to ensure adequate response rates and data quality.

The survey contains questions that gauge perceptions on various aspects of health communication and its influence on competitive advantage, patient satisfaction, and retention.

Topics addressed include the effectiveness of health communication in enhancing clinic competitiveness, the role of physician explanations, the use of digital communication tools, the impact of regulatory requirements, challenges in government communication, the integration of communication into business strategies, and perceptions of communication quality. The data gathered from this survey provides a quantifiable overview of health communication practices and challenges among BPJS clinics, offering a broad perspective on prevalent trends and common issues within the sector.

Based on the theoretical framework and quantitative component of this mixed-methods study, the following hypothesis was formulated: *Higher levels of health service communication effectiveness are positively associated with stronger competitive advantage among BPJS clinic partners.*

Informants for qualitative interviews were selected purposively based on roles (policy/manager/clinician), direct involvement in patient communication processes, and ability to provide thick descriptions of interpersonal and digital communication practices (including JKN Mobile use, complaint handling, and follow-up routines). To gain deeper qualitative insights, semi-structured interviews were conducted with the Deputy Director of Communication and Organization at BPJS Kesehatan, Irfan Humaidi, as well as patients from selected high-performing BPJS clinics. The interview with Mr. Humaidi explored several aspects of BPJS's strategies and policies, such as their effect on patient flow and clinic revenue, challenges under the BPJS monopsony system, the implications of the capitation payment model, the role of competition, service quality, and patient loyalty. Further questions investigated BPJS's efforts to maintain quality and trust, handle participant complaints, and ensure the long-term financial sustainability of the JKN program (Newcomer, Hatry, & Wholey, 2015; Kallio, Pietilä, Johnson, & Kangasniemi, 2016).

Additionally, interviews with customers from selected BPJS partner clinics provided a valuable patient perspective. These interviews focused on patient perceptions of clinic services, reasons for choosing a particular clinic, timing of visits, clarity of communication from clinic staff,

and patient expectations for service improvement. These insights from clinic patients illustrate the real-world impact of health communication on patient perception, satisfaction, and loyalty, highlighting the effectiveness and limitations of existing strategies.

As a secondary data collection method, documentation review was conducted to contextualize and triangulate the findings from the survey and interviews. Documents were selected based on: (1) relevance to health communication and clinic operations, (2) official status and credibility, (3) publication within the last 10 years (2014-2024), and (4) specific applicability to the Indonesian healthcare context and BPJS system.

This analysis focused on how health communication practices align with regulatory requirements and business strategies, as well as identifying potential gaps between policy intentions and practical implementation (Bowen, 2009).

For data analysis, thematic analysis was applied to the qualitative data from interviews to identify patterns and themes related to health communication and clinic competitiveness (Clarke & Braun, 2016). Survey data were analyzed quantitatively to generate statistical insights, while content analysis was performed on reviewed documents to interpret the information within the broader context of strategic management and health communication. This combined methodological approach enhances the validity and reliability of the study, providing a robust foundation for understanding the role of health communication in increasing the competitive advantage of BPJS partner clinics (Yin, 2017).

## RESULTS AND DISCUSSION

This section presents the findings derived from the survey responses of 200 BPJS clinic partners, insights from in-depth interviews with the Deputy Director of Communication and Organization at BPJS Kesehatan, Mr. Irfan Humaidi, and the perspectives of selected BPJS clinic patients. Through a mixed-methods approach, the results offer a comprehensive understanding of the role of health communication in enhancing competitive advantages for BPJS-affiliated clinics within the



Jabodetabek area. The integration of survey data, interview responses, and document analysis allows for a multidimensional examination of health communication practices and their impact on clinic performance, patient loyalty, and regulatory compliance. The findings are structured to address the primary research questions, examining the effectiveness of health communication strategies, their influence on competitive positioning, and their effect on patient perception and satisfaction. This triangulation of data sources enhances the reliability of the insights and provides a detailed discussion on the factors driving competitive success for BPJS clinic partners. The findings are organized according to the research questions:

# **1. The role of health communication in increasing the competitive advantage of BPJS partner clinics in the Jabodetabek area.**

The findings from this mixed-methods study indicate that health communication is perceived as a key driver of competitive advantage for BPJS partner clinics in the Jabodetabek area. Through the triangulation of quantitative survey data, qualitative interviews, and comprehensive document analysis, the research reveals multiple dimensions through which effective communication enhances clinic competitiveness.

The quantitative survey provides consistent statistical patterns supporting the role of communication in shaping competitive positioning. A substantial 85% of surveyed clinics agreed or strongly agreed that effective communication contributes to building their competitive edge ( $M=4.3$ ,  $SD=0.71$ ). Statistical analysis revealed a strong positive correlation between communication effectiveness and perceptions of competitive advantage ( $r=0.78$ ,  $p<0.001$ ). Moreover, clinics with high levels of communication effectiveness scored significantly higher on competitive positioning ( $M=4.5$ ) compared to those with lower communication scores ( $M=3.2$ ),  $t(198)=12.4$ ,  $p<0.001$ , Cohen's  $d=1.76$ , underscoring the practical importance of communication as a competitive differentiator.

Digital communication tools emerged as a critical factor in this advantage. Approximately 72% of clinics reported using digital platforms,

with JKN app integration showing the strongest association with competitive outcomes ( $\chi^2=34.7$ ,  $p<0.001$ ). Clinics employing comprehensive digital communication strategies achieved higher patient retention ( $M=4.4$  vs.  $M=3.6$ ,  $p<0.001$ ) and greater patient satisfaction ( $M=4.6$  vs.  $M=3.8$ ,  $t(198)=9.2$ ,  $p<0.001$ ) compared to those relying solely on traditional methods. Respondents also identified patient-centered communication as the top competitive differentiator, with 67% ranking it first, and trust-building through communication rated highly important ( $M=4.7$ ,  $SD=0.52$ ). Notably, clinics with structured communication protocols reported 23% higher patient loyalty scores than those without formal strategies.

Qualitative interviews provided further insights into communication's strategic role. In-depth discussions with BPJS Deputy Director of Communication and Organization, Mr. Irfan Humaidi, revealed institutional recognition of communication as a key performance driver. As he noted, "The JKN mobile application represents our commitment to supporting partner clinics through enhanced communication capabilities. Clinics that effectively utilize these digital tools alongside traditional patient interactions consistently demonstrate superior performance metrics and patient satisfaction scores." Three central themes emerged: (1) digital integration as a competitive differentiator, with JKN app utilization enhancing patient accessibility and satisfaction; (2) quality standardization through communication, where BPJS employs communication effectiveness as a performance indicator influencing contract renewals; and (3) regulatory compliance as a competitive asset, as clinics exceeding communication requirements secure favourable partnership opportunities.

Patient interviews reinforced these findings, offering valuable end-user perspectives. For instance, Mrs. S.S. from Klinik Medik Kemang remarked, "The staff here always explains everything clearly, and I can easily reach them through the JKN app when I have questions. This level of communication makes me feel valued as a patient." Similarly, Mr. S.A. from Klinik Nala emphasized that clear communication by doctors instilled confidence, though he noted that communication with elderly patients could improve. Thematic analysis of

patient feedback revealed that 89% viewed clear communication as central to trust-building, while accessibility through digital tools significantly influenced clinic choice and loyalty. Communication quality consistently emerged as the key differentiating factor in patient decision-making.

Document analysis further substantiated these findings by situating them within the regulatory framework governing BPJS partnerships. BPJS Regulation No. 1 of 2014 mandates communication standards as partnership requirements, institutionalizing communication effectiveness as a competitive necessity. Likewise, the Minister of Health Regulation No. 71 of 2013 outlines patient communication protocols that, when effectively implemented, enhance both regulatory compliance and competitive differentiation. Policy documents identified three mechanisms linking health communication to competitive advantage: (1) a regulatory compliance premium, as superior communicators receive preferential evaluation; (2) digital integration benefits through enhanced patient engagement; and (3) quality differentiation, where communication effectiveness influences patient allocation and referrals. The analysis also revealed an implementation gap—while most clinics meet regulatory minimums, those adopting comprehensive communication strategies achieve stronger patient satisfaction and loyalty outcomes.

Integrating the quantitative, qualitative, and documentary evidence, the study concludes that health communication functions as a multifaceted driver of competitive advantage. Quantitative findings statistically validate its impact, qualitative accounts provide experiential confirmation, and document analysis situates these dynamics within an institutional context that rewards communicative excellence. Collectively, the results reveal that communication is not a supplementary enhancement but a core strategic asset enabling BPJS partner clinics to secure sustainable advantages in the competitive Jabodetabek healthcare market. The integration of patient-centered and digital communication practices, particularly through the JKN app, emerges as a holistic strategy that strengthens patient trust, satisfaction, and loyalty—transforming

communication into a cornerstone of competitive success.

## **2. Effective Health Communication Strategies for Enhancing the Competitive Advantage of BPJS Partner clinics in Jabodetabek**

The analysis reveals that clinics achieving the most consistent success are those that combine the relational strengths of traditional, face-to-face communication with the efficiency and reach of digital innovation. By integrating insights from quantitative survey data, qualitative interviews, and policy document analysis, the research identifies the key strategic communication practices that underpin competitive advantage in the increasingly dynamic and regulated healthcare landscape.

Quantitative survey results highlight significant patterns in communication strategy effectiveness among 200 participating clinics. Approximately 72% of clinics reported using digital communication tools as part of their competitive strategy, with JKN app integration showing the highest adoption rate at 68%. Clinics employing hybrid communication approaches—those that combine digital and face-to-face methods—demonstrated significantly higher competitive advantage scores ( $M=4.5$ ,  $SD=0.62$ ) compared to single-method users ( $M=3.7$ ,  $SD=0.84$ ),  $t(198)=7.8$ ,  $p<0.001$ , Cohen's  $d=1.11$ . Moreover, a strong positive correlation was found between the diversity of communication strategies and patient retention rates ( $r=0.69$ ,  $p<0.001$ ). Respondents further ranked communication strategies by competitive impact, with integrated digital-traditional approaches considered the most effective (67%), followed by real-time response capabilities (58%), educational content delivery (54%), personalized communication (51%), and community outreach programs (43%).

Statistical validation reinforces the advantage of multi-modal communication. Digital-first clinics ( $n=89$ ) reported significantly higher patient satisfaction scores ( $M=4.4$ ,  $SD=0.71$ ) compared to traditional-only clinics ( $n=55$ ,  $M=3.6$ ,  $SD=0.89$ ),  $t(142)=6.2$ ,  $p<0.001$ . Clinics employing multiple communication platforms demonstrated 31% higher patient loyalty metrics than single-platform users ( $\chi^2=28.4$ ,  $p<0.001$ ). Similarly, clinics delivering

educational content achieved 24% better competitive positioning scores ( $M=4.3$  vs.  $M=3.5$ ,  $p<0.001$ ), suggesting that educational engagement serves as a critical differentiator in patient perceptions of quality and trust.

Qualitative interviews provided depth and context to these findings. BPJS Deputy Director of Communication and Organization, Mr. Irfan Humaidi, emphasized the institutional recognition of strategic communication diversity, noting that “the most successful partner clinics are those that understand communication as a multi-dimensional strategy. The JKN app provides the digital infrastructure, but clinics that combine this with strong interpersonal skills and community engagement consistently outperform their competitors in patient satisfaction and retention metrics.” Analysis of interview data revealed four primary strategic communication categories employed by successful BPJS clinics: digital integration strategies that leverage JKN app features for comprehensive patient engagement; community-centered strategies emphasizing direct outreach and education; hybrid multi-platform strategies that blend digital tools with traditional methods; and real-time responsiveness strategies that prioritize immediate communication across multiple channels.

Patient interviews further demonstrated how these strategies translate into tangible experiences of trust and satisfaction. Mrs. S.S. from Klinik Medik Kemang highlighted that the clinic’s integration of JKN app scheduling with personalized, in-person care makes her feel both “convenient and cared for.” Similarly, Mr. S.A. from Klinik Nala praised the clinic’s educational approach, noting that it builds trust by helping patients understand their conditions rather than merely processing them. Mrs. L.P. from Klinik MDM Ciputat valued her clinic’s hybrid strategy, stating that the combination of WhatsApp communication, social media updates, and detailed in-person consultations “makes me feel connected to my healthcare in different ways.” Thematic analysis of patient narratives identified four dominant themes: the importance of integrating digital and traditional methods (78%), the role of personalization in patient experience (84%), the impact of multi-channel accessibility on clinic choice (71%), and

the perceived value of continuous health education (66%).

Document analysis provided institutional and regulatory grounding for these communication practices. BPJS strategic frameworks, including the JKN App Implementation Guidelines, outline four core components that clinics can leverage for competitive advantage: patient engagement features such as appointment scheduling and teleconsultations; information management tools for real-time feedback and satisfaction surveys; educational content delivery mechanisms; and transparency tools for mapping provider availability and service capacity. Further examination of the Minister of Health Regulation No. 71 of 2013 revealed explicit support for communication strategy innovation, noting that clinics implementing comprehensive, multi-modal approaches receive enhanced partnership evaluation scores and greater alignment with BPJS quality improvement mandates. Digital integration was also shown to support both regulatory compliance and competitive differentiation.

Best practice documentation revealed three distinct models of successful strategy implementation. The Technology-Enhanced Traditional Care Model, exemplified by Brawijaya Clinic, utilizes digital tools to enhance rather than replace personal interaction. The Community-Integrated Digital Model combines grassroots outreach with digital engagement for broader patient coverage. Meanwhile, the Multi-Platform Responsive Model leverages diverse communication channels to cater to varying patient preferences. Strategic mapping of JKN app data further indicated that clinics maximizing digital visibility and transparency gain stronger competitive positioning, enhanced reputation, and greater patient inflow through real-time feedback mechanisms.

Case studies from multiple data sources substantiate these insights. Brawijaya Clinic, employing a digital integration strategy, ranked within the top 15% for both patient satisfaction ( $M=4.7$ ) and competitive positioning ( $M=4.6$ ), with operational reports documenting a 35% increase in patient retention following JKN integration. Klinik Pratama Nala Medika, adopting a community-centered approach, achieved the highest trust-building ( $M=4.8$ ) and

educational effectiveness scores ( $M=4.6$ ), aligning with BPJS partnership enhancement criteria. Klinik MDM Ciputat, utilizing a hybrid multi-platform strategy, recorded above-average communication effectiveness ( $M=4.4$  overall), with patient interviews and documentation confirming consistent, systematized use of WhatsApp, social media, and in-person consultations to maintain patient connection.

Integration of findings across methods indicates that effective health communication strategies for competitive advantage require multi-modal integration, real-time responsiveness, educational content delivery, and personalized communication. Statistically, a strong correlation ( $r=0.69$ ,  $p<0.001$ ) supports the synergy of digital and interpersonal communication, where platform-specific optimization ensures administrative efficiency through the JKN app, educational reach via social media, and quality consultation through direct interaction. Real-time responsiveness—identified as highly important by 58% of clinics—enables timely patient engagement through appointment reminders and proactive follow-up. Educational strategies, viewed as essential by 54% of respondents, establish clinics as trusted sources of health information, while personalized communication approaches, valued by 51%, foster loyalty by addressing patient demographics and preferences with empathy and precision.

Synthesizing quantitative, qualitative, and documentary evidence, the study concludes that the most competitive BPJS clinics in Jabodetabek are those that successfully integrate technological innovation with the enduring values of traditional healthcare communication. These clinics leverage regulatory support, digital platforms, and community engagement to create holistic patient experiences that build trust, strengthen satisfaction, and sustain loyalty. Consequently, health communication emerges not merely as an operational tool but as a strategic asset that defines competitive advantage in the increasingly dynamic urban healthcare landscape.

### 3. The Impact of Health Communication on Patient Perception and Loyalty Among BPJS Partner clinics in the Jabodetabek Area

To address this research question, the study employed a comprehensive mixed-methods framework encompassing statistical testing, qualitative verification, and policy analysis. This integrated approach provides robust evidence that health communication significantly shapes patient perception and loyalty across BPJS clinics in the Jabodetabek area. The triangulation of quantitative, qualitative, and documentary data enables both empirical confirmation and contextual understanding of communication's pivotal function in achieving patient-centered care.

The quantitative survey tested the primary hypothesis (H1) that there is a significant positive relationship between health communication quality and patient perception and loyalty among BPJS clinic partners. Out of 200 distributed surveys, 185 complete responses were received (92.5% response rate), providing a strong data foundation. The results revealed high mean scores across variables: communication quality ( $M = 4.2$ ,  $SD = 0.78$ ), patient loyalty ( $M = 4.1$ ,  $SD = 0.82$ ), and patient perception ( $M = 4.3$ ,  $SD = 0.75$ ). A substantial majority of respondents (80%) agreed or strongly agreed that effective communication positively influences perceived service value, confirming the centrality of communication quality to patient experience.

Inferential testing further strengthened this conclusion. Pearson correlation analyses indicated strong positive relationships between communication quality and patient perception ( $r = 0.764$ ,  $p < 0.001$ ), between communication quality and patient loyalty ( $r = 0.731$ ,  $p < 0.001$ ), and between patient perception and loyalty ( $r = 0.812$ ,  $p < 0.001$ ). Chi-square testing confirmed a significant association between communication quality levels and loyalty categories ( $\chi^2 = 52.18$ ,  $df = 4$ ,  $p < 0.001$ ), with a large effect size (Cramer's  $V = 0.361$ ). One-sample t-tests revealed that communication effectiveness, patient loyalty, and patient perception all scored significantly above the neutral midpoint (all  $p < 0.001$ , Cohen's  $d > 1.3$ ), indicating that clinics consistently perform well in communicative engagement and relational outcomes.

The independent samples t-test provided strong evidence for the digital communication advantage. Clinics with high digital integration—particularly those utilizing JKN app features—reported significantly higher patient loyalty ( $M = 4.6$ ,  $SD = 0.61$ ) than low-integration clinics ( $M = 3.4$ ,  $SD = 0.89$ ),  $t(198) = 10.47$ ,  $p < 0.001$ , Cohen's  $d = 1.48$ . Similarly, patient perception scores were substantially higher among high-integration clinics ( $M = 4.7$ ,  $SD = 0.58$ ) compared to their counterparts ( $M = 3.6$ ,  $SD = 0.83$ ),  $t(198) = 9.85$ ,  $p < 0.001$ , Cohen's  $d = 1.39$ . ANOVA testing of different communication strategy types yielded significant differences in patient loyalty ( $F(2,197) = 28.43$ ,  $p < 0.001$ ,  $\eta^2 = 0.224$ ), with integrated digital-traditional approaches ( $M = 4.5$ ,  $SD = 0.64$ ) outperforming both digital-only ( $M = 3.9$ ,  $SD = 0.73$ ) and traditional-only ( $M = 3.2$ ,  $SD = 0.91$ ) strategies. Post-hoc Tukey tests confirmed significant differences between all groups (all  $p < 0.01$ ). Multiple regression analysis identified communication quality ( $\beta = 0.42$ ,  $p < 0.001$ ), digital tool usage ( $\beta = 0.28$ ,  $p < 0.001$ ), staff training ( $\beta = 0.19$ ,  $p < 0.001$ ), and infrastructure quality ( $\beta = 0.15$ ,  $p < 0.01$ ) as significant predictors of patient loyalty, together explaining 57.9% of the total variance ( $R^2 = 0.579$ ).

Qualitative interviews provided validation and contextual depth to these statistical results. BPJS Deputy Director of Communication and Organization, Mr. Irfan Humaidi, confirmed institutional recognition of the role of communication in shaping patient outcomes. He noted that clinics with superior communication practices consistently achieve higher patient satisfaction and retention rates. He emphasized that digital communication tools, particularly the JKN app's telemedicine and complaint response features, proved essential during the COVID-19 pandemic, helping clinics maintain patient relationships despite physical restrictions. His comments also highlighted three critical institutional insights: first, clinics utilizing digital tools maintained patient engagement levels 40% higher than those relying solely on traditional communication methods; second, clinics providing specialized communication support for elderly patients achieved 25% higher satisfaction among that demographic; and third, infrastructure quality directly correlates with communication effectiveness, as better-equipped

clinics facilitate more meaningful patient interactions.

Patient interviews offered firsthand validation of these findings. Mrs. S.S. from Klinik Medik Kemang described how the combination of caring staff and digital accessibility through the JKN app made her feel valued and supported, enhancing her loyalty to the clinic despite closer alternatives. Mr. S.A. from Klinik Nala highlighted the importance of consistent communication quality, praising his doctor's clarity but noting variability among staff, especially when interacting with elderly patients. Mrs. L.P. from Klinik Amanah pointed out that limited physical space sometimes disrupted communication quality, suggesting that environmental constraints can influence the effectiveness of interpersonal interactions. Thematic analysis across interviews revealed clear patterns: 91% of patients explicitly linked communication quality to loyalty, 76% identified digital tools as enhancing their experience, 68% emphasized the importance of staff communication training, and 54% mentioned infrastructure as a factor affecting communication satisfaction.

Document analysis corroborated these findings and demonstrated institutional mechanisms supporting the communication–loyalty relationship. BPJS performance evaluation documents indicated that patient satisfaction surveys account for 35% of total clinic performance assessments, with complaint resolution times and digital engagement rates serving as mandatory indicators. Patient loyalty is tracked through retention and referral data, positioning communication as a key metric of clinic success. The Minister of Health Regulation No. 71 of 2013 further institutionalizes communication standards by mandating patient information protocols, feedback mechanisms, and quality assurance measures that prioritize communication satisfaction. Analysis of JKN app documentation revealed that its design explicitly supports patient loyalty, with data showing 73% higher app retention rates among satisfied patients, particularly through telemedicine, appointment scheduling, and rapid complaint resolution features. Policy analyses of pandemic-era communication strategies further confirmed that clinics maintaining digital capabilities retained 68% more patients during

lockdowns, with telemedicine adoption correlating strongly ( $r = 0.43$ ,  $p < 0.001$ ) with loyalty maintenance.

Integration of these findings across methods produces convergent evidence for the central role of communication in patient perception and loyalty. Quantitative testing supports strong correlations ( $r > 0.73$ ) between communication quality and key patient outcomes. Qualitative validation reveals that 91% of patients explicitly associate good communication with loyalty, and documentary analysis shows that BPJS performance frameworks institutionalize these communication measures. Digital communication acts as an amplifier, with large effect sizes (Cohen's  $d > 1.3$ ) and consistent patient testimony affirming the importance of accessibility and responsiveness. Demographic and infrastructure factors further moderate these effects: while well-trained staff and adequate facilities enhance communication outcomes, elderly patients remain a group requiring specialized attention.

The comprehensive impact assessment demonstrates that health communication exerts both statistically significant and practically meaningful influence on patient perception and loyalty among BPJS partner clinics in Jabodetabek. Large effect sizes (Cohen's  $d > 1.3$ ) and explained variance exceeding 57% affirm communication's powerful role in shaping patient experiences. Practically, 80% of clinics acknowledge that communication directly affects perceived service value, and those integrating digital tools achieve measurable advantages in retention and satisfaction. Infrastructure quality and staff training further reinforce these effects, while tailored communication for elderly patients enhances inclusivity and overall satisfaction.

In summary, the triangulated evidence underscores that health communication operates as a critical determinant of patient perception and loyalty, and therefore as a strategic lever for competitive advantage in the BPJS clinic network. Investment in comprehensive communication strategies—combining digital integration, staff capacity building, and infrastructure improvement—yields measurable returns in patient trust, satisfaction, and long-term loyalty. These findings confirm that

communication is not merely a service function but a strategic pillar for sustainable clinic performance in the evolving Jabodetabek healthcare market.

Those findings are summarized in the following table:

**Table 2.**  
*Findings*

Research Question	Conclusion	Supporting Data
<b>How does health communication play a role in increasing the competitive advantage of BPJS partner clinics in the Jabodetabek area?</b>	Health communication is a core driver of competitive advantage, strengthening trust, loyalty, and satisfaction and differentiating clinics in a crowded market.	<ul style="list-style-type: none"> <li>• 85% agree/strongly agree communication builds competitive edge (<math>M=4.3</math>, <math>SD=0.71</math>).</li> <li>• Strong link to advantage: <math>r=0.78</math>, <math>p&lt;0.001</math>; high-communication clinics score higher on positioning (<math>M=4.5</math> vs. <math>3.2</math>), <math>t(198)=12.4</math>, <math>p&lt;0.001</math>, <math>d=1.76</math>.</li> <li>• 72% use digital tools; JKN integration most associated with advantage (<math>\chi^2=34.7</math>, <math>p&lt;0.001</math>).</li> <li>• Higher outcomes with comprehensive strategies: retention (<math>M=4.4</math> vs. <math>3.6</math>, <math>p&lt;0.001</math>); satisfaction (<math>M=4.6</math> vs. <math>3.8</math>), <math>t(198)=9.2</math>, <math>p&lt;0.001</math>.</li> <li>• Patient-centered communication ranked #1 by 67%; trust importance <math>M=4.7</math> (<math>SD=0.52</math>).</li> <li>• Structured protocols → +23% patient loyalty.</li> </ul>
<b>What health communication strategies are effective in enhancing the competitive advantage of BPJS partner clinics in Jabodetabek?</b>	The most effective approach is hybrid, integrating interpersonal communication with digital tools (e.g., JKN, WhatsApp, social media) plus rapid response, education, and personalization.	<ul style="list-style-type: none"> <li>• Hybrid &gt; single-method: <math>M=4.5</math> (<math>SD=0.62</math>) vs. <math>3.7</math> (<math>SD=0.84</math>), <math>t(198)=7.8</math>, <math>p&lt;0.001</math>, <math>d=1.11</math>.</li> <li>• Diversity ↔ retention: <math>r=0.69</math>, <math>p&lt;0.001</math>.</li> <li>• Digital-first clinics show higher satisfaction: <math>M=4.4</math> vs. <math>3.6</math>, <math>t(142)=6.2</math>, <math>p&lt;0.001</math>.</li> <li>• Multi-platform users → +31% loyalty (<math>\chi^2=28.4</math>, <math>p&lt;0.001</math>).</li> </ul>

		<p>Educational content → +24% competitive positioning (M=4.3 vs. 3.5, <math>p&lt;0.001</math>).</p> <ul style="list-style-type: none"> <li>• Patient themes: integration (78%), personalization (84%), accessibility (71%), education (66%).</li> <li>• Illustrative cases: Brawijaya (digital-enhanced personal care); Nala Medika (community education); MDM Ciputat (hybrid WhatsApp/social + in-person).</li> </ul>
<b>How does health communication impact patient perception and loyalty among BPJS partner clinics in Jabodetabek?</b>	<p>Clear, empathetic, and responsive communication significantly improves patient perception and loyalty; digital integration amplifies these effects, and staff training/infrastructure further strengthen outcomes.</p>	<ul style="list-style-type: none"> <li>• Means above neutral: communication M=4.2 (SD=0.78), loyalty M=4.1 (SD=0.82), perception M=4.3 (SD=0.75). 80% say communication boosts perceived value.</li> <li>• Correlations: comm↔perception <math>r=0.764</math>; comm↔loyalty <math>r=0.731</math>; perception↔loyalty <math>r=0.812</math> (all <math>p&lt;0.001</math>).</li> <li>• Association: <math>\chi^2=52.18</math>, <math>df=4</math>, <math>p&lt;0.001</math>; Cramer's <math>V=0.361</math>. Digital integration advantage: loyalty 4.6 vs. 3.4, <math>t(198)=10.47</math>, <math>d=1.48</math>; perception 4.7 vs. 3.6, <math>t(198)=9.85</math>, <math>d=1.39</math> (both <math>p&lt;0.001</math>).</li> <li>• ANOVA (strategy type) <math>F(2,197)=28.43</math>, <math>p&lt;0.001</math>; integrated &gt; digital-only &gt; traditional-only (all Tukey <math>p&lt;0.01</math>).</li> <li>• Regression (<math>R^2=0.579</math>): communication (<math>\beta=0.42</math>), digital tools (<math>\beta=0.28</math>), staff training (<math>\beta=0.19</math>), infrastructure (<math>\beta=0.15</math>) all significant (<math>p\leq0.01</math>).</li> </ul>

<ul style="list-style-type: none"> <li>• Leadership &amp; patients corroborate: higher engagement with JKN, needs of elderly, and facility adequacy.</li> </ul>
---

Source: Primary data from researcher's mixed-methods study on BPJS partner clinics (2025)

The findings of this study highlight that health communication is not merely an operational function but a strategic foundation that determines the competitiveness and sustainability of BPJS partner clinics in the Jabodetabek area. A multi-dimensional communication approach that combines regulatory quality assurance, digital innovation, and patient-centered engagement emerges as the most effective means of strengthening patient trust, satisfaction, and long-term loyalty. The convergence of statistical data, interview narratives, and document analysis demonstrates that these three interrelated dimensions—quality control, digital communication integration, and patient-centered interaction—collectively form the core of a high-performing health communication strategy.

Quality control and communication standards play a crucial role in institutionalizing effective communication within the BPJS healthcare network. The analysis of BPJS Regulation No. 1 of 2014 and Minister of Health Regulation No. 71 of 2013 reveals that communication quality is embedded in accreditation and service satisfaction frameworks, ensuring consistent feedback mechanisms between clinics and patients. Survey data show that 85% of clinics identify quality standards as central to maintaining competitiveness, with those employing structured feedback systems reporting notably higher patient loyalty and satisfaction. This alignment between regulatory expectations and clinic-level implementation transforms communication from a procedural activity into a measurable quality indicator. As confirmed in interviews with BPJS leadership, performance assessments now allocate 35% of evaluation weight to patient satisfaction surveys, reinforcing communication as a benchmark of institutional quality. Clinics that adopt such systematic feedback models are therefore more capable of adapting to patient needs, improving trust, and

securing their position in an increasingly competitive healthcare environment.

Digital health communication innovation represents the second critical pillar in shaping competitive advantage. The introduction of the JKN mobile application has redefined how clinics interact with patients by offering real-time, two-way communication that bridges accessibility and efficiency. Quantitative data demonstrate that clinics with high levels of digital integration achieve substantially greater patient loyalty ( $M=4.6$ ,  $SD=0.61$ ) than those with limited adoption ( $M=3.4$ ,  $SD=0.89$ ), with a large effect size (Cohen's  $d=1.48$ ). The app's features—such as online registration, teleconsultation, complaint management, and health promotion—enable clinics to streamline administrative processes while maintaining personalized communication. Document analysis indicates that user engagement through the JKN app yields up to 73% higher patient retention among satisfied users, while interview evidence highlights that digital responsiveness enhances patients' sense of being heard and valued. This diffusion of digital communication not only improves operational efficiency but also empowers patients with accessible, interactive health information, reinforcing BPJS Kesehatan's goal of equitable and connected healthcare delivery.

Equally central to the model of effective communication is the patient-centered approach, which integrates empathy, personalization, and responsiveness into clinical interaction. Statistical results from multiple regression analysis confirm that patient-centered communication significantly predicts patient loyalty ( $\beta=0.42$ ,  $p<0.001$ ), explaining 57.9% of variance in loyalty outcomes. Patient interviews further validate this, with 91% of respondents explicitly linking clear, empathetic communication to their continued trust and preference for specific clinics. Patients such as Mrs. S.S. described how staff attentiveness and the ability to reach the clinic easily through digital platforms foster a sense of being genuinely cared for. Likewise, Mr. S.A. emphasized that personalized explanations from doctors-built confidence, though he noted the need for better communication with elderly patients—highlighting inclusivity as an emerging dimension of patient-centered care.

The convergence of quantitative and qualitative data underscores that communication tailored to patient expectations not only enhances satisfaction but also strengthens the emotional and relational foundations of healthcare loyalty.

Taken together, these three interlocking dimensions—regulatory quality assurance, digital innovation, and patient-centered interaction—form an integrated framework for competitive health communication. Clinics that effectively combine these elements demonstrate higher levels of trust, loyalty, and satisfaction, translating directly into superior competitive positioning. Within the Jabodetabek healthcare landscape, where patient expectations and service competition are equally high, such integrated communication practices represent not just a pathway to compliance but a core strategy for sustainable success.

## CONCLUSIONS

The analysis conducted in this study reveals that health communication serves as a fundamental catalyst for competitive advantage among BPJS partner clinics in the Jabodetabek area, particularly within the context of an increasingly complex and unpredictable healthcare environment. The statistical evidence, supported by qualitative insights and regulatory analysis, demonstrates that the healthcare landscape has evolved from the traditional VUCA (Volatile, Uncertain, Complex, and Ambiguous) paradigm toward a more challenging BANI (Brittle, Anxious, Nonlinear, and Incomprehensible) reality. This transformation necessitates adaptive communication strategies that can respond to rapid changes while maintaining patient trust and satisfaction. The quantitative analysis revealing strong correlations between communication effectiveness and competitive advantage ( $r=0.78$ ,  $p<0.001$ ) underscores the critical importance of strategic communication investment in this dynamic environment.

The integration of digital communication tools, exemplified by the JKN mobile application, represents more than technological advancement—it constitutes a strategic response to the fundamental challenges of modern healthcare delivery. The statistical analysis demonstrating that clinics with high digital communication integration achieve significantly



higher patient loyalty scores (Cohen's  $d=1.48$ ) provides compelling evidence that digital innovation directly translates into competitive positioning. This digital transformation aligns with contemporary patient expectations for swift, accurate, and data-driven healthcare interactions, while simultaneously addressing the operational challenges that clinics face in managing increasing patient volumes and complexity. The interview data from BPJS leadership confirming 40% better patient engagement maintenance during pandemic restrictions through digital tools validates the practical significance of these technological investments beyond mere statistical relationships.

The JKN application's comprehensive functionality demonstrates how integrated digital platforms can address multiple dimensions of patient-clinic interaction simultaneously. Rather than serving as isolated tools, the app's features for complaint handling, appointment scheduling, teleconsultations, and medication management create a cohesive ecosystem that streamlines healthcare delivery while enhancing patient experience. The document analysis revealing 73% higher app retention rates among satisfied clinic patients, combined with survey data showing 72% of clinics utilizing digital tools for competitive advantage, illustrates how technological integration creates measurable value for both patients and healthcare providers. This systematic approach to digital communication transforms what were previously fragmented interactions into a unified, patient-centered experience that builds loyalty through convenience and accessibility.

The transformative impact of digital communication extends beyond individual clinic operations to reshape the broader BPJS healthcare policy framework. The regulatory analysis demonstrates that platforms like JKN have fundamentally altered how healthcare providers connect with patients, ensure compliance with legal standards, and maintain professional credibility. The statistical evidence showing that communication effectiveness significantly predicts patient loyalty ( $\beta=0.42$ ,  $p<0.001$ ) reflects a deeper structural change in healthcare delivery, where communication quality has become integral to regulatory compliance and competitive positioning. This integration empowers all stakeholders—from

policymakers to individual clinic participants—to engage in systematic information distribution that facilitates patient access to preferred healthcare providers while enabling efficient scheduling and medication management processes.

However, the research findings also reveal significant implementation challenges that must be addressed to fully realize the potential of digital health communication. The interview data highlighting accessibility difficulties for elderly users, combined with survey evidence of technical disruptions affecting service delivery, demonstrates that technological solutions alone are insufficient without comprehensive support systems. The qualitative analysis revealing that 54% of patients noted infrastructure impacts on communication quality underscores the importance of addressing both digital and physical barriers to effective healthcare communication. These challenges are particularly significant in the BANI environment, where system brittleness can amplify the impact of technical failures and accessibility limitations, potentially undermining patient trust and clinic competitiveness.

The technical challenges associated with JKN app implementation, including maintenance issues and occasional system errors that affect SEP (Participant Eligibility Letter) verification, represent more than operational inconveniences—they constitute threats to the fundamental trust relationship between patients and healthcare providers. The statistical analysis showing significant differences in patient loyalty based on communication reliability ( $p<0.001$ ) demonstrates that technical disruptions can have measurable impacts on competitive positioning. These findings suggest that successful digital communication strategies require not only innovative technology but also robust support infrastructure and contingency planning to maintain service continuity during system disruptions.

Despite these challenges, the convergent evidence from quantitative analysis, qualitative interviews, and document review shows that digital communication platforms like JKN Mobile represent a transformative force for BPJS healthcare delivery. The triangulated findings demonstrate that this technological integration strengthens health communication practices and

stakeholder engagement in ways that extend beyond immediate operational improvements. The multiple regression analysis explaining 57.9% of variance in patient loyalty through communication-related factors provides robust empirical support for the strategic importance of comprehensive communication approaches in maintaining competitive advantage.

The digital transformation of BPJS communication strategy has established a foundation for a more connected, efficient, and responsive healthcare system that empowers clinics in Jabodetabek to build patient trust, enhance satisfaction, and sustain competitive advantage. The statistical evidence of large effect sizes (Cohen's  $d > 1.3$ ) for communication quality impact on patient outcomes, validated by consistent qualitative themes and regulatory support, demonstrates that this transformation represents a fundamental shift in healthcare delivery paradigms rather than superficial technological adoption. This comprehensive approach to health communication integration positions BPJS clinics to navigate the complexities of the BANI environment while maintaining patient-centered care as their primary competitive differentiator.

Nevertheless, based on the empirical findings and analytical insights generated through this mixed-methods investigation, several strategic recommendations emerge for BPJS partner clinics and stakeholders seeking to strengthen health communication's role in maintaining competitive advantage while addressing current implementation challenges. These recommendations are grounded in the statistical evidence, qualitative themes, and regulatory analysis that demonstrate the multifaceted nature of effective health communication in contemporary healthcare environments.

The accessibility and usability challenges identified through patient interviews and survey data necessitate comprehensive approaches to digital inclusion that extend beyond technological solutions to encompass educational and support interventions. The research findings revealing particular difficulties among elderly users suggest that successful digital communication strategies must incorporate tailored educational components that address diverse demographic needs and

technological comfort levels. This approach should include the development of comprehensive user guides and tutorial systems within the JKN app that provide step-by-step guidance for common processes such as appointment scheduling and teleconsultations. The statistical evidence showing significant correlations between communication personalization and patient satisfaction ( $r=0.69$ ,  $p<0.001$ ) supports the importance of customizing digital interfaces to meet varied user capabilities and preferences.

Community outreach initiatives represent a critical component of digital inclusion strategies, particularly given the interview data highlighting the importance of interpersonal support in technology adoption. Partnerships with local organizations can provide hands-on assistance and information sessions that bridge the gap between digital innovation and traditional healthcare communication preferences. The qualitative analysis revealing that 91% of patients link communication quality to loyalty decisions underscores the importance of ensuring that digital transformation efforts enhance rather than replace meaningful interpersonal connections between patients and healthcare providers.

The development of digital communication competencies among clinic staff emerges as a fundamental requirement for successful technology integration, based on the survey data showing significant differences in patient outcomes between high and low communication quality clinics. Comprehensive training programs should focus not only on JKN app functionalities but also on the interpersonal skills necessary for providing empathetic guidance to patients navigating digital health tools. The interview data from patients like Mr. S.A. emphasizing the importance of clear communication particularly for elderly patients validates the need for specialized training approaches that address demographic-specific communication challenges. Professional development in telemedicine and digital consultation skills becomes essential for ensuring that virtual interactions maintain the quality and effectiveness of traditional face-to-face healthcare communication.

Technical reliability and system maintenance represent critical infrastructure

requirements that directly impact the competitive advantages derived from digital communication strategies. The statistical analysis demonstrating significant relationships between communication reliability and patient loyalty necessitates proactive approaches to system maintenance and technical support. Establishing dedicated support teams and implementing regular performance monitoring can minimize service disruptions and maintain trust that form the foundation of competitive advantage in healthcare delivery. The document analysis revealing the importance of SEP validation processes highlights the need for robust backup systems and contingency planning to ensure uninterrupted access to healthcare services.

Awareness and adoption campaigns must be strategically designed to reach diverse demographic groups through appropriate communication channels based on research findings that could indicate varying levels of digital comfort and access across populations. Television and radio campaigns targeting elderly and rural populations can complement digital marketing strategies to ensure comprehensive outreach. The creation of engaging educational content, including patient testimonials and practical demonstrations, can effectively communicate the benefits of digital health communication while addressing common concerns and misconceptions about adoption of technology in healthcare settings.

The implementation of robust feedback mechanisms and transparency initiatives represents a critical component of sustainable competitive advantage strategies, supported by statistical evidence showing strong correlations between communication responsiveness and patient loyalty. Regular collection of patient input through JKN app feedback systems enables continuous refinement of communication strategies based on real patient needs and experiences. Transparency in sharing improvements made in response to feedback reinforces patient trust and demonstrates organizational commitment to patient-centered care, creating sustainable competitive advantages that extend beyond immediate technological capabilities.

Data security and compliance transparency become increasingly important as digital communication platforms handle sensitive

patient information, based on the regulatory analysis highlighting the importance of maintaining trust in digital healthcare systems. Clear explanations of data usage and privacy policies within the app, combined with regular compliance audits, ensure that digital innovation enhances rather than compromises patient trust. The maintenance of transparent communication regarding data security practices supports the broader goal of building sustainable competitive advantages through trustworthy healthcare delivery.

Continuous innovation in response to the evolving BANI environment represents a long-term strategic imperative that extends beyond current technological capabilities to anticipate future patient needs and healthcare delivery challenges. The development of enhanced teleconsultation options, real-time medication availability updates, and interactive facility location services reflects the dynamic nature of competitive advantage in healthcare delivery. Supporting clinics in implementing flexible communication approaches that can adapt to unpredictable situations ensures that health communication strategies remain relevant and effective as the healthcare environment continues to evolve.

Through the systematic implementation of these evidence-based recommendations, BPJS clinics can continue to improve patient-centered care, increase digital inclusivity, and enhance their competitive positioning in ways that create sustainable advantages in the increasingly complex Jabodetabek healthcare market. The comprehensive approach to health communication integration, supported by robust empirical evidence and validated through multiple analytical perspectives, provides a foundation for fostering a more connected and resilient healthcare ecosystem that serves the diverse needs of patients while maintaining the competitive viability of healthcare providers in an ever-changing environment.

## REFERENCES

- Balmer, J. M., & Greyser, S. A. (2006). Corporate marketing: Integrating corporate identity, corporate branding, corporate communications, corporate image, and corporate reputation. *European Journal of Marketing*, 40(7/8), 730–741.

- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.
- Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 349–375.
- Clarke, V., & Braun, V. (2016). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297–298.
- Dutta-Bergman, M. J. (2005). Developing a profile of consumer intention to seek out additional information beyond a doctor: The role of communicative and motivation variables. *Health Communication*, 17(1), 1–16.
- Elrod, J. K., & Fortenberry, J. L. (2020). Integrated marketing communications: A strategic priority in health and medicine. *BMC Health Services Research*, 20, 825.
- Fortenberry, J. L., & McGoldrick, P. J. (2016). Internal marketing: A pathway for healthcare facilities to improve the patient experience. *International Journal of Healthcare Management*, 9(1), 28–33.
- Hill, C. W. L. (1988). Differentiation versus low cost or differentiation and low cost: A contingency framework. *Academy of Management Review*, 13(3), 401–412.
- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965.
- Lupton, D. (2013). The digitally engaged patient: Self-monitoring and self-care in the digital health era. *Social Theory & Health*, 11(3), 256–270.
- Ministry of Health Republic of Indonesia. (2014). *Permenkes RI No. 9 Tahun 2014 tentang Klinik*. Jakarta: Ministry of Health Republic of Indonesia.
- Murray, A. I. (1988). A contingency view of Porter's "generic strategies." *Academy of Management Review*, 13(3), 390–400.
- Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (2015). Conducting semi-structured interviews. In W. C. Adams (Ed.), *Handbook of Practical Program Evaluation* (4th ed., pp. 492–505). Wiley.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: The Free Press.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.
- Thompson, A. A., Strickland, A. J., & Gamble, J. E. (2010). *Crafting and executing strategy: The quest for competitive advantage*. McGraw-Hill.
- Wulandari, D. P., Laila, N., & Mushandi, R. (2023). Analisis persebaran fasilitas kesehatan di DKI Jakarta menggunakan metode geographically weighted regression. *Jurnal Sains Geografi*, 1(2).
- Yin, R. K. (2017). *Case study research and applications: Design and methods*. SAGE Publications.