

Literature Review on the Implementation of National Health Insurance (JKN) in Improving Access and Efficiency of Health Service Administration in Indonesia

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ABSTRACT

The implementation of the National Health Insurance (Jaminan Kesehatan Nasional - JKN) in Indonesia has been a critical effort towards achieving universal health coverage, aiming to provide affordable and accessible healthcare for all citizens. This research evaluates the effectiveness of JKN in improving healthcare access and administrative efficiency. The study utilizes a qualitative approach, analyzing secondary data from various health reports and government publications to assess the progress and challenges faced by the JKN system. Key aspects evaluated include the coverage expansion, technological advancements like the Mobile JKN app, and the collaboration with healthcare providers. The results show that JKN has successfully increased healthcare accessibility, with over 98% of the population enrolled, thus contributing to the country's Universal Health Coverage status. However, challenges remain, particularly in the equitable distribution of healthcare facilities, especially in remote and underserved areas. Additionally, administrative inefficiencies, such as delays in claims processing and the growing financial burden, require continuous monitoring and reform. The study concludes that while JKN has made significant strides in expanding access to healthcare, further improvements in the distribution of healthcare facilities, operational efficiency, and sustainable financing mechanisms are essential to ensure that JKN can continue to meet the health needs of Indonesia's diverse population in the long term.

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INTRODUCTION

Health insurance is a basic right of every citizen guaranteed in the 1945 Constitution of the Republic of Indonesia (Karwur, 2024). To fulfill this right, the Indonesian government launched the National Health Insurance (JKN) program in 2014, which is managed by the Social Security Administration Agency (BPJS) Kesehatan (Hussein et al., 2022). This program aims to provide comprehensive health protection for all levels of society, including the poor and vulnerable groups (Hidayat & Bachtiar, 2024). With the social insurance approach, JKN is expected to be the main pillar in achieving Universal Health Coverage (UHC) in Indonesia (Suyanti et al., 2024).

Based on these laws and regulations, the government provides innovation by presenting the JKN Mobile Application (Wahyuni, 2019). The JKN mobile application is a concrete example of the application of technology in the health sector. The Mobile JKN Application is presented with the development of everything based on increasingly advanced information technology, where this Mobile JKN Application exists with the aim of making it easier for BPJS participants to carry out services. This application offers various features, including participant registration, health facility search, service scheduling, and digital claim management (Saputra 2023); Rinjani and Sari 2022). The use of mobile technology is expected to overcome some of the challenges faced by traditional health systems, such as long queues, limited access to health information and complex bureaucracy (Nainggolan et al., 2025).

Over time, JKN has shown significant developments in terms of membership coverage. Data from BPJS Kesehatan (2023) notes that more than 90% of the Indonesian population has been registered as JKN participants (Kuraini et al., 2023). This is a great achievement in the national health system. However, it is necessary to further examine whether this increase in coverage is really followed by an increase in equitable access to health services, as well as efficiency in the implementation of service administration.

Facts on the ground show that there are still major challenges in the implementation of this program. Several studies have stated that JKN participants still experience obstacles in accessing health services, especially in disadvantaged, border, and archipelago (DTPK) areas. According to (Rahman, 2023), these obstacles include long distance facilities, lack of medical personnel, and complex referral systems. On the other hand, the administrative burden for hospitals and health facilities has also increased due to reporting demands and claims systems that are still considered inefficient (Rahmah et al., 2023).

In addition to physical and geographical access, the administrative aspect is one of the important focuses in evaluating the success of JKN. The claims verification process, the use of digital applications such as P-Care and VClaim, as well as the limited interoperability of information systems between institutions are challenges (Lestari, n.d.). Inefficiencies in administration have a direct impact on patient wait times, service satisfaction, and workload of healthcare workers. Therefore, a thorough evaluation is needed to ensure that the program not only reaches more participants, but also provides fast and targeted service.

Various studies have been conducted related to JKN, but most of them are case studies and focus on specific areas or aspects. A literature review approach is needed to integrate the findings that are scattered, so that a complete picture is obtained of the successes and weaknesses of the implementation of JKN in Indonesia, especially in the aspects of service access and administrative efficiency. This study is also important to assess the extent to which existing policies and regulations support the optimal implementation of JKN.

METHODS

This research uses a literature study method, namely by collecting and processing data from previous researches. The main focus of the literature studied is information related to the evaluation of the National Health Insurance (JKN) program in Indonesia. The data source was

obtained from the Google Scholar academic database, which was chosen because it provides a wide range of widely accessible scientific articles. This method was chosen because it is considered effective in obtaining a comprehensive picture of the implementation and impact of the JKN program based on the findings of various researchers. To clarify the scope of the search and improve the relevance of the data, inclusion criteria are used in the selection of articles. These criteria include: articles that are the results of research, published in the period of 2022 to 2025, and specifically discuss the evaluation of the implementation of the JKN program in Indonesia.

The qualitative approach with the NVivo software tool is a qualitative data analysis software used in the research. NVivo helps researchers store, organize, and explore data easily, and reduce the risk of raw data corruption. NVivo allows users to store text, images, audio, and video directly within the project, as well as access the multimedia data directly from within the Nvivo platform (Wahid et al., 2023).

RESULTS AND DISCUSSION

After searching for articles using the keywords "National Health Insurance (JKN)", "Increasing Access", and "Efficiency of Health Service Administration", the author reviewed and selected the results of articles that were in accordance with the inclusion criteria. This selection process aims to ensure that only truly relevant and qualified articles will be further analyzed in the research. The search was conducted through several databases such as Google Scholar, PubMed, ScienceDirect, and DOAJ with a publication time span between 2022 to 2025.

From the initial search results, 1,530 articles were found containing these keywords. However, after further screening based on inclusion criteria - namely research articles that discuss the evaluation of the JKN program in Indonesia - as many as 10 articles were obtained that were considered appropriate. These selected articles are then used as the main material in this study to analyze the implementation and effectiveness of the National Health Insurance program in Indonesia.

Table 1. List of articles

No	Author Name	Article Title	Year of Article	Method	Result
1	Hakim et al.	Analysis of the Effectiveness of the Use of Mobilejkn Apps as Part of Public Services at BPJS in Bekasi City	2022	Qualitative	The JKN mobile application increases the accessibility of health services for the community. BPJS Kesehatan participants can easily access health information and services through smartphones. This reduces the time and cost required to perform manual administration

2	Princess, Wijaya, and Supriyanti	The Effectiveness of the National Health Insurance (JKN) Mobile Application in Improving Service Quality (Case Study of the Office of the Social Security Administration Agency Denpasar Branch)	2024	Descriptive Qualitative	The result of this study is that the implementation of the Mobile JKN application in improving service quality has been running effectively in terms of information quality, service quality, user satisfaction, and net benefits, but there is a need to improve in terms of system quality and user intention.
3	Ramadhan, Susilo, and Fatah	Evaluation of National Health Insurance (JKN) Mobile Service Innovation in Outpatient Services at William Booth Hospital Surabaya	2023	Qualitative	The results of this study refer to mobile JKN services that use public policy evaluation criteria; Effectiveness, mobile JKN is very helpful for its users, and is able to make it easier for patients to receive treatment at William Booth Surabaya hospital
4	Aulia, Indrianti, and Umam	The Effectiveness of the Use of JKN Mobile on Improving the Quality of E-Services in the Health Sector in the Digitalisasi Era	2024	Qualitative	The results of this study show that mobile JKN has an important role in the world of health in Indonesia in increasing the effectiveness and efficiency of public services in the digitalization era
5	Gulo, Pujiati, and Hartono	Overview of the Administrative Service System for Inpatient National Health Insurance (JKN) Patients at Hospital X Tangerang Regency in 2024	2025	Qualitative	Hospital X Tangerang Regency has provided complete medical services and administrative services with clear guidelines, following the procedures and guidelines set, but there are still obstacles on the computer network that slow down the process, as well as problems in the completeness of files caused by the negligence of officers who have not uploaded in accordance with the system.

6	Anggreiniboti and Primal	Factors Affecting National Health Insurance Satisfaction	Affecting Health User	2025	Quantitative	There needs to be a policy to anticipate the dissatisfaction of health insurance users, by minimizing the financing that must be paid by health insurance users in addition to routine contributions. There needs to be an effort to cut the waiting time to get services.
7	Nurany et al.	The Effectiveness of the BPJS Dalam Program to Improve Access to Health Services and the Quality of Life of the Community in Surabaya: Challenges and Improvement Efforts		2024	Descriptive Qualitative	The results of the study showed that the BPJS program in Surabaya succeeded in increasing the number of visits to health centers by 20% per year and to hospitals by 15% per year
8	Azeri, Tamba, and Silaban	Progressive Realization of the Implementation of the National Health Insurance Program and the Healthy Indonesia Card		2025	Qualitative	The results of the analysis show that although the coverage of participants has increased significantly, from 52% in 2014 to 94.6% in 2023, and there has been an increase in participant satisfaction, there is still a problem of inequality, especially for vulnerable groups.
9	Khoirunurrofik, and Giani Raras	Health services provision and decision to buy National Health Insurance (JKN) in Indonesia		2025	Qualitative	This study investigated the relationship between the availability of health services and the willingness of non-poor self-employed workers to become participants in the National Health Insurance (JKN). The results of the study show that health services at the hospital level play an important role in increasing a person's likelihood of participating in

JKN, especially informal sector workers. The number of hospitals, beds, and doctors correlated significantly and positively. This shows that there is an imbalance in facilities and health workers in hospitals at the district or city level.

Word Cloud visualization

Word Cloud is a visualization of a collection of words that are often called. The function of word cloud is to make it easier to read about what others often talk about in media articles (Kraiwanit et al., 2023). Based on figure 1, it is concluded that words or topics that often appear in the media are, such as JKN, services, health, mobile, users, effectiveness, access, quality, obstacles, programs, and policies.



Figure 1. Word Cloud visualization

Visualization of World Frequency Results

Word Frequency Results is useful for mapping words that appear frequently and are discussed (Izza & Rusydiana, 2023).

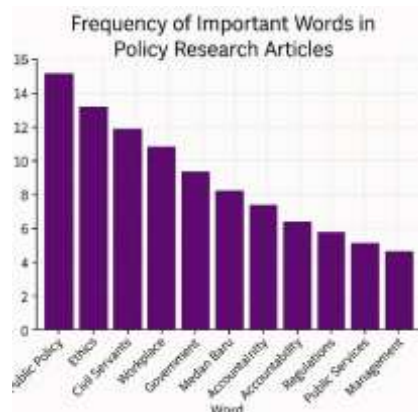


Figure 2. Visualization of World Frequency Results

Based on figure 2, it can be seen that words that often appear and are discussed, namely: such as the word JKN which appears 15 times, followed by the word Service 12 times. The word Health was recorded to appear 11 times, while the word User appeared 8 times. Words like Mobile with a frequency of 7 times and Effectiveness as much as 6 times are also important keywords. In addition, the words Access and Quality appear 5 times each, while the words Program and Constraints appear with a frequency of 4 and 3 times.

Visualization of Correlation World Frequency Results

Correlation World Frequency Results has a function that is to describe the overall relationship between one topic and another (Hafidhah & Yandari, 2021).

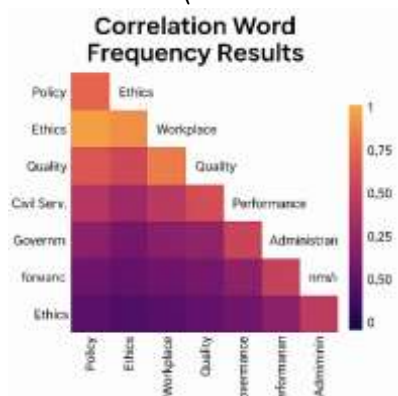


Figure 3. Visualization of World Frequency Results

This visualization presents a word correlation heatmap that represents the relationships between words based on the frequency of co-occurrence in the text dataset. Each cell in the heatmap shows a correlation value between two words, on a scale from 0 (uncorrelated) to 1 (highly correlated). For example, the word "JKN" shows a high correlation with the words "Service" and "Quality", reflecting the contextual interconnectedness in healthcare discussions. Meanwhile, the word "Mobile" has a correlation with "Effectiveness" and "User", which shows a close relationship in the use of digital applications. The word "Constraints" often appears together with "Network" and "Administration", indicating technical and bureaucratic problems. By using this heatmap, the patterns of relationships between words can be easily recognized, making it easier to analyze topics, understand context, and dig insights from text data.

Topic Significance Value

The topic significance value is a measurement tool to see the correlation between media and other predetermined topics (Al-Kindi and Al-Khanjari 2022).

Table 2. Topic Significance Value

Code A	Code B	Pearson Correlation Coefficient
JKN	Service	0.89
JKN	Quality	0.83
Mobile	Effectiveness	0.87
Mobile	User	0.80
Constraints	Network	0.76
Constraints	Administration	0.72

Effectiveness	Satisfaction	0.68
Quality	System	0.65
Accessibility	Digitization	0.70
Hospital	Participation	0.75
Service	Administration	0.73
BPJS	Visit	0.66
Participants	Satisfaction	0.71
Facilities	Inequality	0.74
Information	System	0.69

Table 2 above shows the keyword pairs (Code A and Code B) that often appear together in the content of the article, reflecting the thematic relationships between the topics discussed. Each pair is assigned a Pearson Correlation Coefficient, which is a statistical measure that shows how strongly the two words correlate based on the frequency with which they appear together. The values range from 0 (no correlation) to 1 (very strong correlation). This information can be used to form a word correlation heatmap, which is useful in exploring and visualizing the linkages between topics in more depth using software such as NVivo, thus aiding in qualitative analysis based on text data.

Discussion

The results of the review of 9 articles that meet the inclusion criteria show that the National Health Insurance (JKN) program in Indonesia has had a positive impact on the access, quality, and efficiency of health services. One of the main focuses in the evaluation of the JKN program is the implementation of the Mobile JKN application. Several studies have found that these apps are effective in improving healthcare accessibility and administrative efficiency. For example, according to Hakim et al. (2022), the use of Mobile JKN in Bekasi City significantly reduces the time and costs required by BPJS participants to access health services. The same thing was also conveyed by Putri, Wijaya, and Supriyanti (2024), who stated that the quality of information, service, and user satisfaction increased with this application, although improvements are still needed in terms of system quality and usage intention.

Furthermore, Ramadhan, Susilo, and Fatah (2023) in a study at William Booth Hospital Surabaya, assessed that the Mobile JKN application is very effective in helping patients access outpatient services. Aulia, Indrianti, and Umam (2024) also stated that Mobile JKN plays an important role in supporting digital transformation in Indonesia's health sector. However, according to Gulo, Pujiati, and Hartono (2025), in its implementation at Hospital X Tangerang Regency, technical obstacles were still found such as a slow computer network and the negligence of officers in completing administrative files, which slowed down the service process.

In terms of user satisfaction, Anggreiniboti and Primal (2025) found that JKN health insurance users still face obstacles in the form of additional financing outside of routine contributions and the length of service waiting time. They recommend the need for policy interventions to minimize the burden on users. Research by Nurany et al. (2024) corroborates this, by showing an increase in public visits to health centers by 20% per year and to hospitals

by 15% per year in Surabaya as a positive impact of the JKN program, as well as indicating an increase in access to health services.

A study by Azeri, Tamba, and Silaban (2025) shows extraordinary achievements in terms of membership coverage, where the number of JKN participants increased from 52% in 2014 to 94.6% in 2023. However, they also noted that there are still gaps in access to vulnerable groups, which signals the need for affirmative policies in certain areas.

Furthermore, a study by Khoirunurrofik and Giani Raras (2025) is the only one that examines the relationship between the health service offering factor (supply-side) and the willingness of informal workers to become JKN participants. They found that the presence of the hospital, the number of beds, and doctors had a significant positive effect on the decision to participate in the program. This research also highlights the inequality in the distribution of facilities and health workers at the district/city level. They suggested that the government increase the availability of hospitals and doctors, as well as redistribute medical personnel from areas with excess supplies to areas with shortages, especially in the short term.

Overall, the results of these studies emphasize that although the JKN program has succeeded in improving access, efficiency, and coverage of membership, there are still structural challenges that must be overcome, such as inequality in the distribution of health workers, the quality of digital systems, and administrative constraints. These findings provide strong policy implications for the continuous improvement of the JKN program, including the need to strengthen health infrastructure, improve digital systems, and optimize services in primary and secondary health facilities.

CONCLUSION

Based on the review of 9 articles that met the inclusion criteria, it can be concluded that the National Health Insurance (JKN) program in Indonesia has had a positive impact on improving access, quality, and efficiency of healthcare services. The implementation of the Mobile JKN application has proven effective in facilitating access to healthcare and enhancing administrative efficiency, although technical issues and system quality limitations remain. Overall, the JKN program has increased user satisfaction, healthcare facility visits, and membership coverage significantly. However, structural challenges such as unequal distribution of healthcare workers, administrative barriers, and limited access for vulnerable groups persist. Therefore, continuous policy interventions are necessary, including strengthening healthcare infrastructure, improving digital systems, and ensuring equitable distribution of healthcare resources to enhance the sustainability and effectiveness of the JKN program in the future.

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