



HEALTH SYSTEM TRANSFORMATION IN INDONESIA: IMPLEMENTATION AND CHALLENGES OF SIX POLICY PILLARS

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Abstract

Indonesia's health system transformation is structured around six strategic pillars: primary care, referral services, system resilience, financing, human resources, and health technology. This study aims to assess the implementation progress and challenges associated with these pillars. A literature review was conducted using national and international databases (Google Scholar and ScienceDirect), focusing on peer-reviewed articles published between 2016 and 2025. Four studies were selected based on inclusion criteria that emphasized relevance to Indonesia's health system transformation agenda. The review identified key challenges, including limited digital infrastructure, uneven distribution of the health workforce, rigid financing mechanisms, particularly within Public Service Agency (BLU) institutions and weak intersectoral coordination. Many facilities remain unprepared for digital integration, particularly the implementation of Electronic Medical Records (EMR). Although some improvements have been observed, structural barriers continue to hinder the overall progress. Strengthening digital readiness, enhancing workforce capacity, adopting more flexible budgeting mechanisms, and improving coordination, especially through platforms such as SATUSEHAT are recommended as strategic responses. However, this study has several limitations, such as the limited availability of articles that cover all six pillars comprehensively and most of the studies used emphasize legal and administrative aspects rather than specific analysis in the health sector. These limitations limit the generalization of the findings. These findings are expected to inform more adaptive and equitable health policy reforms in Indonesia.

Keywords: Health System Evaluation, Health Transformation, Indonesia, Policy Implementation, Six Pillars

Abstrak

Transformasi sistem kesehatan Indonesia disusun berdasarkan enam pilar strategis: layanan primer, layanan rujukan, ketahanan sistem, pembiayaan, sumber daya manusia, dan teknologi kesehatan. Studi ini bertujuan untuk mengevaluasi implementasi dan tantangan utama dari keenam pilar tersebut. Metode yang digunakan adalah tinjauan literatur dengan sumber dari basis data nasional dan internasional (Google Scholar dan ScienceDirect), terbatas pada artikel yang diterbitkan antara tahun 2016 hingga 2025. Empat studi dipilih berdasarkan kriteria inklusi yang menekankan relevansi terhadap agenda transformasi sistem kesehatan Indonesia. Tinjauan menunjukkan beberapa tantangan utama, seperti keterbatasan infrastruktur digital, distribusi tenaga kesehatan yang tidak merata, mekanisme pembiayaan yang kaku, terutama pada institusi Badan Layanan Umum (BLU), serta lemahnya koordinasi lintas sektor. Banyak fasilitas kesehatan juga belum siap untuk mengintegrasikan sistem digital, terutama Rekam Medis Elektronik (RME). Meskipun terdapat beberapa kemajuan, hambatan struktural masih menghambat laju implementasi. Strategi yang disarankan meliputi peningkatan kesiapan digital, penguatan kapasitas tenaga kesehatan, penerapan model pembiayaan yang lebih fleksibel, serta penguatan koordinasi melalui platform seperti SATUSEHAT. Namun, studi ini memiliki beberapa keterbatasan yaitu, terbatasnya ketersediaan artikel yang mengevaluasi seluruh enam pilar secara komprehensif dan mayoritas studi yang digunakan lebih menyoroti aspek hukum dan administratif dibandingkan analisis spesifik di bidang kesehatan. Temuan ini diharapkan dapat menjadi dasar bagi perumusan kebijakan kesehatan yang lebih adaptif dan berkeadilan di Indonesia.

Kata Kunci: Enam Pilar, Evaluasi Sistem Kesehatan, Indonesia, Implementasi Kebijakan, Transformasi Kesehatan

INTRODUCTION

Health system reform has been an important agenda for many countries around the world to improve health services and achieve universal health coverage. Thailand has successfully implemented a universal health insurance scheme since 2002 that increased people's access to health services from 76% to 99.5% within a decade (Tangcharoensathien et al., 2018). Malaysia uses a mixed public-private health system that is widely recognized for achieving universal health coverage through tax-based public health services that provide



access at a very low cost to its citizens. However, the system shows inequalities in the treatment of non-citizens, such as migrant workers and asylum seekers, who are charged higher healthcare rates due to the government's policy of subsidy removal since 2014 (Loganathan et al., 2019).

Meanwhile, Brazil has also made significant progress in achieving universal health coverage, with an increase in Family Health Strategy coverage from 7.6% in 2000 to 58.2% in 2014, and an increase in health spending from 7.0% to 8.3% of gross domestic product over the same period. However, since 2015, the country has experienced a decline in public health spending per capita in real terms, accompanied by an increase in violent deaths, loss of private health insurance coverage by millions of residents, and a resurgence of infectious diseases. The combination of economic crisis, political instability, and austerity policies has threatened the sustainability of the health system and worsened the conditions of the most vulnerable (Massuda et al., 2018). The diverse experiences of these three countries show that health system reform requires a comprehensive and sustainable approach that is tailored to each country's context. Some of the critical success factors for such reforms include strong political commitment, adequate budget allocation, and multi-stakeholder engagement (World Health Organization, 2023).

Indonesia has launched a health transformation initiative that focuses on six strategic pillars in an effort to comprehensively improve the national health system. The six pillars include primary care transformation, referral service transformation, health system resilience transformation, health financing transformation, health human resources transformation, and health technology transformation (Kementerian Kesehatan Republik Indonesia, 2023). Until 2023, several important achievements have been made, including the reduction of the stunting rate from 24.4% in 2021 to 21.6% in 2022 and the construction of 15 Primary Hospitals in areas that previously did not have adequate health facilities (Kementerian Kesehatan Republik Indonesia, 2023). The National Health Insurance (JKN) program as part of the health financing pillar has become one of the largest social health insurance programs by covering more than 96.83% of the Indonesian population in 2024 (Sistem Monitoring & Evaluasi Jaminan Sosial DJSN, 2024). The efforts to improve the competence of health workers have also been carried out since 2020 through a continuous professional development program that aims to maintain and improve the professional abilities of health workers according to the competency standards of each health worker profession (Sekretariat Konsil Tenaga Kesehatan Indonesia, 2020).

Although various efforts and achievements have been reported, to date there has been no comprehensive evaluation of the implementation of the six pillars of health transformation. Scientific literature examining the effectiveness of programs within the health transformation framework is still very limited, especially with regard to the analysis of supporting infrastructure, human resources, policy coordination, and program sustainability. The limited evaluative research on health transformation in Indonesia has resulted in a lack of scientific evidence that can be used as a basis for future policy improvements. Based on these limitations, this article aims to evaluate the implementation of the six pillars of health transformation in Indonesia, identify barriers in the implementation of health transformation programs, and provide policy recommendations that can overcome existing barriers and strengthen the national health system. The results of this literature review are expected to serve as a reference for policy makers in formulating more effective and sustainable health system improvement strategies to achieve national health development goals.

METHODS

This study employed a literature review approach to evaluate the implementation of Indonesia's health system transformation through six policy pillars. Article searches were conducted in two databases: ScienceDirect for international sources and Google Scholar for



national sources. The search used combined keywords such as “Health System Strengthening,” “Universal Health Coverage,” “Health Policy Reform Indonesia,” and “Primary Healthcare,” with publication years restricted to 2016–2025 to capture relevant literature following early preparations for Indonesia’s health transformation agenda, formally launched in 2021. Articles were selected through a multi-stage process. Initial screening was conducted based on titles and abstracts. Full texts were then assessed using inclusion criteria: (1) articles focused on the implementation or challenges of the six health system transformation pillars in Indonesia; and (2) published in English or Bahasa Indonesia with open access availability. Exclusion criteria included articles that discussed general health topics without direct relevance to the transformation pillars or the Indonesian health context. A total of 4 eligible articles were identified and analyzed. If discrepancies occurred during the selection process, a team vote was used to reach a consensus.

RESULTS AND DISCUSSIONS

Based on these findings, it was found that 3 article from national and 1 from international database, namely Google Scholar and Science Direct with the keywords which has been determined.

Table 1. Study Review Result

No	Researcher, Year	Title	Research Methods	Result
1	(Novianti & Bakhtiar, 2024)	Implementation of Electronic Medical Record System in Indonesia Viewed from the Perspective of Legal Certainty	Normative juridic with a statutory approach and a case approach using library legal materials or secondary data.	The result of the study show that Electronic Medical Record (EMR) in Indonesian health facilities are not fully ready, mainly due to the lack of human resources, SOPs, and the infrastructure. Although there is a legal basis for PMK NO. 24 of 2002, through preparation in term of human resources, work culture, and infrastructure is very important to improve the quality of services and ensure the security of EMR data.
2	(Cahyadi et al., 2025)	Adopting Pillar One: an Idea model for the transformation of Indonesia’s Tax Law to realize SDG’s goal XVII and its challenges	Normative juridical to approach the discussion of doctrines in legal science, descriptive-analytical method to emphasize a	The result of the study show that Indonesia’s economic growth is a stagnant, so adopting the OECD’s two-pillar solution through the revision of the Income Tax Law is important to increase revenue. However, this requires a mature bureaucracy, regulatory harmonization, and



			hypothesis, and literature study technique for collecting data to obtain a theoretical basis from experts.	strong ICT infrastructure for effective implementation.
3	(Aisyah et al., 2024)	ICT Maturity Assessment at Primary Healthcare Services across 9 Provinces in Indonesia: An Evaluation Study	Cross-sectional survey of 9 provinces across Indonesia which representing the country's diverse conditions on its major islands.	The result of the study show that the ICT maturity level of health facilities in Indonesia is between basic and good, with an average score of 2.74 (on a scale of 1-5). This indicates sub-optimal ICT readiness, especially in human resources, software, hardware, and infrastructure. Regional variations are also seen between provinces, indicating the need for a tailored approach to ICT improvement.
4.	(Rahmawati, 2024)	Policy Strategies in the Implementation of Referral Health Service Transformation	Quantitative descriptive analysis methodological approach that focus on identifying and evaluating problems related to health services.	This article discusses the challenges and strategies in transforming referral health services in Indonesia. The main obstacles include the unsupportive hospital ecosystem and the slow response of institutions to changing needs. Analysis shows that budget constraints, especially from BLU, are the main obstacles. Suggested strategies include revising the Ministry of Health's planning and budgeting policies, integrating referral transformation programs into existing systems, and adjusting budget patterns for BLU units. These reforms are aimed at improving access, quality, and efficiency of health services.

Source: data processed



Progress of Implementation of the Six Pillars of Health Transformation in Indonesia

The implementation of Indonesia's health transformation agenda, despite its ambitious design, continues to face systemic and structural barriers that hinder meaningful progress. One of the most pressing issues is the shortage and maldistribution of qualified health human resources, particularly in supporting the digitalization of services. The adoption of Electronic Medical Records (EMRs) and other digital health technologies remains uneven, not solely due to technological limitations but also due to institutional resistance, lack of standardized operating procedures, and the absence of a digital-ready work culture (Novianti & Bakhtiar, 2024) and (Aisyah et al., 2024). These factors collectively point to deeper governance and capacity issues that cannot be resolved through technical fixes alone.

Regional disparities further complicate the implementation of health policies, revealing that uniform national strategies often fail to account for local variations in infrastructure and administrative capacity. This calls for a more adaptive policy framework that integrates context-specific approaches rather than relying on top-down mandates. In terms of financing, rigid budget mechanisms especially within the Public Service Agency (BLU) framework limit the flexibility required for transformative reforms (Rahmawati, 2024). Without substantial reform in public financial management, including more responsive and decentralized budgeting, efforts to modernize the health sector will continue to stall.

The Main Obstacles and Strategies In The Six Pillars of Policy Implementation in Indonesia

The obstacles in health advancement are significant and growing more intricate, necessitating effective oversight of health progress from the initial planning stages through to execution. The Healthy Indonesia Program represents a key initiative of the fifth agenda of Nawa Cita, aimed at enhancing the overall living standards of the Indonesian population. The primary aim of the Healthy Indonesia Program is to elevate both health and nutrition levels within the community by promoting health initiatives and empowering the population, all while ensuring financial safety and fair access to health services. The healthy Indonesia program is implemented by upholding three main pillars, namely (1) the application of a healthy paradigm, (2) the strengthening of health services, and (3) the implementation of health services guarantees (JKN) (Isasih et al., 2024).

In line with the third main pillar of the Healthy Indonesia Program, which emphasizes the implementation of health service guarantees through JKN, there are still significant challenges that hinder its effectiveness in practice. The implementation of JKN faces significant challenges, particularly in reaching the poorest populations who bear the heaviest financial burden for health services. Despite JKN's design to protect vulnerable groups, only 15 percent of mothers in the poorest quintile used JKN for delivery services, revealing a critical gap in the program's coverage where it's most needed (Nugraheni et al., 2020). This gap highlights the urgent need for innovative approaches and regulatory frameworks that go beyond conventional policy tools to ensure equitable access and responsiveness in healthcare delivery.

Then, the ideal form to adopt Pillar One model law in Indonesia that the reality of digital transformation greatly influences global economic dynamics necessitates the development of regulations that effectively merge both legal and non-legal aspects. In what is termed Society 5.0, technology emerges as a crucial factor that must be integrated into the legislative process. The swift advancements in information and communication technologies have prompted individuals to engage in various life-sustaining activities within the digital sphere. Currently, information and communication technology, often abbreviated as ICT, functions like a guiding force that establishes a new way of living in society. Consequently, it is essential to incorporate technology, as a non-legal consideration, into the legislative framework (Safiranita et al., 2022)



In addressing the various challenges of implementing the six pillars of health system transformation, particularly in strengthening primary health care services recommend several key strategies that focus on contextual and participatory approaches. These strategies include phased training tailored to the capacity of cadres and health workers, providing non-monetary performance-based incentives, such as transportation subsidies, and continuous support through regular evaluative meetings. Additionally, strengthening cross-sector coordination is achieved by reactivating forums at the subdistrict level, while community empowerment campaigns are intensified in collaboration with local governments to increase social support for the role of health cadres. This approach forms a crucial foundation for ensuring the sustainability and effectiveness of health services at the community level (Setiaasih et al., 2025).

CONCLUSION

Indonesia's commitment to transforming its health system through six strategic pillars marks a critical step toward achieving equitable and sustainable health development. However, the findings suggest that transformation efforts remain constrained by structural and contextual limitations. This underlines the importance of adaptive policy frameworks that are responsive to both systemic disparities and regional capacities. Rather than viewing the six pillars as separate agendas, a more integrated, context-aware implementation is required to ensure that health transformation translates into meaningful improvements in service quality and accessibility across the archipelago.

Research Limitation

Based on the researcher's experience in this research process, there are several limitations that we experienced and are factors that can be considered more, especially for future researchers, in order to perfect their research. Because this researcher himself certainly has shortcomings that need to be continuously and always improved in future research. Here are some limitations in this study, including: (1) In the process of searching for references, there are limitations to journals that research things with our title. (2) The core topic of the journal that we use as a reference mostly explains the law of transformation from the government, not in terms of Health. (3) In reading the results and discussions in the articles we found, they explained more about one of the 6 pillars. The shortcomings are due to the fact that the article we discussed lacks sufficient information.

Recommendation

To support the ongoing transformation, the government should prioritize strengthening the capacity of the health workforce through structured and continuous training programs. Accelerating the development of digital health infrastructure particularly in underserved areas requires collaboration with regional health offices, universities, and technology partners. Financing mechanisms, especially in BLU institutions, should adopt more flexible budgeting approaches to support innovation and responsiveness. Furthermore, fostering stronger cross-sector coordination through platforms such as SATUSEHAT must be accompanied by rigorous monitoring and evaluation involving independent research institutions and civil society. These efforts are essential to institutionalize reforms and build a health system that is both resilient and inclusive.

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