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# THE EFFECTIVENESS OF ACHIEVING 100% UNIVERSAL HEALTH COVERAGE (UHC) IN THE CITY OF SEMARANG THROUGH PUBLIC SERVICE INNOVATION 'PANGERAN DIPONEGORO'

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**ABSTRAK**

Layanan kesehatan memainkan peran penting dalam kehidupan masyarakat dan merupakan hak dasar setiap individu. Akses yang setara dan berkualitas ke pelayanan kesehatan sangat penting untuk kesejahteraan masyarakat. Penelitian ini bertujuan menganalisis efektivitas inovasi pelayanan publik dalam mencapai 100% JKN di Kota Semarang, dengan fokus pada kontribusi inspiratif Pangeran Diponegoro, untuk memberikan wawasan mengenai implementasi program asuransi kesehatan dan dampaknya pada JKN. Metode yang digunakan adalah kualitatif dengan pendekatan Double Diamond, pengumpulan data primer melalui dokumentasi dan studi literatur inovasi, serta pengumpulan data sekunder melalui studi literatur dan FGD. Hasil penelitian menunjukkan inovasi "Pangeran Diponegoro" berhasil memberikan dampak positif signifikan dalam mencapai Jaminan Kesehatan Nasional (JKN) di Kota Semarang. Terjadi peningkatan partisipasi masyarakat, aksesibilitas, dan kualitas layanan kesehatan, serta keunggulan kompetitif yang jarang dimiliki oleh lembaga lain. Meskipun telah banyak

**ABSTRACT**

*Health services play an important role in people's lives and are the basic right of every individual. Equal and quality access to health services is crucial for people's welfare. This study aims to analyze the effectiveness of public service innovation in achieving 100% UHC in Semarang City, with a focus on Pangeran Diponegoro's inspirational contribution, in order to provide insight regarding the implementation of the health insurance program and its impact on UHC. The method used in this research is qualitative using the Double Diamond approach with primary data collection through documentation and innovation supporting literature studies and secondary data collection through literature studies and Focus Group Discussions. The results of the study show that the "Pangeran Diponegoro" innovation succeeded in having a significant positive impact in achieving Universal Health Coverage (UHC) in Semarang City. There has been an increase in community participation, accessibility and quality of health services, as well as a competitive advantage that is rarely possessed by other agencies. There have been many studies using public service objects.*



## 1. Introduction

Health services constitute a fundamental aspect of people's well-being, recognized as a basic right for every individual (Malini et al., 2023). Ensuring equal and high-quality access to healthcare is paramount for the welfare of society (Basuki et al., 2016). In Indonesia, various health service programs, such as BPJS, JKN-KIS, and ASKES, have been implemented with the aim of providing equitable healthcare services to the entire population (Adyas, 2021; Malini et al., 2023). However, the current scenario reveals that the Universal Health Coverage (UHC) system in Semarang City is still not fully accessible to the public (Adyas, 2021).

Semarang City boasts a substantial population of 1.65 million people. Given the scale of this population, it is imperative for the government and related institutions to ensure the provision of comprehensive healthcare services to all residents (Basuki et

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al., 2016). Nevertheless, the ground reality indicates that a significant number of Semarang City's inhabitants are yet to benefit from the existing health insurance schemes. Hence, there is a pressing need for concerted efforts to enhance both the accessibility and quality of healthcare services.

This research aims to explore the effectiveness of achieving 100% UHC in Semarang City through the implementation of innovative public services, 'Pangeran Diponegoro,' or the acronym for the Achievement of 100% UHC Program in Semarang City Supported by the Collaborative Roles of Cross-Programs and Cross-Sectors. Additionally, the study aims to provide a comprehensive understanding of the implementation of health insurance programs at the local level and the transformative impact of innovative public service delivery in attaining UHC in Semarang City (Plianbangchang, 2018).

The outcomes of this research are anticipated to serve as valuable insights for health policymakers and public service providers in Semarang City (Basuki et al., 2016). These insights can potentially enhance the efficiency of health insurance programs and facilitate the more effective realization of the UHC objectives. Furthermore, this study is also poised to provide valuable input for the development of similar healthcare initiatives in other Indonesian cities grappling with analogous challenges in their pursuit of UHC (Basuki et al., 2016; Plianbangchang, 2018). The aspect of community engagement, emphasizing strategies for strengthening program implementation and increasing citizen involvement in the sustainable achievement of UHC, will be a central focus of this research.

This research is based on four main theoretical components. First, health services are seen as an integral part of public services that underlie the fulfillment of the basic needs of society (Pratama, 2019). The concept of public service focuses on providing quality, equitable and just services for all citizens. This understanding is key to appreciating the significance of access to quality health services (Sari, M.Sc., Apt. et al., 2023) for all levels of society in the city of Semarang.

Second, health insurance is identified as an important instrument in increasing the coverage and quality of health services (Purnamasari et al., 2020). The National Health Insurance Program is the basis for national policy to achieve UHC by providing fair and equitable protection and access to health for the entire population (Plianbangchang, 2018). In this study, understanding the concept of health insurance is the basis for evaluating the level of success and challenges faced in achieving the 100% UHC target in Semarang City (Ezat Wan Puteh & Almualm, 2017).

Third, innovation in the context of health services is defined as a new approach or system change aimed at increasing the efficiency and effectiveness of services (Asmara & Rahayu, 2019; Robinson & Schroeder, 2022). The focus on public service innovation allows the identification and analysis of various forms of innovation that have been implemented in an effort to achieve UHC in the city of Semarang. The use

of the concept of innovation helps measure the impact of these innovative initiatives in increasing access to and quality of health services at the local level.

Fourth, the partnership strategy is considered an important approach to achieve the goals of inclusive and sustainable health services (Adyas, 2021; McKee et al., 2013; Purnamasari et al., 2020). Within the framework of the partnership strategy, the participation of various stakeholders, including government, private sector, and civil society, is integrated to reach mutual agreements and increase program effectiveness. This research explores the role of the partnership strategy in the implementation of the health insurance program in Semarang City to identify potentials and obstacles in achieving UHC comprehensively.

## 2. Research Methods

The method employed in this research is qualitative (Hennink et al., 2020) using the Double Diamond approach (Verschoor & Vette, 2021). This approach consists of four main stages: Define, Discover, Develop, and Deliver, aimed at obtaining comprehensive research results. Data were primarily obtained through innovation-supporting documents from the Semarang City Health Office, while secondary data collection was conducted through literature studies and Focus Group Discussions spanning two months, from April to June 2023. Subsequently, data triangulation was carried out to ensure the validity and reliability of the data. The conceptual framework served as the research flow (Yang & Xie, 2022). Additionally, Total Quality Management (Bon & Mustafa, 2013; Thai Hoang et al., 2006) was implemented using three models (Stevens & Sherwood, 1982): the IE Matrix, VRIO, and Value Chain. These models were employed to conduct analyses relevant to this study (Baia et al., 2020; Brucker, 1974; Knez et al., 2021).

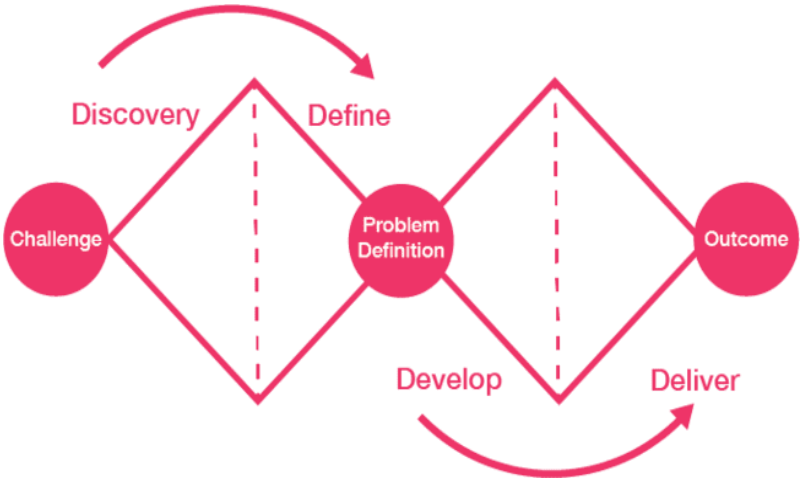


*Figure 1. Conceptual framework*
*Source: Author's Elaboration, 2023*

## 3. Results and Discussions

### Innovation Profile: 'Principle of Diponegoro'

The Universal Health Coverage (UHC) program in Semarang City aims to grant access to health insurance for urban communities previously not covered by existing health programs. To achieve this objective, a policy shift was initiated by incorporating the City Community Health Insurance (Jamkesmaskot) program into the National Health Insurance program - Healthy Indonesia Cards Social Security Administration Agency (JKN-KIS BPJS Kesehatan). This policy alteration includes a target to enroll up to 50,000 individuals classified as economically disadvantaged in the program.


*Figure 2. Pangeran Diponegoro Innovation Roadmap*
*Source: Author's Elaboration, 2023*

The implementation of the Semarang City UHC Program is governed by Semarang Mayor Regulation Number 43 of 2017, which mandates the registration of City of Semarang residents as Participants Receiving BPJS Health Contribution Assistance (PBI). However, a persistent challenge remains as a considerable number of individuals still lack adequate health insurance coverage.

In response to this challenge, an innovative approach is imperative. This innovation aims to enhance community participation in the UHC program, particularly among urban residents not covered by previous initiatives. Consequently, this endeavor is anticipated to augment access and the quality of health services for all residents in Semarang City who require them.

The Pangeran Diponegoro innovation represents a concerted effort to expedite the achievement of UHC in Semarang City. The primary objective of this innovation is to ensure that all Semarang City residents can avail themselves of health services by participating in the National Health Insurance (JKN) program. This innovation has yielded significant impacts on attaining the Sustainable Development Goals (SDGs), particularly in poverty reduction, achieved through an increased proportion of Health Insurance participants under the National Social Security System (SJSN) in the health sector.

Following the optimization of collaboration in implementing the Pangeran Diponegoro innovation since 2019, the current UHC achievement has reached 100%. This remarkable success can be attributed to the innovative intervention. The proportion of Health Insurance participants through the SJSN in the health sector has made a crucial contribution to realizing the goals, targets, and indicators of the Sustainable Development Goals (SDGs) in Semarang City.

**Innovation Feasibility Study**

**a) Matrix Internal-External Factors**

This report utilizes the Internal-External Factor Matrix to facilitate the implementation of more targeted innovations (Brucker, 1974; Thai Hoang et al., 2006). The matrix is instrumental in analyzing internal and external factors that impact the implementation of innovations within the context of health services (Zulkarnain et al., 2018). The table below outlines the details of the matrix and the pertinent factors influencing the achievement of UHC in Semarang City (Yang & Xie, 2022).

Table 1. Matrix I-E

| Internal factors | Weight | Rate | Score |
|---|---|---|---|
| Achievements of Community Participation | 0.22 | 4 | 0.88 |
| Service quality | 0.24 | 4 | 0.96 |
| Technology Innovation | 0.18 | 4 | 0.72 |
| Implementing Human Resources | 0.21 | 3 | 0.63 |
| Program Management | 0.15 | 4 | 0.60 |
| Total | | | 3.79 |
| External Factors | Weight | Rate | Score |
| Related Stakeholder Support | 0.24 | 4 | 0.96 |
| Community Compliance | 0.24 | 3 | 0.72 |
| Budget Availability | 0.19 | 4 | 0.76 |
| Potential Collaboration | 0.15 | 4 | 0.60 |
| Policy Support | 0.18 | 3 | 0.54 |
| Total | | | 3.58 |

Source: Author's Elaboration (Processed, 2023)

Based on the presented matrix results, Pangeran Diponegoro's innovation exhibits internal strength with a value of 3.79 and external strength with a value of 3.58. These

values suggest that internal factors wield a more substantial influence than external factors in determining the success of Pangeran Diponegoro's innovation. Consequently, the conclusion (Figure 3) drawn is that the innovation is currently in the growth phase. It possesses the potential for continued expansion and stands as a high-potential initiative to attain the goals of Universal Health Coverage (UHC) in Semarang City.

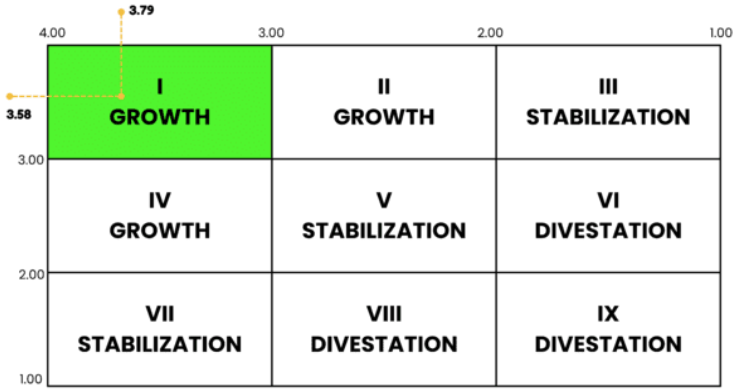


Figure 3. IE Matrix Results Quadrant
Source: Author Data, 2023

**b) VRIO Framework**

Furthermore, the innovation of Pangeran Diponegoro is assessed for competitive advantage through the VRIO Framework (Baia et al., 2020), namely an assessment based onValue, Rarity, Imitability, dan Organization.

In the value aspect, Pangeran Diponegoro's innovation provides significant benefits in achieving UHC in Semarang City, which reached 99.23% in UHC membership outcomes (see table 2.)

Table 2. Significance of Innovation

| No | Description | Before | After |
|---|---|---|---|
| 1. | The Community Does Not Have JKN | 2018: 6.27 % | Year 2023: 0.77 % |
| 2. | UHC Membership Achievements | 2018: 93.73 % | Year 2023: 99.23 % |
| 3. | Life expectancy | 2018: 77.23 % | Year 2023: 77.70 % |

Source: Semarang City Health Service Data (Processed, 2023)

The significance of this finding indicates the successful implementation of the UHC Program in Semarang City through the innovation of Pangeran Diponegoro, as evidenced by the increased public confidence in participating in the UHC program (2018 UHC membership achievement: 93.73% and 2023 achievement: 99.23%). This corresponds to an increase in the UHC target in the 2020-2024 RPJMN, namely 95-98%.

This condition brings extensive benefits in the health sector, where participants in the UHC program can easily access health services, resulting in faster treatment and higher recovery rates.

In terms of scarcity, Pangeran Diponegoro's innovation holds high value because not many health services directly verify JKN membership (Enholm et al., 2022). The ability of this innovation to overcome obstacles and challenges in achieving UHC in Semarang City provides a competitive advantage that is rarely possessed by other agencies. However, concerning the aspect of imitation, Pangeran Diponegoro's innovation has a moderate level of difficulty. As a result, this innovation fosters adaptability for healthcare institutions in other regions. This is evident from the replication of Pangeran Diponegoro's innovation by Demak, Batang, and Gresik Regencies through replication statements and a comparative study conducted by DI Yogyakarta Province on UHC achievements in Semarang City.

In the organizational aspect, the implementation of Pangeran Diponegoro's innovation requires effective coordination among various stakeholders, including the government, health institutions, and the community. In this aspect, a managerial strategy has been executed to support the sustainability of the innovation. Measures such as performance quality assurance through innovative SOP and SPP, service quality improvement through regular meetings with the Main Stakeholder Communication Forum concerning the sustainability of the Semarang City UHC Program, and digitalization of services through the JKN Mobile application have been implemented. Additionally, JKN First Level Health Facility (FKTP) support through accreditation and the implementation of BLUD management is also conducted to support program sustainability.

Thus, the overall results of the analysis demonstrate that Pangeran Diponegoro's innovation in achieving UHC in Semarang City has had a significant positive impact. The success of this program is evident from the increased public trust, high levels of participation, and competitive advantages that are rarely possessed by other agencies. Furthermore, effective implementation through proper coordination among relevant parties has ensured the sustainability of Pangeran Diponegoro's innovations.

c) **Value Chain Analysis:**

The Universal Health Coverage program in Semarang City adds value by providing access to health insurance for individuals not previously covered (McKee et al., 2013). In this context, the "Pangeran Diponegoro" innovation plays a crucial role in optimizing the Value Chain to achieve inclusive and sustainable UHC (Knez et al., 2021; McKee et al., 2013; Plianbangchang, 2018). The following is an analysis of the innovation Value Chain:

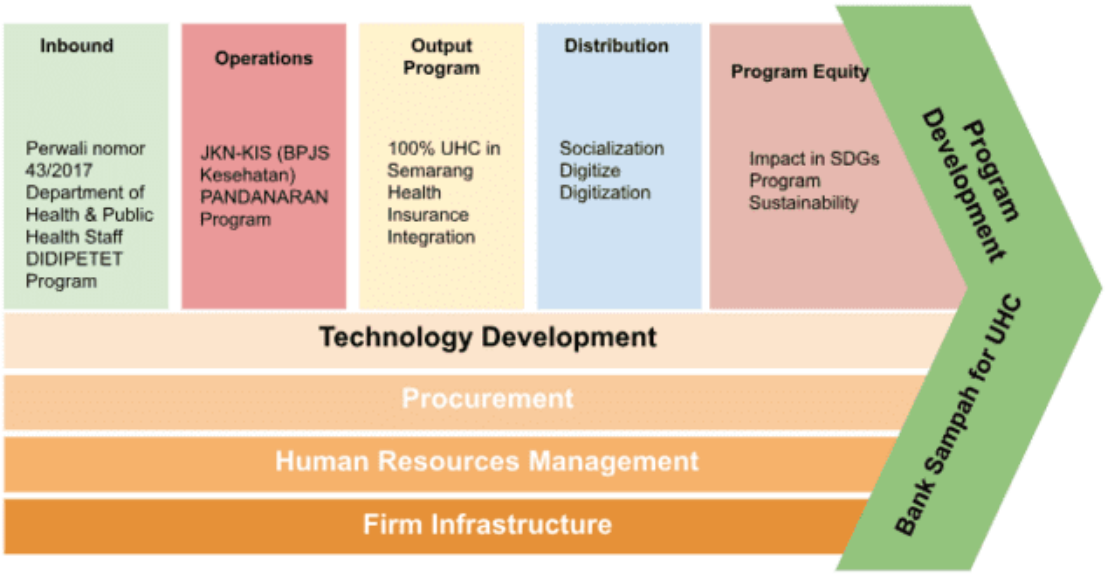


Figure 4. Model Value Chain on Pangeran Diponegoro Innovation
Source: Author Data, 2023

The Inbound Program for achieving UHC in Semarang City encompasses various facets. In terms of policy and regulation, Semarang Mayor Regulation No. 43 of 2017 establishes the registration of city residents as BPJS Health Contribution Beneficiary Participants (PBI), providing a legal framework for UHC implementation. The human resources aspect involves a skilled workforce, including Semarang City Health Office staff, engaged in implementing innovative health services. Digital technology, exemplified by the "DIDI PETET" program, utilizes social media, mobile applications, and websites to efficiently reach a broader population.

In the operational process, program integration into the JKN-KIS BPJS Health program enables Semarang residents to access broader health insurance benefits. Technological innovation, as seen in the "DIDI PETET" and "Pandanaran" programs, accelerates communication and establishes effective complaint channels between the community and the Semarang City Health Office. Externally, societal participation is boosted by the "Pangeran Diponegoro" innovation, achieving a remarkable 99.23% community participation rate in UHC. This innovation enhances access and service quality, especially for previously uncovered urban residents.

Distribution involves information dissemination through the "DIDI PETET" program's use of social media and mobile applications, ensuring effective communication about UHC. The "PANDANARAN" program fosters communication channels between the community and the Semarang City Health Office, ensuring quality and affordable health services. Program equity is evident in the impact on Sustainable Development Goals (SDGs), particularly in reducing poverty and increasing Health Insurance participation through the National Social Security System (SJSN). To sustain inclusive UHC in Semarang City, supporting initiatives like the

"Waste Bank for UHC" play a crucial role in strengthening JKN membership and reducing health insurance coverage costs.

In conclusion, the "Pangeran Diponegoro" innovation succeeded in increasing efficiency and effectiveness in achieving UHC in Semarang City by involving various supporting programs that work integrated and complementary. Overall, the innovation "Pangeran Diponegoro" managed to have a significant positive impact in achieving UHC in Semarang City. There has been an increase in community participation, accessibility, and quality of health services, as well as a competitive advantage that is rarely possessed by other agencies.

**Discussions**

The initiation of the Universal Health Coverage (UHC) Program in Semarang City involved diverse participant segments, including Contribution Assistance Recipients (PBI), PNS Askes, TNI Participants, POLRI, and JPK Jamsostek Participants (Gavetti & Porac, 2018). The primary goal was to offer health insurance access to all residents, including those hospitalized without coverage and newborns from regional PBI participants (Adyas, 2021; Anzari et al., 2020). Despite achieving 93.73% UHC in 2018, a noteworthy 114,453 individuals lacked health insurance, highlighting the necessity for innovative solutions.

To address this gap, the Pangeran Diponegoro innovation was introduced, significantly contributing to achieving Sustainable Development Goals (SDGs) and increasing UHC to 99.23% in 2023 (Choirul Saleh et al., 2023; Wajdi et al., 2017). Internal and external evaluations have been conducted to ensure the innovation's sustainability, with recommendations promptly implemented by the Semarang City Health Office. The commitment to maintaining UHC for seven consecutive years is evident, benefiting 99.23% of Semarang City residents with comprehensive health services.

The Semarang City Government, through its proactive health programs, demonstrates a commitment to citizens' well-being (Basuki et al., 2016). Collaborative efforts with various stakeholders and the integration of digital technology have streamlined access to health services, offering convenience through the JKN Mobile application. The success of the UHC Program and Pangeran Diponegoro's innovation is acknowledged through its replication in other regions, attesting to its adaptability and effectiveness.

Financial resources, human collaboration, physical infrastructure, and digital technology have collectively bolstered the successful implementation of Pangeran Diponegoro's innovation (Du Toit, 2002; Deschamps & Nelson, 2014). Strategies for sustainability encompass institutional, managerial, and social dimensions, ensuring compliance with regulations, standardized performance, and continuous community engagement. By synergizing these strategies, Pangeran Diponegoro's innovations are

poised to endure, contributing positively to inclusive and sustainable Universal Health Coverage in Semarang City.

## 4. Conclusion

In conclusion, the Universal Health Coverage (UHC) Program's evolution in Semarang City, engaging diverse participant segments, has significantly advanced healthcare inclusivity. Despite achieving a commendable 93.73% UHC rate in 2018, persistent challenges led to the introduction of the Pangeran Diponegoro innovation. This initiative, internally and externally evaluated, propelled UHC to an impressive 99.23% in 2023. The sustained commitment of the Semarang City Government, collaborative partnerships, and the program's replicability highlight its adaptability and effectiveness. The research's implications lie in offering valuable insights for policymakers and healthcare authorities, showcasing innovative strategies' success in achieving inclusive and sustainable UHC. The Semarang model's replicability underscores its potential for addressing health coverage gaps, providing essential lessons for building resilient healthcare systems prioritizing accessibility, quality, and community well-being.

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