Managed Care In Healthcare Insurance: A Case Study In Indonesia For Review

Kartika Destya Arini¹, Imas Nurhasanah², Mohammad Amnurokhim Malahade^{3*}, Erlina Puspitaloka Mahadewi⁴

^{1,2,3} Master of Public Health, Faculty of Public Health, Universitas Respati Indonesia
⁴ Economic and Business Faculty, Universitas Esa Unggul, Jakarta Indonesia
*Corresponding Author:

Email: aasaahi@gmail.com

Abstract.

This study about managed care, a model of health care financing and services designed to achieve greater efficiency and cost control through comprehensive integration between funding sources, service providers, and insurance participants. In Indonesia, this concept is implemented within the framework of the National Health Insurance System (JKN) managed by BPJS Kesehatan. The use of capitation, cost-sharing, and selective contracting mechanisms are the main strategies to control spending while ensuring more equitable access to health services for the entire community. This study adopts a Systematic Literature Review (SLR) and qualitative descriptive approach to examine the impact of managed care on the national health insurance system in Indonesia. The results of the study indicate that this model contributes to increasing transparency and effectiveness of the health care financing structure. Analysis of the implementation of JKN reveals that the capitation mechanism is able to control medical service costs, although challenges such as the high number of patient visits and disparities in service utilization between PBI and Non-PBI participants still need attention. Strategies such as the Quality Control and Cost Control Team (TKMKB) and Case Managers have been proven to be able to improve the efficiency of claims management and the overall quality of health services. The main obstacles faced include inadequate regulations, less than optimal coordination between implementers, and the welfare of medical personnel that still needs to be improved.

Keywords: Cost sharing; health services; insurance; jkn and managed care.

I. INTRODUCTION

Managed care is a model of health financing and services designed to increase efficiency and control medical costs by synergistically integrating aspects of funding, health services, and risk distribution. This concept was originally introduced in the United States through the Health Maintenance Organization (HMO) Act of 1973, which encouraged the development of managed care-based organizations as an innovative alternative to the conventional health financing system[1]. In various countries, including Indonesia, managed care has become the main approach in managing health service financing[2]. This model is implemented through mechanisms such as capitation, cost-sharing systems, and control of service use to ensure that services are provided effectively and efficiently. In the Indonesian context, the application of managed care is growing along with the implementation of the National Health Insurance (JKN) managed by BPJS, as regulated in Law No. 40 of 2004 concerning the National Social Security System[3]. The managed care system in Indonesia itself aims to ensure the availability of equitable and sustainable access to health services for the entire community, while optimizing the distribution of health resources efficiently. With the principles of cooperation and portability, the JKN system allows participants to obtain health services without being limited by certain geographic areas, supporting the creation of equitable national health services[4].

However, the success of this system is not without challenges, such as limited funds, regulatory complexity, and resistance from service providers to the capitation financing model[5]. Based on studies related to the implementation of managed care in Indonesia, it is known that health workers generally have a good understanding of the referral aspects and service standards in the JKN system. However, their understanding of financial mechanisms such as capitation and the risk of economic loss still needs to be

improved[6]. On the other hand, insurance companies that run managed care schemes need to adapt to regulatory dynamics and strengthen their business strategies to remain competitive in the health insurance industry[7]. Therefore, this study aims to analyse the implementation of managed care in the context of health insurance in Indonesia, explore its impact on service quality, and identify challenges and opportunities for developing managed care-based financing schemes[8].

II. METHODS

This study adopted the Systematic Literature Review (SLR) approach with a qualitative descriptive method. A comprehensive literature search was conducted through databases such as PubMed/MEDLINE, Scopus, Web of Science, and Google Scholar, using primary keywords such as "Managed Care", "Health Insurance", and "National Health Insurance". From the total search results, about 25 journals were selected as the primary sample to be analyzed narratively and thematically, with the aim of identifying key patterns in the implementation of managed care in Indonesia[9].Data from each included study were extracted into a standard format that included: author, year, study design, population and setting, insurance schemes examined, and key findings related to utilization, financial outcomes, determinants of coverage, and market impact.

The extracted studies were then organized thematically: impact of health service utilization, determinants of equity, and secondary insurance market phenomena, and subjected to narrative synthesis to identify prevailing patterns, research gaps, and conflicting resultsRib[10]. Finally, policy implications were derived from the overall weight of evidence in each thematic area, ensuring recommendations were based on the breadth of empirical findings, with the Systematic Literature Review (SLR) approach, it is hoped that this study will be able to provide a comprehensive picture of the effectiveness of the managed care system, and formulate policy recommendations that can strengthen its implementation in Indonesia[11].

III. RESULT AND DISCUSSION

The results of this study indicate that a synthesized literature review on health insurance, in Indonesia examines the impact of managed care coverage on health services, effects such as the insurance market, anticipating risk, and appropriate policy recommendations[12].

Implementation of Managed Care in the National Health Insurance System (JKN)

Managed care is a system that regulates health financing and services with the main goal of controlling expenditures and improving the quality of health services[13]. This system works by integrating various aspects, such as funding sources, health service providers, and insurance participants, so that a more efficient and organized ecosystem is created. In Indonesia itself, this managed care model has been adopted through the National Health Insurance (JKN) system managed by BPJS in Indonesia[14]. One of the mechanisms that is the backbone of this scheme is capitation, which is used as the main way to pay for Primary Health Facilities (FKTP). Through this mechanism, Hospitals and Health Centers receive fixed payments based on the number of registered participants, not on the number of services they provide. This approach is believed to be able to control operational costs and encourage the efficiency of the use of health services as a whole insurance services[15].

Effectiveness of the Capitation Mechanism in Managed Care Indonesia

In the implementation of the managed care system, the capitation model offers health facilities a fixed payment based on the number of registered participants, without taking into account the number of services provided. Research shows that this approach is effective in controlling operational costs while increasing the efficiency of health service utilization. However, challenges arise due to the high level of patient visits, which causes the capitation funds per visit to be inadequate, especially in private facilities that even experience losses[16].BPJS Kesehatan itself has developed various strategies to optimize the implementation of capitation, one of which is by strengthening the function of FKTPs so that they are able to provide more effective patient care before being referred to advanced facilities. Another obstacle faced is the lack of readiness of several FKTPs in providing 24-hour services, which is caused by limitations in human resources and supporting funds[2].

The Role of Case Managers in Improving Managed Care Efficiency

One approach that has been proven effective in the managed care system is the existence of Case Managers, which aims to improve the quality of health services through more optimal use of hospital resources[17]. Research shows that implementing case managers can accelerate the recovery process by reducing the length of hospitalization and improving patient experience, especially in the framework of social insurance-based managed care. In Indonesia itself, the implementation of this role still faces challenges such as the lack of competent experts and the need to adjust to national regulations for the JKN system[18].

Quality Control and Cost Control Strategy in Managed Care

Managing quality and costs effectively is a crucial aspect in the managed care system, aiming to increase the efficiency of claims management while ensuring that service quality is maintained. A study in South Sulawesi showed that after holding a Quality Control and Cost Control Team meeting at six BPJS branches, there was a decrease in the number of disputed claims and an increase in the level of claim maturity, both inpatient and outpatient[19]. The implementation of Quality Control and Cost Control Team is considered capable of increasing transparency in the claims process and reducing the risk of administrative errors in the BPJS system. However, regular evaluation and increased coordination between health service providers and BPJS Kesehatan are still needed to ensure the long-term benefits of this strategy[20].

Doctor Resilience in the Managed Care System

The implementation of the managed care system not only affects patients and health care providers, but also has an impact on medical personnel, especially doctors[21]. Research shows that high work demands within the BPJS Kesehatan framework can cause quite high levels of stress in doctors, which has the potential to reduce the quality of health services provided[22]. The position of doctors in the insurance system often faces a dilemma, because they must maintain service quality standards amidst cost pressures controlled by the capitation scheme. In facing this challenge, a resilience program is needed that is designed to help doctors manage work stress and improve their well-being. The program is not solely the responsibility of individual doctors, but must also receive support from the organizations that oversee them, such as hospitals and BPJS[23].

Regulations and Challenges of Managed Care Implementation

Regulations that support the implementation of the managed care system in Indonesia have developed since the enactment of Law No. 40 of 2004 concerning Insurance (President of the Republic of Indonesia, 2014). However, studies show differences in implementation between the central and regional levels, which are obstacles in the management and evaluation of capitation funds. For examples, the lack of validation and updating of data on poor residents who receive Contribution Assistance Recipients (PBI) has an impact on the uneven distribution of subsidies[24]. In addition, external challenges such as moral hazard, late delivery of documents from business entities, and lack of coordination in Service Level Agreements (SLAs) are the main factors affecting the effectiveness of the implementation of managed care in the private insurance sector.

Learning from the Taiwanese Health Insurance System

As a comparison, Taiwan's National Health Insurance (NHI) system is known as one of the best managed care models globally, thanks to its ability to effectively control health care costs. The success of Taiwan's NHI cannot be separated from the use of sophisticated information technology, integrated data-based policies, and solid synergy between various stakeholders in managing this insurance system. However, this system also faces several challenges, such as financial deficits arising from excessive use of services, demographic changes with an increasing number of elderly people, and an increase in the prevalence of non-communicable diseases. Indonesia can adopt lessons from the Taiwanese model by implementing more data-oriented policy reforms and increasing transparency in the management of health insurance as a whole services[25].Managed care in Indonesia is implemented through mechanisms such as capitation and cost-sharing, which aim to control spending and increase service efficiency. Within the framework of the JKN system, the capitation financing model provides incentives to primary health facilities (FKTP) to optimize services with a fixed budget based on the number of registered participants[26].

Impact of Managed Care on Financing Efficiency and Access to Health Services

Managed care in Indonesia itself aims to optimize the use of health insurance funds by ensuring that services are provided efficiently. The impact of the implementation of managed care itself on financing efficiency and access to health services shows positive results. The capitation system implemented in JKN has succeeded in controlling costs, although it still faces certain operational challenges[27]. Studies show that although capitation funds in FKTP have increased, the high volume of patient visits has caused funds per visit to be quite small, even in private facilities that are experiencing losses. In addition, there is variation in the use of services between Contribution Assistance Recipients (PBI) and Non-PBI participants. Non-PBI participants tend to use health services more often than PBI, which causes an imbalance in financing and access to services. To address this situation, a more flexible policy is needed in the distribution of capitation funds and increased coordination between BPJS Kesehatan and health service providers[28].

IV. CONCLUSION

In recent years, the implementation of managed care systems in Indonesia has increasingly become an important part of efforts to improve the efficiency of financial management and the quality of health services. As a system that integrates aspects of funding, service providers, and insurance participants, managed care functions to ensure more equitable access and control health costs through mechanisms such as capitation, cost-sharing, and selective contract selection. The implementation of managed care has brought various benefits, the challenges cannot be ignored. The high level of patient visits at Primary Health Facilities (FKTP) has resulted in increasing cost burdens, especially for private service providers who rely on capitation funds. In addition, the disparity in the use of services between Contribution Assistance Recipients (PBI) and Non-PBI participants has created an imbalance in access to health services, which requires a more adaptive fund distribution strategy. Regulations that are not yet fully aligned between the center and regions also slow down the updating of JKN participant data, thus hampering the effectiveness of the national health protection program. The impact of the implementation of managed care is not only felt by service participants, but also by health workers. The high workload in the BPJS system in Indonesia puts pressure on doctors and medical personnel, who are at risk of experiencing stress due to pressure to increase efficiency and limited resources. Therefore, efforts to improve the welfare of health workers through resilience and resilience strategies are becoming increasingly crucial in maintaining service quality.

To address these challenges, Indonesia needs to develop more comprehensive and evidence-based policies. Lessons learned from Taiwan's National Health Insurance (NHI) system or other country can be shown that the use of information technology in health service management, can strengthen transparency and increase efficiency. With a more mature data-based approach and synergy between actors in the health system, Indonesia has a great opportunity to strengthen the role of managed care as a long-term solution in financing and accessing health services. The success of the managed care system in Indonesia is highly dependent on close coordination between the government, service providers, the insurance industry, and the community as beneficiaries. Through innovative and evidence-based policy reforms, the national health system can develop to be more resilient, inclusive, and sustainable, in order to provide optimal benefits to all Indonesians. Indonesia's National Health Insurance Program, Jaminan Kesehatan Nasional (JKN), has significantly improved health service utilization and financial protection, particularly among previously uninsured populations. The program has significantly increased access to outpatient and inpatient services, particularly for non-wage workers, thereby reducing financial barriers to health care [29]. To address these issues, policy interventions should focus on aligning insurance schemes across the population, implementing cost-sharing mechanisms to reduce moral hazard, improving preventive care and health literacy, strengthening public-private partnerships, and establishing a robust monitoring and evaluation framework. By addressing these areas, Indonesia can further improve the equity and efficiency of its health care system, in managed care to ensuring sustainable and comprehensive health coverage for all citizens in Indonesia [30].

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REFERENCES

- [1] R. Town and S. Liu, "The Welfare Impact of Medicare HMOs," Rand J Econ, 2003, doi: 10.2307/1593785.
- [2] M. Z. Younis, P. A. Rivers, and M. D. Fottler, "The impact of HMO and hospital competition on hospital costs," *J Health Care Finance*, 2005.
- [3] BPJS, "BPJS Kesehatan," Badan Penyelenggara Jaminan Sosial.
- [4] A. Basirah Mulya, N. Liska Suspenny, C. Wayamah, and E. Puspitaloka Mahadewi, "Development of BPJS from Participation, Government Policy, and Technological Aspects After Pandemic," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 5, no. 1, pp. 1–9, Feb. 2025, doi: 10.51601/ijhp.v5i1.391.
- [5] BPJS Kesehatan, "PANDUAN PRAKTIS TENTANG KEPESERTAAN DAN PELAYANAN KESEHATAN YANG DISELENGGARAKAN OLEH BPJS KESEHATAN BERDASARKAN REGULASI YANG SUDAH TERBIT," *J Vis Lang Comput*, 2015.
- [6] L. Prayitno, N. Novita, S. Esther, and E. Puspitaloka Mahadewi, "The Usage Of Government Formulary For BPJS Inpatients With Ischemic Stroke In Indonesia," *International Journal of Health and Pharmaceutical* (*IJHP*), vol. 4, no. 3, pp. 491–498, Jun. 2024, doi: 10.51601/ijhp.v4i3.347.
- [7] Y. Ewi, S. Hermawati, and E. Puspitaloka Mahadewi, "Analysis Of BPJS Based National Health Insurance Program Financing For Sectio Caesarea Birth In Indonesia," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 5, no. 1, pp. 132–137, Feb. 2025, doi: 10.51601/ijhp.v5i1.395.
- [8] Z. Shi, P. He, D. Zhu, F. Lu, and Q. Meng, "Changes in health care utilization and financial protection after integration of the rural and urban social health insurance schemes in Beijing, China," *BMC Health Serv Res*, vol. 22, no. 1, p. 1226, Oct. 2022, doi: 10.1186/s12913-022-08602-1.
- [9] S. Ghimire, S. Ghimire, P. Khanal, R. A. Sagtani, and S. Paudel, "Factors affecting health insurance utilization among insured population: evidence from health insurance program of Bhaktapur district of Nepal," *BMC Health Serv Res*, vol. 23, no. 1, p. 159, Feb. 2023, doi: 10.1186/s12913-023-09145-9.
- [10] E. P., Mahadewi, METODE RISET BISNIS (Business Research Methods). PT. Literasi Nusantara Abadi Grup.
- [11] G. Ayu, H. Fermansyah, and E. Puspitaloka Mahadewi, "A Study of Managed Care Health System During Pandemic," *International Journal of Science, Technology & Management*, vol.4, no.4,pp. 802–808, Jul. 2023.
- [12] J. Glazer and T. G. McGuire, "OPTIMAL RISK ADJUSTMENT IN MARKETS WITH ADVERSE SELECTION: AN APPLICATION TO MANAGED CARE," in *Models of Health Plan Payment and Quality Reporting*, WORLD SCIENTIFIC, 2017, pp. 1–28. doi: 10.1142/9789813202887_0001.
- [13] E. P., & S. A. I. Mahadewi, "The Influence of Service Quality on Consumer Purchase Decisions," *Jurnal Ekonomi Utama*, vol. 3, no. 2, pp. 153–158, Jul. 2024.
- [14] R. Ngguna, Erlina Puspitaloka Mahadewi, Gisely Vionalita, and R. Handayani, "Analysis of Patient Satisfaction on the Quality of Physiotherapy Services in the Pandemic Era at the SHC," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 2, no. 3, 2022, doi: 10.51601/ijhp.v2i3.49.
- [15] K. Rizki Agustin, E. Puspitaloka Mahadewi, A. Irfandi, and V. Azteria, "The Effect of Service Quality on Customer Satisfaction PT. CAR Life Insurance During the Covid-19 Pandemic," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 2, no. 2, 2022, doi: 10.51601/ijhp.v2i2.50.
- [16] R. Bharati *et al.*, "Experiences and Effect of Implementing Social Health Insurance Program in Nepal- A Mixed Method Study," Jan. 02, 2024. doi: 10.21203/rs.3.rs-3624786/v1.
- [17] A. S. Moriya, W. B. Vogt, and M. Gaynor, "Hospital prices and market structure in the hospital and insurance industries," *Health Econ Policy Law*, 2010, doi: 10.1017/S1744133110000083.
- [18] M. B. Degefa, B. T. Woldehanna, and A. D. Mebratie, "Effect of community-based health insurance on catastrophic health expenditure among chronic disease patients in Asella referral hospital, Southeast Ethiopia: a comparative cross-sectional study," *BMC Health Serv Res*, vol. 23, no. 1, p. 188, Feb. 2023, doi: 10.1186/s12913-023-09181-5.

- [19] A. Annatasia, M. R. Hilmy, R. Kusumapradja, and E. Puspitaloka Mahadewi, "The Importance of Nurse Knowledge about Physical Examination and Inform on Medical Record Facility Inpatient Patient: Case Study in Sari Asih Hospital Karawaci Tangerang," 2020. doi: 10.5220/0009950704910498.
- [20] A. Heryana, E. P. Mahadewi, and I. Ayuba, "Kajian Antrian Pelayanan Pendaftaran Pasien BPJS di Rumah Sakit Queue Analysis of BPJS Patient Registration Services in Hospital," *Gorontalo Journal of Public Health*, vol. 2, no. 1, 2019.
- [21] E. Puspitaloka Mahadewi and M. Muchtadin, "The Influence of Psychological Capital and Affective Commitment on Organizational Citizenship Behavior of Hospital Staff," *International Journal of Science, Technology & Management*, vol. 5, no. 2, pp. 367–372, Mar. 2024, doi: 10.46729/ijstm.v5i2.1081.
- [22] Z. Rindy Al Fitry, E. Puspitaloka Mahadewi, A. Heryana, and I. Marti Ayu, "Medication Compliance Analysis in Pulmonary Tuberculosis Patients at Bekasi Jaya Health Center Indonesia," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 2, no. 3, 2022, doi: 10.51601/ijhp.v2i3.51.
- [23] L. Trisnantoro, "Universal health coverage and medical industry in 3 Southeast Asian countries," *BMC Public Health*, 2014, doi: 10.1186/1471-2458-14-s1-i3.
- [24] D. A. Rosman and J. C. Apfeld, "The economics of health care," in *An Introduction to Health Policy: A Primer for Physicians and Medical Students*, 2013. doi: 10.1007/978-1-4614-7735-8_11.
- [25] A. Sopian and E. Puspitaloka Mahadewi, "Indonesia Insurance Development with Various Aspects and Prespectives of The Regulatory Approach," *International Journal of Science, Technology & Management*, vol. 4, no. 5, 2023, doi: 10.46729/ijstm.v4i5.921.
- [26] E. P. Mahadewi, A. Heryana, and S. Kuswanti, "Kepuasan Layanan Pasien Jkn Berhubungan Dengan Kinerja Petugas Kesehatan," *Jurnal Bunga Rampai*, 2019.
- [27] A. Sopian and E. Puspitaloka Mahadewi, "Indonesia Insurance Development with Various Aspects and Prespectives of The Regulatory Approach," *International Journal of Science, Technology & Management*, vol. 4, no. 5, 2023, doi: 10.46729/ijstm.v4i5.921.
- [28] V. Maylia Ardini and E. Puspitaloka Mahadewi, "The Development of Health Insurance and Services in Indonesia," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 2, no. 3, pp. 440–446, May 2022, doi: 10.51601/ijhp.v2i3.65.
- [29] N. Rosnani, R. Hastuti, and E. Puspitaloka Mahadewi, "Analysis Of Demand For Health Insurance Business During The Indonesian Covid Pandemic," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 2, no. 3, 2022, doi: 10.51601/ijhp.v2i3.106.
- [30] V. Maylia Ardini and E. Puspitaloka Mahadewi, "The Development of Health Insurance and Services in Indonesia," *International Journal of Health and Pharmaceutical (IJHP)*, vol. 2, no. 3, pp. 440–446, May 2022, doi: 10.51601/ijhp.v2i3.65.