PREVENTIF: JURNAL KESEHATAN MASYARAKAT
FAKULTAS KESEHATAN MASYARAKAT UIVERSITAS TADULAKO
http://jurnal.fkm.untad.ac.id/index.php/preventif
ISSN (P) 2088-3536 ISSN (E) 2528-3375

Implementation Challenges of Performance-Based Capitation in Indonesia: A Scoping Review

Ayu Tyas Purnamasari*[1], Rizki Fadila[2]

[1 2] D-3 Asuransi Kesehatan, Jurusan Rekam Medis dan Informasi Kesehatan, Poltekkes Kemenkes Malang

Author's Email Correspondence (*): Ayutyasp97@gmail.com (085646872591)

ABSTRACT

Performance-Based Capitation (KBK) is a payment system implemented in Indonesia's primary health care (PHC) to improve service quality through performance-based financing. Despite its potential, various challenges have limited its effectiveness. This study aimed to identify and synthesize evidence on the barriers to KBK implementation in Indonesia. A scoping review was conducted following the PRISMA-ScR guidelines using data from Google Scholar, PubMed, and Scopus. A total of 14 studies published between 2019 and 2025 were included. Data were extracted, charted, and analyzed thematically. The findings were categorized into five major themes: human resources, systems and infrastructure, program management and governance, technical capacity, and patient participation and engagement. Interrelated challenges were identified in KBK implementation, including shortages and unequal distribution of human resources, inadequate systems and infrastructure, weak governance, limited technical capacity, and low community participation. These factors collectively hinder the achievement of key performance indicators encompassing contact rate, the non-specialist referral ratio (RRNS), and controlled condition of Chronic Disease Management Program (RPPT) which underscoring the need for comprehensive strategies that strengthen workforce capacity, infrastructure, governance, and community engagement.

***Keywords** : Challenges ; contact rate ; primary healthcare ; RPPT ; RRNS*

Published by:
Tadulako University
Address:
Jl.Soekarno Hatta KM 9. Kota Palu, Sulawesi Tengah, Indonesia.
Phone: +6282197505707
Email: preventifjournal.fkm@gmail.com

Article history :
Received : 11 08 2025
Accepted : 19 12 2025

INTRODUCTION

The implementation of National Health Insurance in Indonesia through Jaminan Kesehatan Nasional (JKN) scheme continuously strives to enhance health services for JKN participants, aiming to deliver high-quality health services, covering primary to advanced care services. (1) The sustainability of the JKN program is crucial, and one of the measures being implemented is quality and cost-controlled service techniques (managed care). (2) In implementing managed care, primary health care (PHC) or First Level Health Facilities (Fasilitas Kesehatan Tingkat Pertama – FKTP) serves a critical role as gatekeeper and the initial contact within the referral system, ensuring compliance with established standards of medical care. (3,4)

Capitation is commonly used in primary care, where providers receive a fixed payment per person without regard to the type or volume of services delivered. (5) This payment method can promote cost containment but also enable the selection of low-risk patients or the underprovision of services in order to reduce costs. To mitigate these unintended consequences and encourage the delivery of high-quality care, many countries have integrated capitation with performance-based payment systems. (6,7)

Performance-based capitation in Indonesia has undergone some changes in indicators. Since 2019, performance-based capitation implemented Kapitasi Berbasis Kinerja (KBK) mechanism which tied to three indicators: the contact rate (angka kontak – AK), the non-specialist referral ratio (rasio rujukan non spesialistik – RRNS), and the controlled condition of Chronic Disease Management Program (Program Pengelolaan Penyakit Kronis - Prolanis) participant ratio (rasio peserta Prolanis terkendali – RPPT). These indicators have respective targets of ≥150%, ≤2%, and ≥5%, which have an impact on the amount of capitation. (8) PHC receive the full amount of capitation upon meeting the targets; otherwise, the payment will be reduced in accordance with regulations.

Several studies have reported challenges in the implementation of performance-based capitation in Indonesia. These challenges were the insufficient number of PHC staff which led to unmet contact rate targets due to their dual burden in JKN programs, limited infrastructure such as the P-Care system and diagnostic tools affecting referral ratio indicators, and unclear technical guidelines on capitation fund allocation, particularly for programs like Prolanis that require separate budgeting. (9) Administrative constraints have also posed challenges in the implementation of performance-based capitation, as seen at the one of the clinics in East Jakarta, where a shortage of administrative staff hindered effective data collection on patient visits and affected the accuracy of performance reporting. (10) These challenges may hinder the ability of primary healthcare providers to meet performance indicators and ultimately affect service quality.

Although several studies have examined aspects of performance-based capitation implementation in Indonesia, there is still a lack of comprehensive evidence that systematically maps and synthesizes the challenges across different settings and regions. Existing studies tend to focus on specific indicators, facilities, or local contexts, resulting in fragmented understanding of the broader implementation barriers. Therefore, this study aims to systematically identify, map, and synthesize the evidence on the challenges in implementing performance-based capitation (KBK) in primary healthcare facilities across Indonesia.

METHODS

This study employed a scoping review design based on the framework of Arksey and O'Malley and was reported in accordance with the PRISMA-ScR guideline. (11) The research question was: "What are the challenges in the implementation of performance-based

capitation in Indonesia?" The search strategy was developed using the PCC (Population, Concept, Context) framework.

Table 1
PCC (Population, Concept, and Context)

Population	Concept	Context
Primary Health Care	Implementation challenges	Performance-based capitation in Indonesia

A systematic search was conducted in Google Scholar, PubMed, and Scopus for articles published between 2019 and 2025 using keywords related to performance-based capitation, primary healthcare, implementation, barriers, and Indonesia. The data searches began in 2019, coinciding with the implementation of performance-based capitation in Indonesia. (12) The terms ("kapitasi berbasis kinerja" OR "performance-based capitation") AND ("Puskesmas" OR "FKTP" OR "fasilitas kesehatan tingkat pertama") AND ("tantangan" OR "hambatan" OR "implementasi") AND ("Indonesia") used during the search. The terms in English also used to search more relevant studies were ("performance-based capitation" OR "kapitasi berbasis kinerja") AND ("primary healthcare" OR "Puskesmas" OR "FKTP") AND ("implementation" OR "barriers" OR "challenges") AND ("Indonesia"). Figure 1 shows a PRISMA-ScR flow chart that describes the identification procedure.

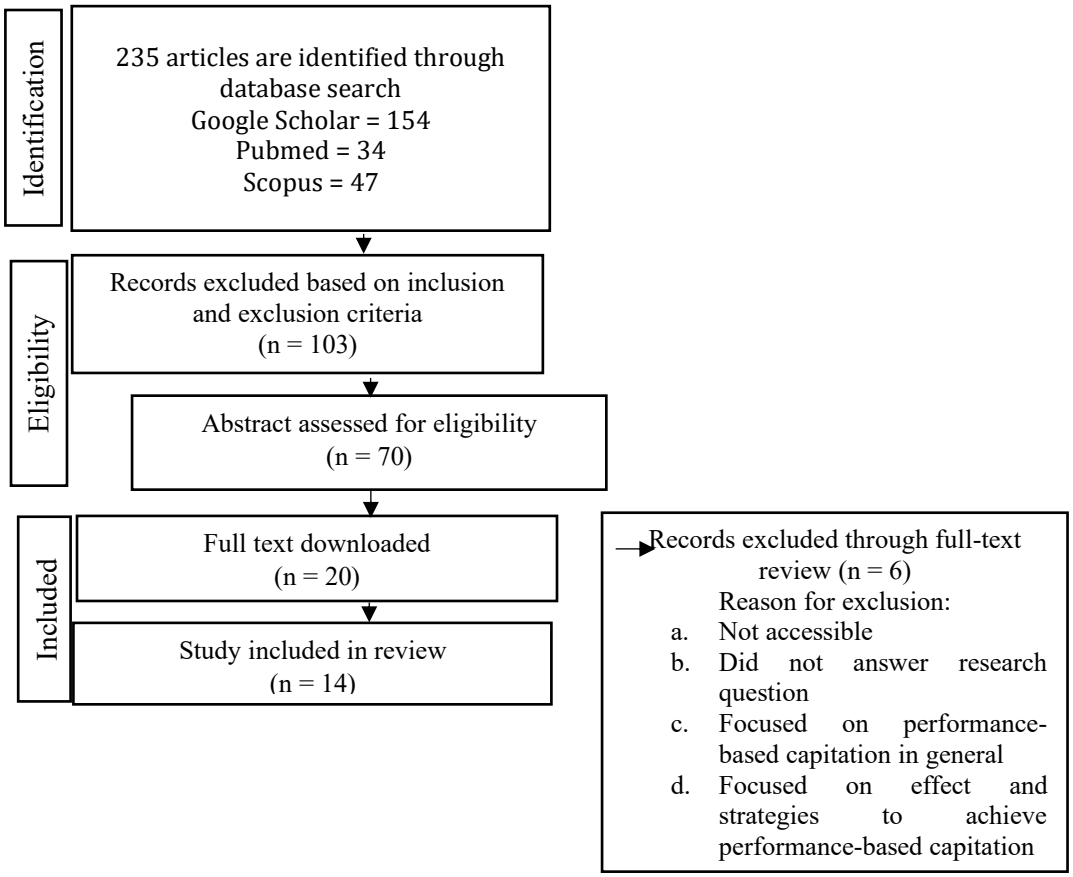

Figure 1. Flowchart of PRISMA-ScR

Studies were included if they examined challenges or barriers to the implementation of performance-based capitation in Indonesian primary healthcare settings, were written in English or Bahasa Indonesia, and were available in full text. A total of 14 studies were included in the final review. Data were extracted using a structured charting form and analyzed using a qualitative thematic synthesis approach. Findings were organized into five themes: human resources, systems and infrastructure, program management and governance, technical capacity, and patient participation and engagement.

RESULTS

Of the fourteen included studies, five identified themes discussed barriers and challenges in the implementation of performance-based capitation in primary healthcare in Indonesia, involving Human Resources, Systems and Infrastructure, Program Management and Governance, Technical Capacity, and Patient Participation and Engagement. The most frequently identified barriers were shortages and unequal distribution of human resources, inadequate systems and infrastructure, weak program management and governance, limited technical capacity of health workers, and low patient participation. These challenges were found to affect the achievement of key performance indicators, particularly the contact rate, non-specialist referral ratio (RRNS), and the ratio of controlled Prolanis participants (RPPT). A detailed summary of the included studies is presented in Table 2.

Table 2. Summary of Selected Studies (n = 14)

No	Author(s)	Study Design	Study Setting	Purpose	Result
1	Astuti, et al. (2023)	Qualitative descriptive with in-depth interviews, observation, document review	Jambi, Talang Banjar PHC	To analyze the input and process aspects in achieving performance-based capitation (KBK) indicators	Lack of dedicated KBK planning unit; limited promotive or admin staff; inadequate IT support; unclear budgeting; low Prolanis participation; data entry delegated to volunteers.
2	R. Augustian, D. Ayuningtyas. (2023)	Mixed-method (quantitative and qualitative interviews)	189 PHC facilities in East Jakarta for quantitative analysis; qualitative data from 4 PHCs, 4 clinics, BPJS Health, and District	To analyze factors influencing performance-based capitation (KBK) achievement in East Jakarta	Low-performing KBK due to lacked diagnostic tools, promotive staff, IT, and had poor accessibility; Prolanis/home visits suboptimal; COVID-19 disrupted outreach.

No	Author(s)	Study Design	Study Setting	Purpose	Result
			Health Office (DHO)		
3	Aryani, et al. (2024)	Qualitative with Structural Equation Modeling (SEM) analysis	Secondary data from the BPJS Healthcare Security with a total of 28,301 PHCs in Indonesia in 2021	To examine the correlation between the implementation of KBK and the performance of FKTP, as well as the factors influencing FKTP performance outcomes	Limited HR reduced contact rate achievement; dual burden from participant and home visits; unequal staff distribution; poor infrastructure and diagnostic facilities affected referral ratios.
4	Y. Susanti, Khairani (2025)	Qualitative with normative juridical method	PHCs in Indonesia	To examine performance-based capitation arrangements within JKN programs, emphasizing regulatory dimensions, implementation processes, and encountered problems.	Barriers included infrastructure gaps, resource inequality, weak coordination, low KBK readiness, poor health information systems, and legal, technical, HR limitations.
5	Cahyati, et al. (2023)	Qualitative descriptive with in-depth interviews	Five PHCs in Nganjuk that did not receive full capitation	To explain the implementation of the KBK payment policy in relation to standard factors, policy objectives, resources, communication, and social conditions.	Data entry delays from auxiliary units; lack of general practitioners; high RPPT targets; drug shortages; internet issues; social factors (farming, aging) affected implementation.
6	Rosita, et al. (2024)	Qualitative descriptive with in-depth interviews, observation,	PHC in Banda Aceh	To examine how the Meuraxa PHC in Banda Aceh was implementing performance-	Contact rate hindered by patient refusal, data entry issues, non-eligible services; multiple program duties; lack of lab facilities; poor

No	Author(s)	Study Design	Study Setting	Purpose	Result
		document review		based capitation (KBK)	Prolanis follow-up; unrecorded BPJS data.
7	Rosida, et al. (2024)	Explanatory sequential mixed method	Four PHCs in Denpasar	To explore the KBK achievement at PHCs in Denpasar and pinpoint the internal and external environmental factors that impede and facilitate KBK fulfillment at these PHCs	Absence of planning documents; low data entry commitment; minimal financial incentives; medicine stockouts; delayed reporting; patient-driven referrals.
8	M. Geodesi, R. Wardani (2022)	Qualitative descriptive with in-depth interviews and document review	PHC in Jombang	To investigate KBK indicators achievement	High workload with limited HR; patient referral demands; RPPT hindered by staff shortages, task duplication, lack of transport for home visits.
9	Febrianti, et al. (2019)	Mixed-method (quantitative and qualitative interviews)	Makasar, three PHCs and four clinics	To describe the implementation of Outpatient referral at the primary health cares	Inadequate HR vs patient volume; long queues; role duplication; non-functional facilities; drug shortages; low referral system understanding.
10	R. Fadila, A. Purnomo (2021)	Quantitative descriptive	33 PHCs in Pasuruan Regency	To describe the causes of the high non-specialist referral ratio at the Pasuruan PHC	High referral ratios from lack of infrastructure/equipment; incomplete service rooms; only 75% met workforce standards; shortages in key professionals.
11	Trisno, et al. (2024)	Quantitative study	Secondary data from the BPJS Healthcare Security in Pamekasan	To investigate how the relationship between the ratio of doctors to non-specialistic referrals	Non-ideal doctor-patient ratio (71%); dual roles; less attractive work conditions; weak gatekeeping increased unnecessary referrals.

No	Author(s)	Study Design	Study Setting	Purpose	Result
12	A. Purnamasari, H Ningrum (2023)	Qualitative descriptive with in-depth interviews, document review, and focus group discussions	Two PHCs in Malang	To explore the implementation of PROLANIS during the COVID-19 pandemic at FKTPs in Malang	Low RPPT target achievement; insufficient Prolanis staff; no dedicated facility; budget covered only 30 participants; scheduling conflicts; shared exercise areas.
13	Lestari, et al. (2022)	Qualitative descriptive with in-depth interviews	Situbondo, Panji and Panarukan PHCs	To analyze the human resources and management factors that influence the achievement of the RPPT (Ratio of Prolanis Participants Served) indicator	Few promotive staff; no dedicated RPPT personnel; weak planning; poor data management; irregular reporting; no reminders; limited KBK training.
14	Kasim (2024)	Action research with Consolidated Framework for Implementation Research (CFIR) approach	Five PHCs in East Flores	To identify factors that influence the success of the Prolanis program in urban health centers in East Flores	Prolanis hindered by poor internet/device access; limited HR and tech support; elderly access issues; low participation from geographic and social barriers; need for better P-Care and telemedicine use.

Human Resources

Multiple studies indicated that most PHCs were experiencing lack of health workes, particularly doctors, dentists, and promotive staff. (13–17) This situation forced health workers to have dual roles as medical personnel and performance-based capitation (KBK) team, contributing to workload burden and reduced program effectiveness. (18–22) In some cases, staff felt less motivated and delegated their tasks even to volunteers. (13,23) Further it hindered performance of PHC to achieve KBK targets.

Systems and Infrastructure

Implementation of KBK was mainly obstructed by inadequate infrastructure. Poor internet connectivity held staff for real-time data entry such as report through P-Care and entry the contact rate data. (15,24,25) PHCs experiencing shortage of medical equipment and drugs had resulted in failure to achieve the KBK target. Insufficient drugs made PHC failed to control the medical consumption of Prolanis patients. (15) In addition, PHC was forced to refer to the hospital due to a lack of drugs. (21) Inadequate transportation facilities made it difficult for PHC to carry out prolanis activities because of the large area. (26)

Program Management and Governance

Many studies highlighted the absence of structured planning and guidance documents such as proposed activity plan (PAP), activity implementation plan (AIP), activity framework (AF), or standard operational procedure (SOP) related to KBK. (16,23) The lack of a dedicated management unit or team responsible for KBK implementation limited accountability and coordination. (23) Weak coordination among stakeholders also hindered PHC to achieve KBK targets. (24) Financial management issues, such as unclear budgeting for KBK activities and limited incentives for high performance, also discouraged staff motivation. (23)

Technical Capacity

Limited technical capacity was evident in inadequate training, low understanding of KBK indicators, and weak data management systems. (16,24,25) Staff showed low commitment to data input, and many PHCs lacked automated systems for reminders and follow-up. (16,23) Some Prolanis team lacked competency in reporting systems like P-Care and telemedicine platforms, impeding monitoring and evaluation efforts. (25,27)

Patient Participation and Engagement

Limited patient engagement was a critical barrier in achieving performance targets. Low participation in Prolanis programs, refusal of home visits, and requests for

unnecessary referrals were frequently cited. (13,19,26) Patient behavior was influenced by low awareness of the referral system, limited health literacy, and sociodemographic factors such as work schedules, aging populations, and limited geographic condition. (15,21,25) Lack of participation and engagement caused unattainability of the non-specialist referral ratio and the controlled condition of Prolanis participant ratio's targets.

DISCUSSION

This scoping review synthesized evidence from 14 studies on the implementation of Performance-Based Capitation (KBK) in Indonesia and identified five themes of challenges: Human Resources, Systems and Infrastructure, Program Management and Governance, Technical Capacity, and Patient Participation and Engagement.

Human Resources

These findings on the challenges of implementation Performance-Based Capitation (KBK) in Indonesia highlighted insufficient numbers of health workers, unequal distribution, and dual roles that increased workload. Medical personnel in PHC are not only responsible for providing direct patient care but are also expected to perform administrative tasks related to KBK, such as implementing Prolanis activities, conducting home visits, and ensuring accurate reporting in systems like P-Care. When staffing levels are insufficient, these dual responsibilities increase workload and may divert time from essential service delivery, ultimately contributing to underachievement of key performance indicators such as the contact rate. Global evidence shows that staff shortage resulted in heavy workloads and pushed frontline staff to multitask without fair compensation. (28) Ultimately, high workload is highly associated with reduced job satisfaction and affects performance like in Ghana, making the attainment of indicators like the contact rate a significant challenge. (29)

Systems and Infrastructure

Infrastructure constraints such as lack of diagnostic tools, internet connectivity, and essential medicines directly affect indicator achievement. The reporting of contact rate and Prolanis activities is highly dependent on stable internet connectivity, as data must be entered into digital platforms such as P-Care in real time. In rural and remote areas, unstable internet access can delay reporting. This challenge is compounded by limited IT infrastructure.

Another critical infrastructure gap is the inconsistent availability of essential medicines. Patients who cannot obtain prescribed medicines at the primary care level are more likely to seek care at higher-level facilities, even for conditions that could be managed at PHCs. Medicine stockouts affected RPPT and RRNS performance. The availability of drugs in PHCs is very diverse, but some essential drugs are out of stock, especially in the eastern region of Indonesia. (30) With a capitation-based system, it is expected that funding should guarantee the availability of basic facility structures and essential equipment. These serve as the foundation upon which performance-based incentives can effectively motivate healthcare providers to deliver high-quality services. (31) However, in practice, the allocation for operational cost support is capped at a maximum of 40% of capitation revenue. This limited proportion may not be sufficient to maintain infrastructure, upgrade equipment, ensure consistent drug supply particularly in large geographic location, and conduct promotional and preventive activities. (32)

Program Management and Governance

Strong program management and effective governance are essential to ensure that KBK become into measurable improvements in primary healthcare. The absence of structured operational guidelines, incomplete planning documents, and undefined leadership roles in some PHCs has been linked to inconsistent program implementation. Weak coordination between stakeholders further complicates performance monitoring and

follow-up actions. These governance gaps can lead to fragmented execution and reduced accountability. Weak commitment of governance can be seen from the reduction of allocated budget for Prolanis per total national health budget every year. (33)

Performance-based health financing experiences in other countries illustrate similar challenges. In Nigeria, the lack of clear operational frameworks and inconsistent communication between national and local implementers diluted the intended impact of performance incentives. (34) In Cambodia, performance-based financing was most effective when accompanied by detailed implementation manuals, transparent fund flow processes, and regular joint reviews between central and district health teams. (35) The regulatory framework for example Ministry of Health Regulation No. 6/2022 provides broad guidance for capitation but leaves flexibility in operational details to local governments. PHCs requires comprehensive regulations for the execution of KBK, which have yet to be established. (32)

Technical Capacity

Technical capacity including the knowledge, skills, and systems needed to implement and monitor KBK. PHC staff must not only understand indicator definitions but also navigate digital platforms such as P-Care and balance these tasks alongside clinical care. Without sufficient training and ongoing support, these demands can lead to reporting delays, incomplete records, and suboptimal performance monitoring. In Tanzania, A three-year Performance-Based Financing training program in Rungwe District significantly improved health workers' management, planning, and customer care skills. Staff applied these skills to develop job descriptions, create business plans, establish facility boards, and negotiate supply contracts. This shows that capacity-building can drive innovation, community engagement, and problem-solving like in Tanzania. (36)

Patient Participation and Engagement

Patient engagement plays a pivotal role in achieving PBC indicators, particularly in programs like Prolanis. Limited patient participation showed as low attendance at Prolanis activities, refusal of home visits, and demands for unnecessary referrals can directly hinder the achievement of the RPPT and RRNS. Low engagement is often linked to limited health literacy, aging, and geographical reasons. A study highlighted the low Prolanis participations in outside Java since two-years implementation due to lower rate of PHCs availability. (33) Study in Iran reported that barriers to community engagement include community trust, organizational structure, and perceptions about participatory initiatives in the community and among health professionals and it is necessary to take steps to remove barriers to community participation in the primary healthcare system. (37)

CONCLUSIONS AND RECOMMENDATIONS

PHCs in Indonesia face substantial challenges in implementing Performance-Based Capitation (KBK), starting from shortages and unequal distribution of human resources that lead to excessive workloads and hinder the attainment of all three KBK indicators. Inadequate systems and infrastructure, including unstable internet connectivity, limited diagnostic tools, and inconsistent essential medicine supply, disrupt data reporting for contact rate and RPPT, and contribute to higher RRNS. Weak governance and poor program management such as the absence of technical guidelines, unclear operational frameworks, and limited coordination further constrain effective implementation. Limited technical capacity, due to insufficient training and understanding of KBK indicators, reduces data quality and undermines performance monitoring. These operational barriers are compounded by low community participation, influenced by geographic constraints, aging populations, and poor awareness of the referral system, resulting in persistent underachievement of RPPT and elevated RRNS. Addressing these multifaceted challenges

requires integrated strategies that strengthen workforce capacity, infrastructure, governance, technical skills, and community engagement to ensure the sustainability and effectiveness of KBK in improving primary healthcare performance. This scoping review was limited to published studies from selected databases and focused only on the Indonesian context, which may have resulted in the exclusion of relevant evidence. The variation in study designs and indicators also limited the comparability of findings.

BIBLIOGRAPHY

1. Indonesia R. Peraturan Presiden Republik Indonesia Nomor 59 tahun 2024 tentang Perubahan Ketiga atas Peraturan Presiden Nomor 82 tahun 2018 tentang Jaminan Kesehatan. Kementerian Sekretariat Negara; 2024.
2. Kementerian Kesehatan RI. Jaminan Kesehatan Nasional harus Diperkuat dengan Dukungan Primary Health Care yang Sedekat Mungkin dengan Pasien [Internet]. 2013 [cited 2025 Apr 23]. Available from: https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20130305/347388/jaminan-kesehatan-nasional-harus-diperkuat-dengan-dukungan-primary-health-care-yang-sedekat-mungkin-dengan-pasien/
3. Kementerian Kesehatan RI. Peraturan Menteri Kesehatan Republik Indonesia Nomor 19 taun 2024 tentang Penyelenggaraan Pusat Kesehatan Masyarakat. Kementerian Hukum Republik Indonesia; 2024.
4. Ratnasari D. Analisis Pelaksanaan Sistem Rujukan Berjenjang Bagi Peserta JKN di Puskesmas X Kota Surabaya Analysis of The Implementation of Tiered Referral System for Participant of National Health Security at Primary Health Center X of Surabaya. JAKI. 2017;5:145–54.
5. Kementerian Kesehatan RI. Peraturan Menteri Kesehatan No 6 Tahun 2022 tentang Penggunaan Jasa Pelayanan Kesehatan dan Dukungan Biaya Operasional Pelayanan Kesehatan Dalam Pemanfaatan Dana Kapitasi Jaminan Kesehatan Nasional Pada Fasilitas Kesehatan Milik Pemerintah. Indonesia; 2022.
6. Berenson RA, Upadhyay DK, Delbanco SF, Murray R. A Typology of Payment Methods: Payment Methods and Benefit Designs: How They Work and How They Work Together to Improve Health Care. Urban Institute; 2016.

7. Barber SL, Mathauer I, Rosenberg M, Larrain N, Liu Y, Long Q, et al. Purchasing Primary Care Services for Quality Chronic Care: Capitation With Performance Payments in Four Countries. Int J Health Plann Manage [Internet]. 2025 Apr 8;n/a(n/a). Available from: https://doi.org/10.1002/hpm.3929
8. BPJS Kesehatan. Peraturan Badan Penyelenggara Jaminan Sosial Kesehatan Nomor 7 Tahun 2019 tentang Petunjuk Pelaksanaan Pembayaran Kapitasi Berbasis Kinerja. Jakarta; 2019.
9. Aryani AD. Factors Affecting the Achievements of Performance-Based Capitation: A Scoping Review. J Jaminan Kesehat Nas. 2022;2(1):53–65.
10. Umakaapa M, Sjaaf AC. Evaluation of the Implementation of the Performance-Based Capitation Policy (KBK) at the Merial Health Clinic of DKI Jakarta City in 2020. J Indones Heal Policy Adm. 2021;6(2):141–5.
11. Arksey H, Malley LO. Scoping Studies : Towards a Methodological Framework. Int J Soc Res Methodol ISSN. 2005;8(1):19–32.
12. BPJS Kesehatan. Peraturan Badan Penyelenggara Jaminan Sosial Kesehatan Nomor 7 Tahun 2019 tentang Petunjuk Pelaksanaan Pembayaran Kapitasi Berbasis Kinerja [Internet]. Jakarta: BPJS Kesehatan; 2019. p. 1–26. Available from: https://jdih.djsn.go.id/assets/file/07-bpjsk-2019.pdf
13. Astuti J, Solida A, Mekarisce AA, Noerjoedianto D, Wardiah R. Analysis of Efforts to Achieve Performance-Based Capitation Indicators Talang Banjar Public Health Center. KESANS Int J Heal Sci Sci. 2023;3(3):268–87.
14. Augustian R, Ayuningtyas D. Analisis capaian kapitasi berbasis kinerja fasilitas kesehatan tingkat pertama di wilayah Jakarta Timur pada masa pandemi COVID-19. Syntax Lit J Ilm Indones. 2023;8(7).
15. Cahyati ST, Sandra C, Herawati YT. Implementasi kebijakan pembayaran kapitasi berbasis kinerja (KBK) di Puskesmas Kabupaten Nganjuk. J Kebijak Kesehat Indones JKKI [Internet]. 2023;12(3):168–77. Available from: https://journal.ugm.ac.id/jkki/article/view/87474https://journal.ugm.ac.id/jkki/article/download/87474/37532 NS -
16. Lestari AD, Witcahyo E, Sandra C. Sumber Daya Manusia dan Manajemen Puskesmas

dalam Mencapai Indikator Rasio Peserta Prolanis Terkendali (RPPT) di Kabupaten Situbondo. J Penelit Kesehat Suara Forikes. 2022;13(4):983–9.

17. Fadila R, Purnomo AF. Analisis Faktor Penyebab Tingginya Rasio Rujukan Non Spesialistik Puskesmas Rawat Inap. J Kesehat komunitas (Journal community .... 2021;7(2):144–9.
18. Aryani AD, Bachtiar A, Candi C. The Structural Equation Modelling of First Level Health Facilities ' Performance-Based Capitation Payment in National Health Service The Structural Equation Modelling of First Level Health Facilities ' Performance-Based Capitation Payment in National. Kesmas Natl Public Heal J. 2024;19(1):35–41.
19. Rosita S, Rahmayani, Za RN, Asnimar. Implementasi Kapitasi Berbasis Kinerja (KBK) di Puskesmas Meuraxa Kota Banda Aceh Implementation of Performance Based Capitation (KBK) at the Meuraxa Community Health Center , Banda Aceh City. J Heal Technol Med. 2024;10(1):15–21.
20. Trisno Z, Raihan W, Zahroh Q. Relationship of Doctor Ratio with Non-Specialistic Referrals Status in Social Security Agency on Health, Pamekasan. J-Kesmas J Fak Kesehat ... [Internet]. 2024;11(2):16–26. Available from: http://jurnal.utu.ac.id/jkesmas/article/view/10565http://jurnal.utu.ac.id/jkesmas/article/download/10565/pdf NS -
21. Febrianti E, Razak A, Haerani S. Basic Study on the Implementation of Outpatient Referral of BPJS Health Members in the First Health Facility at Makassar. Int J Multicult Multireligious Underst. 2019;6(5):694–704.
22. Purnamasari AT, Ningrum HD. Implementasi program pengelolaan penyakit kronis (Prolanis) di masa pandemi COVID-19 pada FKTP di Kota Malang. J Kebijak Kesehat Indones ... [Internet]. 2023;(Query date: 2025-07-31 06:19:4011 cites: https://scholar.google.com/scholar?cites=14996206140154687413&as_sdt=2005&sciodt=2007&hl=en PG-). Available from: https://core.ac.uk/download/pdf/572862116.pdfhttps://core.ac.uk/download/pdf/572862116.pdf NS -
23. Rosida A, Nopiyani NMS, Januraga PP. Implementation of performance-based capitation payment at public health centers in Denpasar, Bali, Indonesia. Public Heal Prev ... [Internet]. 2024;12(2):94–109. Available from:

http://phpmarchive.org/index.php/phpma/article/view/367http://phpmarchive.org/index.php/phpma/article/view/367 NS -

24. Susanti Y. Performance Based Capitation Settings in the National Health Insurance Program for Primary Healthcare Facilities. J Law, Polit Humanit [Internet]. 2025;5(3):2271–81. Available from: https://dinastires.org/JLPH/article/view/1545https://dinastires.org/JLPH/article/download/1545/1199 NS -
25. Kasim AM. Potret Implementasi Program Pengelolaan Penyakit Kronis (Prolanis) Di Puskesmas Perkotaan Kabupaten Flores Timur Nusa Tenggara Timur. Media Inf [Internet]. 2024;20(2):176–84. Available from: https://ejurnal2.poltekkestasikmalaya.ac.id/index.php/bmi/article/view/608https://ejurnal2.poltekkestasikmalaya.ac.id/index.php/bmi/article/download/608/352 NS -
26. Geodesi M, Wardani R. Performance of Health Facilities in Relation to Capitation Payments. KnE Life Sci. 2022;766–78.
27. Purnamasari AT, Ningrum HD. Implementasi Program Pengelolaan Penyakit Kronis (Prolanis) di Masa Pandemi COVID-19 pada FKTP di Kota Malang. J Kebijak Kesehat Indones JKKI. 2023;12(02):84–96.
28. Pholpark A, Mon HM, Lim LT, Tsilaajav T, ... Challenging inadequate and fragmented primary health care financing: findings from Bangladesh, Indonesia, Maldives, and Nepal. Lancet Reg … [Internet]. 2025;38:1–6. Available from: https://www.thelancet.com/journals/lansea/article/PIIS2772-3682(25)00084-8/fulltexthttps://www.thelancet.com/journals/lansea/article/PIIS2772-3682(25)00084-8/fulltext NS -
29. Bonenberger M, Aikins M, Akweongo P, Wyss K. The effects of health worker motivation and job satisfaction on turnover intention in Ghana: a cross-sectional study. Hum Resour Health. 2014;12(43):1–12.
30. Fanda RB, Probandari A, Yuniar Y, Hendarwan H, Trisnantoro L, Jongeneel N. Articles The availability of essential medicines in primary health centres in Indonesia : achievements and challenges across the archipelago. Lancet Reg Heal - Southeast Asia [Internet]. 2024;22:1–13. Available from:

https://doi.org/10.1016/j.lansea.2023.100345

31. Sambodo NP, Bonfrer I, Sparrow R, Pradhan M, van Doorslaer E. Effects of performance-based capitation payment on the use of public primary health care services in Indonesia. Soc Sci Med [Internet]. 2023;327(April):115921. Available from: https://doi.org/10.1016/j.socscimed.2023.115921
32. Purnamasari AT, Ningrum HD, Ardhiasti A, Zahroh AH. Capitation Management Through Performance-Based Capitation Mechanism of Primary Health Care in Malang, Indonesia. Kesmas Natl Public Heal J. 2024;19(5):46–55.
33. Khoe LC, Id GW, Soewondo P, Tahapary DL, Widyahening IS. The implementation of community-based diabetes and hypertension management care program in Indonesia. PLoS One [Internet]. 2020;15(1):1–9. Available from: http://dx.doi.org/10.1371/journal.pone.0227806
34. Ogundeji YK, Quinn A, Lunney M, Chong C, Chew D, Danso G, et al. Factors that influence specialist physician preferences for fee-for-service and salary-based payment models: A qualitative study. Health Policy [Internet]. 2021;125(4 PG-442–449):442–9. Available from: NS -
35. Poel E Van De, Flores G, Ir P, Donnell OO. IMPACT OF PERFORMANCE-BASED FINANCING IN A LOW-RESOURCE SETTING : A DECADE OF EXPERIENCE IN CAMBODIA. Health Econ. 2016;705(July 2015):688–705.
36. Manongi R, Mushi D, Kessy J, Salome S, Njau B. Does training on performance based financing make a difference in performance and quality of health care delivery ? Health care provider ' s perspective in Rungwe Tanzania. BMC Health Serv Res. 2014;14(154).
37. Gholipour K, Shokri A, Yarahmadi AA, Tabrizi JS, Iezadi S, Naghibi D. Barriers to community participation in primary health care of district health : a qualitative study. BMC Prim Care. 2023;24(117):1–12.