

Research Paper



## Stakeholders' Perceptions of Performance-Based Capitation Design Using Chronic Disease Indicators at Primary Health Care Facilities

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**Abstract:** Based on BPJS Kesehatan's utilization review data (Social Security Administrative body for Health) until December 2023, only 32% of 273 primary healthcare facilities met the fourth level for the Controlled prolans participant ratio (RPPT) indicator. This indicator reflects the percentage of Prolans-registered patients diagnosed with Diabetes Mellitus (DM) or Hypertension (HT) who have achieved controlled fasting blood glucose (for DM) or controlled blood pressure (for HT), with a performance target of  $\geq 5\%$ . Meanwhile, 42% of facilities reached the Angka Kontak (AK/Contact Number) target, which measures the number of participants who contacted Primary Health Care Facilities (FKTP) compared to the total registered participants, multiplied by 1,000; the target is  $\geq 150$  per mille. However, 83% of facilities achieved the Non-Specialist Referral Ratio (RRNS) target, which compares the number of non-specialist case referrals to total referrals; the target is  $\leq 2\%$ . These findings highlight the need for stronger motivation mechanisms, such as financial incentives, to support FKTP in achieving better scores in the Performance-Based Capitation (KBK) model. This study explores stakeholder perceptions regarding an incentive-based KBK model using the RPPT indicator in FKTPs in Medan. Stakeholders shared several key perspectives: (1) RPPT targets should range between 5% and 10%, with incentives tied to rating levels; (2) intermediate outcome indicators should include HbA1c for DM and blood pressure for HT; (3) incentive payments should be allocated to FKTPs and managed to strengthen chronic disease services; and (4) these payments must be consistent and sustainable.

**Keywords:** Capitation; Diabetes Mellitus; Hypertension; Incentives; Performance-based Capitation

### Introduction

The quality of primary health services at Primary Health Care Facilities (FKTP) in Indonesia is currently measured using three performance indicators under the Kapitasi Berbasis Kinerja (KBK) scheme: Contact Number (AK), Non-Specialized Referral Ratio (RRNS), and Controlled Chronic Disease Participant Ratio (RPPT). These indicators directly determine the capitation amount received by FKTP. Since its implementation in 2019, the Performance-Based Capitation (KBK) payment model has replaced the previous

commitment-based system and has been running for over five years. However, despite ongoing monitoring and evaluation efforts, significant disparities in performance remain, particularly in the achievement of RPPT targets, which assess the management of patients with Diabetes Mellitus (DM) and Hypertension (HT) enrolled in the Prolanis program.

Given this background, there is a clear need for an incentive-based approach tailored specifically to the RPPT indicator, especially considering its direct impact on improving patient outcomes and reducing long-term costs. However, previous policy studies have yet to explore the design of such an incentive mechanism in detail. Therefore, this study aims to explore stakeholder perceptions regarding a feasible incentive policy model to complement the existing Performance-Based Capitation (KBK) scheme, specifically focusing on improving Controlled Chronic Disease Participant Ratio (RPPT) performance at Primary Health Care Facilities (FKTP) in the Medan branch of BPJS Kesehatan.

## Method

This research employed a thematic analysis approach designed to answer questions “what,” “how,” and “why” regarding the experiences and perceptions of informants. The “how” aspect was explored through the informants’ perceptions of incentive and disincentive policies, particularly the Capitation-Based Performance (KBK) model in managing diabetes mellitus and hypertension. The study was conducted in several First-Level Health Facilities (FKTPs) within the Medan branch area, and data collection took place between May and June 2024. Ethical clearance was obtained from the Medical and Health Research Ethics Committee of the Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada (FKKMK UGM), and informed consent was obtained from all participants before their research involvement.

The sources of data comprised both primary and secondary data. Primary data were collected through in-depth interviews with selected stakeholders, while secondary data were obtained from official records and datasets provided by BPJS Kesehatan. The research informants were selected using purposive sampling, wherein the researchers intentionally chose individuals who were considered to have in-depth knowledge and understanding of the KBK payment system implementation at FKTPs. The interviews were conducted in private and comfortable rooms at the participants’ workplaces, with each session lasting approximately 30 to 45 minutes.

Structured interviews were conducted with 16 respondents, consisting of three heads of community health centers (puskesmas), three heads of primary clinics, two doctors in charge of the chronic disease management program (prolanis), three program officers, one representative from the Medan City Health Office, and four representatives from BPJS Kesehatan. Key informants in this study included the heads of FKTPs, prolanis doctors, and program officers. In contrast, additional informants were drawn from BPJS Kesehatan leaders, the Medan City Health Office, and claim administration officers. To ensure data credibility, source triangulation was used by cross-checking responses from

key and supporting informants. Method triangulation was also applied using different data collection techniques.

The data analysis process followed the qualitative analysis framework developed by Miles and Huberman, which includes three main stages: data reduction, data display, and conclusion drawing or verification. Data reduction involved selecting, simplifying, and focusing on interview content relevant to the study objectives. These refined data were then organized into descriptive narratives to assist in identifying patterns, trends, and interrelationships among the findings. The final step involved continuously drawing and verifying conclusions throughout the analysis to ensure the accuracy and trustworthiness of the interpretations. This analytical model enabled the researcher to explore the deeper meanings within the qualitative data in a structured and systematic manner.

## Results

### Factors Existing in the KBK System Situation

Prolanis activities, group education, and home visits are activities carried out by FKTP to recruit prolanis participants and maintain these participants so that they remain obedient and compliant with their therapy. That way, it is hoped that the condition of these participants will remain stable so that the RPPT value can be achieved above the set target. From the statement of Respondent 5 (R5).

*“Usually after we finish the prolanis exercise, that (is done) education. While educating the patient, we do counseling during the blood sugar check. Usually like that. Every week, the topic changes.”* (R5, personal communication, May 2024).

According to Respondent 9 (R9), Respondent 12 (R12), and Respondent 13 (R13), some of the obstacles they faced at FKTP when conducting home visits were problems with time, the number of personnel, distance, and the willingness of the participants themselves. This happened because various activities were carried out simultaneously with routine activities at FKTP.

*“Sometimes there are clashes in time... many other activities are going on at the same time...our human resources are also...limited.”* (R9, personal communication, May 2024).

The researcher found from the statements of Respondent 11 (R11), Respondent 12 (R12), and Respondent 14 (R14) that patients, especially those who had just been diagnosed with DM or Hypertension, were reluctant to be referred first to the hospital for an assessment from an internal medicine specialist.

*“The HBA1C examination conducted showed that several patients had high values; we recommend that they go to the hospital so that there may be a change of medication from the hospital... Do not want to because the hospital queue is too long.”* (R12, personal communication, May 2024).

### Factors that Influence Stakeholders' Perceptions of the KBK Incentive Model Design

Respondents enthusiastically welcomed the discourse related to the policy of providing incentives for managing DM and hypertension patients. The incentive policy is expected to motivate FKTP to manage the prolanis participants.

*“Yes, in principle, I agree with that. However, there must be clear regulations or rules for providing incentives and assessment benchmarks that may have tools for assessing incentives. Because incentives impact costs, there must be benchmarks or tools to help us spend those costs.”* (R1, personal communication, May 2024).

*“In my opinion, I agree...incentives can be given, so officers and doctors would be more active in achieving the specified targets. They would be more serious and motivated to treat DM and hypertension patients...”* (R5, personal communication, May 2024).

From BPJS Kesehatan data Table 1, the number of participants who dropped out of ProLanis from 2019 to 2023 totaled 6.665. In 2019, the largest number of participants who dropped out of prolanis was 2.851. Then, in 2023, there were 1.099 participants; in 2022, there were 1.045 participants; in 2020, there were 847 participants; and in 2021, there were 823 participants. Most participants who dropped out were due to inactive membership, which was 32%, then due to death (28%), changing ID cards (23%), due to their request (14%), and finally due to changing domicile (3%).

**Table 1. Data on Prolanis Participants who Dropped Out at BPJS Kesehatan Medan Branch Office 2019 - 2023**

Branch office	Reason	End_date_prolanis					Total
		2019	2020	2021	2022	2023	
MEDAN	Death	270	270	400	452	464	1.856
	On request	901	35	8	4	4	952
	Change of domicile	156	1	1	2	1	161
	Change of FKTP	196	137	249	370	592	1.544
	Inactive	1.328	404	165	217	38	2.152
<b>Grand Total</b>		<b>2.851</b>	<b>847</b>	<b>823</b>	<b>1.045</b>	<b>1.099</b>	<b>6.665</b>

Source: <https://ssbi.bpjs-kesehatan.go.id/>

To address these issues, several efforts have been made by FKTP, namely home visits, participant telephone calls, or reminders through participant neighbors. Conducting home visit activities plays an important role in follow-up care for patients with DM and Hypertension because this activity can strengthen the relationship between patients and doctors, help doctors understand patients' culture and preferences, and increase doctors' understanding and insight. Home visit activities can certainly reach patients who are busy during working hours, patients with disabilities (physical limitations), patients with economic and transportation limitations to go to FKTP, and patients who are not compliant with their treatment (Wang et al., 2021).

*“We make turns...which I explained earlier...So there are four teams. That will come down together with the elderly program and program holders.”* (R5, personal communication, May 2024).

*“We usually call, or WA. We have a WA group.”* (R8, personal communication, May 2024).

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*“Because neighbors are generally those who routinely do (prolanis activities), they are generally close. If we do exercise, we remind them.”* (R10, personal communication, May 2024).

All respondents agreed about FKTP incentives specifically for managing DM and Hypertension patients. There are various opinions regarding the incentive provision model. Namely, some argue that it is better to be handed over directly to the team handling prolanis or the holder of the prolanis program; some say that it is handed over to FKTP so that FKTP manages and distributes the incentives. Respondent 2 (R2), Respondent 7 (R7), Respondent 11 (R11), and Respondent 13 (R13) agree to be handed over to FKTP as stated below:

*“I think it remains because we are partners with health facilities and still pay for them. Because the program implementers or doctors cannot work without supporting infrastructure. So, it still has to go to the health facilities.”* (R2, personal communication, May 2024).

### **Factors in the Design of the Incentive KBK Model**

Some respondents think that HBA1C is the best indicator for managing DM patients. Some think that random blood sugar levels are the best. All respondents agree that blood pressure measurement is the best for assessing Hypertension patients. The following are statements from Respondent 5 (R5), Respondent 7 (R7), Respondent 10 (R10), and Respondent 11 (R11):

*“If HBA1C is facilitated, it would be better, we would know the picture in 3 months... but it is difficult to do the costs here.”* (R10, personal communication, May 2024).

*“For DM, HBA1C is once every 6 months... For hypertension, it is still blood pressure”* (R7, personal communication, May 2024).

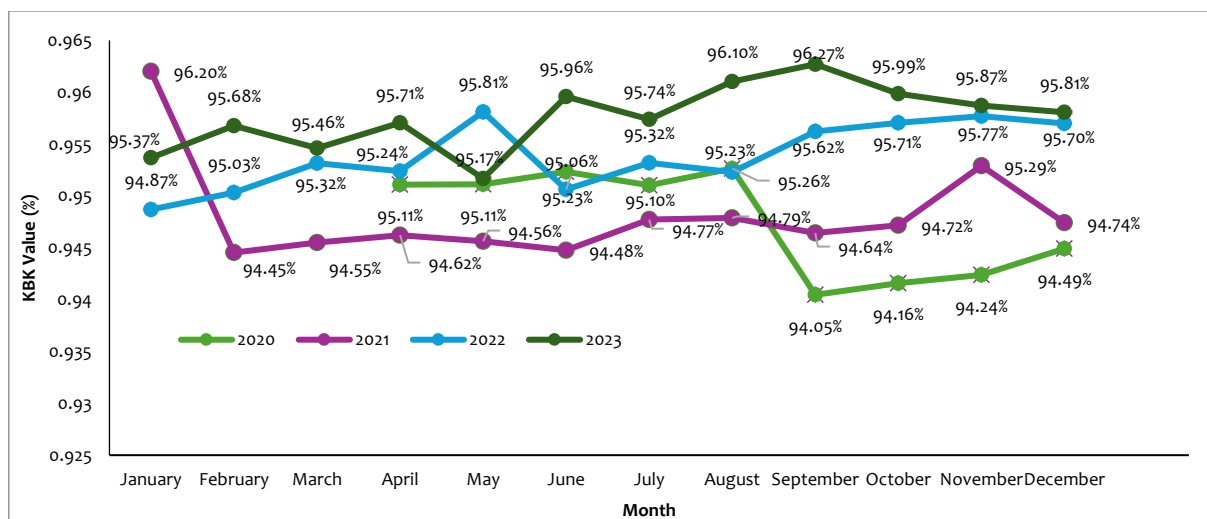
The minimum value of the current RPPT performance indicator is at least 5%. Some respondents think that the value of 5% is high and hope the target value will be reduced. However, some respondents believe the 5% to 10% target can be achieved. However, regarding the percentage of incentives, respondents have various opinions. Namely, respondents hope that it will be given in stages according to achievement, but some expect 10% or the maximum. In addition, some respondents think that capitation does not influence the incentives offered.

*“In my opinion, if this is to be more interesting, maybe leveling, for example, 5-6% is what you get, 6-7% is controlled, that is what you get. Maybe it is better like that: do not stagnate; let people try to improve. It is not the same; maybe one place can get 10%, but how can it be the same as someone who only gets 6%?”* (R1, personal communication, May 2024).

*“5 to 10? If it is more than 10, it is probably going to be a disaster. It seems like no one will get it.”* (R2, personal communication, May 2024).

Figure 1 provides an overview of the average percentage of KBK values for all FKTPs per month from 2020 to 2023. Data on the percentage of KBK values before April 2020 could not be identified or found, so the data that can be displayed is from April 2020 to

December 2023. The lowest KBK values obtained by the Medan Branch Office of FKTP was 94.05% in September 2020, and the highest percentage was 96.27% in September 2023.



**Figure 1. Average Percentage of KBK Value at BPJS Kesehatan Medan Branch Office 2020-2023**  
(Source: <https://ssbi.bpjs-kesehatan.go.id/>)

The ratio of participants in the controlled hypertension prolanis increases yearly, an average of 4.43% per year. Still, the ratio of participants in the controlled DM prolanis decreases by an average of 2.18% per year. This happens because the percentage of DM patients who are examined is also low every year, which is 16.12% per year, while the percentage of hypertension patients who are examined can reach 90.36% per year. The low percentage of examined DM patients occurs because of the limitation of blood sugar level examinations on DM patients in FKTP. Blood sugar level examinations are higher than blood pressure examinations, so they cannot be repeated on the same patient. This differs from blood pressure examinations, which can be done any time when the patient comes for a check-up.

**Table 2. Effectiveness of Prolanis DM BPJS Kesehatan Medan Branch Office 2020-2023**

Branch Name	Year	Diagnosed with DM	Prolanis DM	% DM prolanis participants	Prolanis DM Checked	% of participants examined	Controlled DM	% of controlled DM Prolanis participants
MEDAN	2020	19.575	4.490	22.94%	575	12.81%	481	2.46%
	2021	30.982	5.865	18.93%	990	16.88%	733	2.37%
	2022	36.742	7.365	20.05%	1.171	15.90%	719	1.96%
	2023	42.449	8.524	20.08%	1.612	18.91%	818	1.93%
<b>Average</b>						<b>16.12%</b>		<b>2.18%</b>

Source: <https://ssbi.bpjs-kesehatan.go.id/>

Table 2 shows the effectiveness of the Prolanis program for diabetes mellitus (DM) patients at the BPJS Kesehatan Medan Branch Office from 2020 to 2023. It highlights key indicators such as the number of diagnosed DM patients, Prolanis participants, examination rates, and the proportion of controlled DM cases within the program. Although the percentage of DM patients participating in Prolanis remains relatively stable, averaging around 20%, the proportion of participants who undergo blood sugar level examinations fluctuates but stays generally low at about 16.12% annually. This limited

examination rate is mainly due to restrictions on the frequency of blood sugar tests, which cannot be repeated often for the same patient within a short period.

Consequently, the controlled DM cases within the Prolanis program show a decreasing trend, averaging a decline of 2.18% per year. This decline contrasts with the management of hypertension patients, where examination rates are higher, and follow-up checks can be conducted more flexibly, resulting in improved control rates. The challenge in increasing the examination rates for DM patients emphasizes the need for better strategies to facilitate regular monitoring and support adherence to treatment protocols. By addressing these limitations, the program could potentially improve the percentage of controlled DM cases and overall patient health outcomes.

**Table 3. Effectiveness of Prolanis Hypertension BPJS Kesehatan Medan Branch Office 2020-2023**

Branch Name	Year	Diagnosed with HT	Prolanis HT	% HT prolanis participants	Prolanis HT Checked	% of participants examined	Controlled HT	% of controlled HT Prolanis participants
MEDAN	2020	38.278	3.994	10.43%	3.599	90.11%	1.002	2.62%
	2021	67.542	5.321	7.88%	4.920	92.46%	2.477	3.67%
	2022	81.592	7.572	9.28%	6.781	89.55%	4.638	5.68%
	2023	96.688	9.176	9.49%	8.197	89.33%	5.561	5.75%
<b>Average</b>						<b>90.36%</b>		<b>4.43%</b>

Source: <https://ssbi.bpjs-kesehatan.go.id/>

Table 3 presents the effectiveness of the Prolanis Hypertension program at BPJS Kesehatan Medan Branch Office from 2020 to 2023, highlighting key indicators such as the number of diagnosed cases, participant involvement, examination coverage, and hypertension control rates. The number of participants diagnosed with hypertension (HT) significantly increased each year, with a corresponding rise in Prolanis HT participants. However, while the percentage of HT participants examined remained consistently high (90.36%), the percentage of controlled HT among Prolanis participants showed varying trends, with an average of only 4.43%. This suggests that, despite good examination coverage, the program faced challenges in achieving optimal outcomes for hypertension control. Continued improvement in lifestyle interventions, medication adherence, and monitoring strategies is necessary to enhance the program's overall impact.

**Table 4. Average RPPT Value BPJS Kesehatan Medan Branch Office 2020-2023**

Year	% of controlled HT prolanis participants	% of controlled DM Prolanis participants	RPPT
2020	2.62%	2.46%	2.54%
2021	3.67%	2.37%	3.02%
2022	5.68%	1.96%	3.82%
2023	5.75%	1.93%	3.84%
<b>Average</b>	<b>4.43%</b>	<b>2.18%</b>	<b>3.30%</b>

Source: <https://ssbi.bpjs-kesehatan.go.id/>

Table 4 summarizes the average RPPT values from the BPJS Kesehatan Medan Branch Office between 2020 and 2023, including the percentages of controlled hypertension and diabetes mellitus among Prolanis participants. Although there has been a gradual improvement in the percentage of controlled hypertension and diabetes mellitus

among Prolanis participants, the overall RPPT value averaged only 3.30%. This figure remains below the expected minimum target of 5%, as stated in the RPPT performance benchmark. The relatively low values in hypertension and diabetes control rates indicate the need for more effective program implementation, including patient education, better engagement strategies, and stronger collaboration between healthcare providers and participants. Closing this performance gap is essential for improving health outcomes in the target population.

## Discussion

### Factors Existing in the KBK System Situation

Prolanis is a system that combines the implementation of health services and communication for a group of participants with certain disease conditions through independent disease management efforts, specifically for services for patients suffering from DM and Hypertension. In FKTP, prolanis activities are carried out to prevent ongoing complications and improve the health status of the community. Prolanis' activities include medical consultations, prolanis clubs, home visits, and health screenings (Meiriana et al., 2019).

FKTP has implemented Prolanis and home visit activities at the Medan branch. Prolanis activities are one of the programs for health maintenance for DM and Hypertension participants so that optimal quality of life is achieved with effective and efficient service costs. In addition, the purpose of FKTP implementing prolanis and home visit activities is to achieve performance indicators, one of which is RPPT.

The prolanis program provides additional benefits to JKN participants through several routine activities. Namely, monthly health consultations (counseling), group activities that include group education by FKTP doctors, prolanis club activities, home visits, blood sugar level checks, contact via WA group as a medium for participant reminders, and HBA1C check every 6 months (Salamah et al., 2023).

The output of the prolanis implementation is to encourage DM and Hypertension participants to achieve optimal quality of life, prevent the disease from worsening, or avoid complications caused by the disease. Research conducted by Tanty et al. (2019) found a relationship between prolanis and non-prolanis patients with compliance and GDP levels: the higher the level of compliance following prolanis, the more controlled the clinical outcome will be, and vice versa, the lower the level of compliance, the more uncontrolled the clinical outcome. During the 6-month program, Patients experienced decreased fasting blood glucose levels, which became controlled. The results of the health examinations stipulated in the Prolanis guidelines, including blood pressure and blood sugar examinations, can be used to determine the health status of participants. Prolanis implementation focuses on monitoring health status, but few activities are carried out (A. T. Purnamasari & Ningrum, 2023).

In addition to Prolanis' activities centered in FKTP, home visit activities are important to maintain stable patient clinical outcomes. Proactive home visit activities carried out by health service workers have resulted in clinically significant decreases in blood pressure in rural communities in Bangladesh, Pakistan, and Sri Lanka (Jafar et al., 2020).

Factors influencing patient compliance to participate in prolanis activities are a good understanding of prolanis instructions, family support, quality of interaction between patients and medical personnel at the FKTP, patient confidence that they can recover, and positive patient attitudes towards prevention/preventive efforts (Harniati et al., 2018). Almost similar to the study, the obstacles faced by the FKTP in the Medan Branch are participant mobility to come to the FKTP, participant compliance to participate in prolanis activities actively, participant compliance to follow doctor education about healthy lifestyles and eating patterns, participant willingness to spend time in prolanis activities, the participant's health condition which is getting worse, obstacles in terms of communication so that participants cannot get updates on activities or information from the FKTP, and the distance between the participant's house and the FKTP. Based on research conducted by S. M. Purnamasari & Prameswari (2020), there is a relationship between the level of patient knowledge, family support, health worker support, and the level of severity felt by using Prolanis. Patients who are in better condition are more likely to participate in prolanis.

There is also a factor of reluctance of participants to be referred to the hospital, especially for participants whose condition is unstable, a health condition that specialist doctors should handle at the hospital. Patients felt very tired due to bureaucratic factors; patients waited for about seven hours and had been at the hospital since 5 am to register (Arifin et al., 2019). Participants preferred treatment at FKTP and received DM or Hypertension drugs without prior evaluation from a specialist doctor. These conditions are very good if collaboration between FKTP and the hospital is maintained, so that if the patient receives good treatment at the hospital until the patient is considered stable, then FKTP is ready to accept the referral program and maintain patient treatment at FKTP so that they remain compliant. Thus, the patient's condition can be stable.

No specific regulations from the regions govern the implementation of prolanis in FKTP. Until now, FKTP has managed the financing of prolanis activities itself. Likewise, with home visit activities, health centers provide home visit funds from Health operational funds, while primary clinics provide home visit funds from capitation funds obtained every month. If specific regulations in the regions govern the implementation of prolanis activities and a special budget is given, prolanis activities can certainly develop and become an interesting program to be implemented in FKTP.

The government needs to increase investment and formulate policies to strengthen the function of FKTP, which is responsible for preventing and managing chronic diseases such as hypertension and infectious diseases. System changes must include improving the quality of doctors' training in FKTP, establishing performance accountability to provide incentives for quality services, integrating clinical services with basic community health

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services, and strengthening coordination between FKTP and hospitals (Li et al., 2020). Strengthening the capacity of local health systems and designing interventions that consider constraints from the patient and health facility sides are key to achieving access to and increased use of health services beyond established performance indicators, so that they can serve the wider community (Anselmi et al., 2023).

### Factors that Influence Stakeholders' Perceptions of the KBK Incentive Model Design

All respondents, both from FKTP and the Health Service and BPJS Kesehatan agencies, stated that they agreed with the KBK Incentive for managing DM and Hypertension. The KBK Incentive must be prepared with clear regulations and understood by all stakeholders to become a strong legal umbrella in its implementation in the field. Policymakers must consider prospective monitoring and evaluation of payment reforms to ensure that the expected goals are achieved. Of course, corrections can be made in the middle of the policy implementation process (Glazier et al., 2019).

Research conducted by Jin et al. (2021) analyzing the relationship between incentives in the PBS (Performance-based Salary) system and the quality of DM patient services from the perspective of continuity and coordination, it was found that performance assessment and related incentives significantly improve the process and outcome of the quality of DM patient health services. Lack of financial incentives in FKTP is one cause of poor service quality (Ma et al., 2019). With a positive attitude towards KBK incentives, it is hoped that it can increase the quality of services at FKTP.

Intermediate indicators are used to determine the health status of DM and Hypertension participants. In this case, the intermediate indicator of DM is blood sugar level or HBA1C, and the intermediate indicator of Hypertension is blood pressure. Until now, the health status of DM and Hypertension patients has been determined by random blood sugar levels and blood pressure.

FKTP did not experience difficulties examining random blood glucose and blood pressure but were constrained in examining fasting or post-prandial blood glucose. Meanwhile, regarding the facilities and infrastructure for examining blood glucose and blood pressure, all respondents stated there were no obstacles because FKTP had prepared them. Even for the HBA1C examination, FKTP has collaborated with supporting laboratories. Monitoring blood sugar levels has been proven to provide clinical benefits in diabetic patients and is a standard of patient care. Regular blood glucose monitoring has improved glycemic control in diabetic patients, and more frequent blood glucose measurements are associated with lower HbA1c levels (Zivojinovic, 2022). For fasting blood glucose examinations, it must be ensured that the participants to be examined are truly fasting and that the duration of their fast. If not, of course, the results obtained will not be appropriate.

One of the problems also faced by FKTP is prolans participants who are lost to follow-up. Prolans participants who are lost to follow-up here mean DM or Hypertension patients who had joined prolans before but never returned for a check-up to FKTP. Of course, this

condition is not good for the participants if they never have a blood sugar level or blood pressure check again. Moreover, the treatment will not go as it should. Increased BMI, not adhering to a healthy lifestyle, and not being actively involved in team-based care are factors related to the failure to achieve improvements in blood pressure and fasting blood sugar in patients who suffer from hypertension and DM together (Yu et al., 2023).

The provision of incentives through FKTP or program holders must consider the effectiveness of the management of the funds. Routine provision of incentives will be a motivation and something that FKTP and the prolanis holder team await. The main key in a performance-based payment scheme is to focus on how to use money. Moreover, the payment must be used to reward health workers, where, intuitively and theoretically, the number of incentives must affect the provision of health services and performance (Fardousi et al., 2022).

### Factors in the Design of the Incentive KBK Model

The incentive KBK model also considers intermediate indicators to assess the effectiveness of DM and Hypertension patient management. Most respondents agree that HbA1c is the best indicator for assessing the success of DM management, and blood pressure measurement for assessing the success of hypertension patient management. The HbA1c value predicts the average blood glucose value for the last 2-3 months. This indicator is a valid reference value for assessing glucose levels and the risk of complications in type 1 and type 2 diabetes mellitus patients (Shubrook & Pfothenauer, 2022). If the DM management indicator is HbA1c, the incentive calculation must be adjusted to the HbA1c examination every three months. Blood pressure can be taken at any time when the patient checks up at the FKTP to assess the management of hypertension.

Contextual factors, including the amount/size of incentives, the type of incentives, the frequency of incentives, and the likelihood of receiving incentives, need to be considered in designing incentive policies (Kranzer et al., 2018). These factors tend to influence the behavior and decisions of clients, in this case, FKTP. The current RPPT performance target size is at least 5%. Considering the average value of RPPT per year achieved, the RPPT performance target size must be reasonable and achievable. From the interviews with respondents, most respondents think that for the design of the RPPT incentive, the target value is between 5% and 10%, with incentives given in a rating/tiered manner. That way, FKTP will compete to achieve a higher RPPT value.

The achievement of the KBK value is a picture of the performance of FKTP in implementing the JKN program, so it can be said that if the KBK value is low, the performance of FKTP is also low. The KBK value also affects the amount of capitation payments obtained by FKTP. A decrease in the KBK value of FKTP in the East Jakarta area from 2020 to 2021 was also found due to the implementation of PSBB, namely, large-scale social restrictions (Augustian & Ayuningtyas, 2023).

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## Conclusion

The challenge of implementing prolanis activities is the limited human resources in health centers. In contrast, many other program activities must be implemented, including factors from participants such as compliance with healthy lifestyles, factors of participant understanding of their illness and its management, mobility of prolanis participants to actively participate in prolanis activities at FKTP, communication factors to update information from prolanis activities, and factors of participant reluctance to receive initial management by specialist doctors at hospitals. Meanwhile, no specific policy from the Medan City Government regulates the implementation of prolanis at FKTP. Until now, FKTP has managed the financing of prolanis activities and home visit activities itself; health centers provide home visit funds from Health Operational Funds, while primary clinics provide home visit funds from capitation funds obtained every month.

Stakeholder perceptions related to the KBK incentive model design are the target RPPT value between 5% to 10% with incentives given in a rating/tiered manner, the intermediate indicator for DM is HbA<sub>1c</sub>, and for Hypertension is blood pressure, incentive payments are given to FKTP, and managed to encourage prolanis activities, and incentive payments must be routine and certain. Meanwhile, stakeholder opinions on the ideal indicator for managing DM participants are HbA<sub>1c</sub> because it can assess the average blood sugar level in the last 3 months and predict the risk of complications, and the hypertension indicator is blood pressure.

Several strategic recommendations emerge from this study to enhance the effectiveness of diabetes mellitus (DM) and hypertension management at FKTP. First, local governments should develop specific regulations that promote preventive and promotive efforts for DM and hypertension, considering the substantial costs associated with treating complications. Second, BPJS Kesehatan needs to design an incentive-based payment mechanism that directly impacts healthcare workers' performance and improves the quality of services at FKTP. This system should be supported by practical tools that simplify the calculation of performance indicators and facilitate the evaluation of DM and hypertension care. Additionally, BPJS Kesehatan should consider implementing pilot projects in selected regions before scaling up the KBK incentive system nationwide, to assess the adequacy of JKN funding. Third, FKTP should adopt electronic medical records to facilitate the identification of DM and hypertension patients eligible for Prolanis, streamline follow-up processes, and support efficient patient recall systems. Fourth, FKTPs are encouraged to strengthen group-based promotive and preventive activities through Posbindu PTM and elderly health services, while also fostering a supportive environment among Prolanis participants to encourage peer support in managing chronic conditions. Such approaches can help FKTPs achieve RPPT performance targets more effectively. Lastly, further research involving different stakeholder characteristics is needed to provide a more comprehensive understanding of broader stakeholder perceptions.

## Research Limitations

This study has several limitations that should be considered when interpreting the findings. First, the interviews were conducted in only one city within the Medan Branch Office area, limiting the results' generalizability to other regions or broader populations. Second, interviews with key informants from the District Health Office and BPJS Kesehatan were constrained by limited availability due to their tight schedules, potentially limiting the depth of the data obtained. Third, perspectives from professional associations and healthcare facility organizations were not included, resulting in an incomplete representation of all relevant stakeholders involved in the KBK system. Fourth, the informants were selected only from FKTP with relatively high KBK performance scores, excluding those with lower performance, which may have introduced bias and limited the overall representativeness of the data. Lastly, due to the unavailability of data from 2019, the analysis was restricted to 2020 to 2023, which may not capture long-term trends or earlier developments in implementing the KBK system.

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