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Analysis of Hospital Management Perception Towards Difference Between Real Rate of Hospital and Rate of Inacbgs In Hemodialysis Services: A Study Qualitative at Pertamina Hospital Pangkalan Brandan

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ABSTRACT
This study analyzes the perception of hospital management at Pertamina Hospital Pangkalan Brandan regarding the discrepancy between actual hospital costs and INA-CBGs reimbursement rates for hemodialysis services. The research was prompted by concerns over the financial gap that may impact service sustainability and quality for chronic kidney disease patients. A qualitative case study approach was used, involving in-depth interviews with key informants such as the hospital director, head of finance, medical personnel, and administrative staff. Findings revealed a significant disparity between real costs—ranging from IDR 1,200,000 to IDR 1,600,000 per hemodialysis session—and INA-CBGs reimbursements of only IDR 850,000 to IDR 950,000. The largest cost components were medications, disposable medical equipment, and human resources. This discrepancy places operational burdens on the hospital, which are managed through efficiency measures and cross-subsidies. Informants emphasized that INA-CBGs tariffs do not adequately reflect the clinical complexity of patients, particularly those with comorbidities or frequent dialysis needs. The study recommends revising the INA-CBGs scheme by aligning reimbursement rates with clinical realities and involving hospitals in policy development. In conclusion, reforming the INA-CBGs tariff system is essential to maintaining the financial viability and quality of hemodialysis services in Indonesian hospitals.

Keywords: *Actual Hospital Costs, INA-CBGs, Hemodialysis, Health Financing, Management Perception*

INTRODUCTION
Health is a human right, and Law Number 17 of 2023 affirms that the state guarantees the right of every citizen to live a good, healthy, and prosperous life, both physically and mentally, in order to achieve the national goal of protecting the entire Indonesian nation and all of Indonesia's territory to advance public welfare. Healthcare costs tend to increase during difficult economic times, caused by various factors, including individual *out-of-pocket payments* (*fee for service), provider-determined services* (Trisnantoro, 2021), and the public's limited ability to access healthcare services. Therefore, a system is needed as a reform movement in health funding. One way is by becoming an insurance participant in the National Health Insurance (JKN).
The implementation of the National Health Insurance (JKN) faces numerous challenges. The public complains about the difficulty of obtaining adequate services. For supporting examinations, whether laboratory or radiology, they sometimes have to visit multiple times

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because the costs exceed the INA-CBG package. Patients often complain about medication being unavailable or feeling the amount they receive is insufficient. Hospitals also complain about the fees stipulated in Minister of Health Regulation Number 59 of 2014. The fees in this regulation are considered too low and do not reflect the current medical services, drug prices, reagents, or consumables. Consequently, from a patient perspective, the hospital appears to provide only minimal services (Damara & Sari, 2022).

Based on several problems faced by hospitals in implementing JKN, the one that has attracted the most attention from many parties is the INA-CBG tariff. The Purpose of Tariff Determination according to Trisnatoro (2021), the handling of tariff determination and the purpose of the determination are influenced by the owner. With this ownership background, tariffs can be set with various objectives as follows: 1). Tariff determination for cost recovery and this situation is especially found in government hospitals whose subsidies are decreasing over time. 2). Tariff determination for cross-subsidies and the existence of policies so that the strong economic community can help reduce the cost of hospital services for the weak economic community. 3). Tariff determination to improve access to services policy of setting tariffs as low as possible so that it is hoped that with these low tariffs, access will be good or easy, especially for the poor. 4). Tariff determination to improve service quality and tariff setting policies in VIP wards are carried out based on considerations to improve service quality and also increase job satisfaction of specialist doctors. 5). Tariff determination to reduce competitors can be done to prevent the emergence of new hospitals that will become competitors. 6) Tariff setting to increase profits can be done in hospital markets that tend to be dominated by one hospital (monopoly) with the aim of maximizing revenue. 7) Tariff setting aimed at minimizing service use, reducing usage, the tariff is set high. 8) Tariff setting with the aim of creating *a corporate image* is tariff setting that is set with the aim of improving the hospital's image.

There are several factors that need to be considered in determining the tariff, namely: 1). Unit costs are costs that describe the amount of service costs per patient (the amount of sacrifice of production factors to produce services). 2). Type of service, utilization rate and expected cross-subsidies, namely units with low utilization rates are relatively difficult to increase their rates, on the contrary, units that have the potential to be Revenue Centers need to be developed further in order to increase hospital income. 3). Level of Community Ability and Considering the community's ability to pay, measured by looking at the ATP (*Ability To Pay*) and (WTP (*Willingness To Pay*) of the community. 4). Elasticity, namely the economic law that states that changes in tariffs will cause changes in demand for the products offered. 5). Rates for equivalent competitor services Hospitals also need to compare rates for equivalent competitor services.

The calculation of INA-CBG's tariffs is based on *costing data* and hospital coding data. *Costing data* is obtained from selected hospitals (sample hospitals) representing hospital class, hospital type, and hospital ownership (private and government hospitals), covering all cost data incurred by hospitals, excluding drugs whose funding sources are from government programs (HIV, TB, and others). Coding data is obtained from PPK Jamkesmas hospital coding data for the preparation of JKN tariffs, costing data from 137 government and private hospitals and 6 million coding data (cases) are used.

Presidential Regulation Number 12 of 2013 Concerning Health Insurance, the Indonesian *Case Based Groups tariff* , hereinafter referred to as the INA-CBG's Tariff, is the amount of claim payments by BPJS Kesehatan to advanced health facilities for service packages based on disease diagnosis groupings, the amount of which is stipulated in Presidential Regulation No. 59 of 2024. Presidential Regulation 59/2024 regulates the third amendment to Presidential Regulation 82/2022, which covers various matters related to JKN, such as: Standard Inpatient Class (KRIS): This Presidential Regulation establishes the standard class of inpatient care in hospitals that collaborate with BPJS Kesehatan, ensuring equal and standardized service quality. Health Service Benefits: The Presidential Regulation regulates the benefits of health services provided to BPJS participants, including screening services

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for various diseases such as diabetes, hypertension, and cancer. Contributions and Tariffs: The Presidential Regulation also regulates BPJS contributions and health service tariffs, including changes in contribution calculations for workers in small and micro businesses. Identification and reporting of discrepancies is the first step towards controlling discrepancies and improving operations.

An effective standard costing system requires that management react appropriately to variances because uncorrected variances can affect the company for several periods. The magnitude of the variance and its impact on future operations influence the company's reaction to variances. Small variances are common and most do not require special attention from management, unless a pattern is identified. Small, persistent unfavorable variances may require management attention because their cumulative effect on operations can be substantial and may represent a deterioration in operations.

Hemodialysis is a process used for patients in acute illness and requiring short-term dialysis therapy or patients with terminal kidney disease or *end-stage renal disease* (ESRD) who require long-term or permanent therapy. According to Smeltzer and Bare (2022), hemodialysis is a process of removing toxic nitrogenous substances by taking blood from the patient's body to a dialyzer where the blood is cleaned and then returned to the patient's body after removing excess water, electrolytes and waste substances from the body.

Hemodialysis is the process of filtering and eliminating metabolic waste using a device. It replaces kidney function and is the primary therapy, alongside kidney transplantation and peritoneal dialysis, for people with chronic kidney disease. The primary goal of hemodialysis is to replace kidney function, thereby maintaining homeostasis in the human body (Nurcahayati, 2020).

The hemodialysis process requires the installation of an Arteriovenous Fistula device to gain vascular access that will be connected to the hemodialysis machine (Pranowo, 2022). Hemodialysis remains the primary renal replacement therapy alongside peritoneal dialysis and kidney transplantation in most countries worldwide. More than two million patients are currently undergoing hemodialysis worldwide. Hemodialysis is most commonly performed in the United States, with approximately 350,000 patients, followed by 300,000 in Japan, and nearly 15,000 in Indonesia (Pinem, Tarigan, Sihombing, 2022).

Based on data from the 2022 Basic Health Research, the incidence of hemodialysis in Indonesia reached 19% among people aged 15 and over diagnosed with chronic kidney disease. Meanwhile, the health profile showed a 2% rate in 2022, rising to 3.9% in 2021. Patients undergoing hemodialysis are highly dependent on the dialysis machine for their entire lives, and the condition significantly impacts their quality of life. During the hemodialysis process, patients can experience several complications. These include muscle cramps, hypertension, headaches, nausea, and vomiting, as well as psychological effects such as anxiety (Zahrofi, 2022).

Patients undergoing hemodialysis can maintain their lives while simultaneously changing their lifestyle. Patients are required to visit the hemodialysis unit regularly 2-3 times a week, adhere to their medications, modify their diet, regulate their fluid intake, and monitor their fluid balance daily (Mahmoed, S & Abdelaziz, NA, 2020). Other challenges include managing the impact of kidney disease, such as decreased hemoglobin, potassium and calcium management, and psychosocial and economic issues (Goh and Griva, 2020).

Based on the initial survey conducted by researchers at Pertamina Hospital Pangkalan Brandan, it was found that the number of HD patients was 20 patients. The Hospital's efforts regarding the Difference in Efficiency Rates at Pertamina Hospital Pangkalan Brandan succeeded in carrying out outpatient efficiency, there was a surplus gap of 7.6% or around IDR 552 million and inpatient care had additional income of IDR 1.5M or 9.7%.

At Pertamina Hospital Pangkalan Brandan, efficiency can generally be considered to have been implemented in the hospital, as seen from the positive tariff difference. Efficient drug use is carried out in every activity. Starting from (1) the planning process by prioritizing generic drugs and the drug purchasing process using an e-catalog so that drug prices are

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controlled, (2) socialization of drug formulary standards, (3) setting drug ceilings, standards for medical devices used in procedures in the operating room, (4) laboratory tests carried out according to indications.

Pertamina Hospital Pangkalan Brandan had previously calculated its own rates for HD patients. Hemodialysis at Pertamina Hospital Pangkalan Brandan uses reuse, the cost is Rp. 691,298, while the rate from INA CBS's Regional 2 Private Type C Hospital is Rp. 835,500 for HD. There is a difference in cost sharing between the HD rates from the hospital and the government. Researchers in this case calculated the undesirable events if done with reuse. So far, the hospital has never calculated the undesirable events if using reuse and seen what risks are obtained, resulting in costs exceeding the INA CBG's rate. This can cause the hospital to lose money, thus further research is needed on the problem topic above.

The government needs to evaluate the old hospital rates by conducting a unit cost analysis by considering the increase in the price of drugs, medical materials and equipment, inflation and so on. Another efficiency alternative that can be done by hospitals is through HR efficiency by reducing the quantity of HR in certain units but on the other hand adding HR with certain qualities such as pharmacists, cost efficiency from the cost components themselves other than doctor services, such as selecting reagents in the laboratory that have cheaper prices, although still having to pay attention to quality.

Related to quality related to the lack of human resources, facilities and infrastructure such as waiting rooms that are not spacious and comfortable, uncomfortable doctor's examination rooms, insufficient number of patient seats in the waiting room. Efforts made include improving hospital service procedures, hospital service administration procedures, administrative procedures, especially administration in JKN patient services for speedy claim processing, accelerating the preparation of clinical pathways, accelerating building renovations by fulfilling the facilities and infrastructure to maintain service quality. Although there are still services that do not meet the Hospital Minimum Service Standards, the results of the customer satisfaction survey provide a good value of 95%. Based on the background of the problems that occur as described above, the researcher is interested in conducting research with the title: hospital management perceptions of differences in real hospital rates and INA CBG's rates for hemodialysis services: a qualitative study at Pertamina Hospital Pangkalan Brandan.

METHODS

This research employed a qualitative approach with an intrinsic case study design. The primary focus was on gaining a comprehensive understanding of the phenomenon of tariff disparities from the perspective of hospital management. Informants were selected purposively, including the hospital's Head of Finance (primary informant), the Hospital Director (key informant), and representatives of healthcare workers and administrative staff (triangulation informants). Data collection was conducted through in-depth interviews with semi-structured guidelines and supported by documentation studies. Data validity was tested through source and method triangulation techniques. Data analysis was conducted using a content analysis approach, starting with the transcription process, thematic categorization, and synthesizing the findings into a descriptive narrative.

RESULTS

The research results were obtained through in-depth interviews with six key informants from the management and hemodialysis service units. To clarify and deepen the results, they are presented in the form of a thematic table.

Table 1. Main Findings Based on Informant Interviews

Theme	Subtheme	Narrative Quote	Informant
Difference between Real Tariffs and INA-CBGs	Cost Inequality	"Our hemodialysis costs around 1.5 million, but BPJS only paid 900 thousand."	Head of Finance
Largest Cost Components	Medicines and Medical Devices	"The dialyzer and HD fluid are disposable and expensive. Not to mention the medications that are routinely administered."	Hemodialysis Doctor
Impact of Inequality	Operating Pressure	"We have to be selective about medicines and staff efficiency, because funds are insufficient."	Hospital Director
Survival Strategy	Cross Subsidy	"A profitable service must close this unit. We are also seeking assistance from CSR."	Head of Finance
Quality of Service	Quality Decline	"Many patients complained because the place was cramped and uncomfortable."	Nurse
Claim Constraints	BPJS Administration	"Claims can be delayed if documents are lacking, which is another burden for us."	Administrative Officer

In addition to the above quotation, it was also found that the INA-CBGs pricing policy was considered rigid and did not reflect the complexity of clinical cases. Patients with comorbidities such as diabetes and heart failure often require additional procedures, yet claims are still presented as a single, fixed package. This results in a cumulative deficit for the hospital. The following is a summary of the financing components and their contribution to the total cost of hemodialysis:

Table 2. Average Composition of Hemodialysis Costs per Session

Component	Average Cost (Rp)	Percentage (%)
Drugs	400,000	30%
Disposable Medical Devices	600,000	45%
HR and Honorarium	300,000	20%
Administration and Others	100,000	5%
Total	**1,400,000**	**100%**

These findings conclude that the current INA-CBGs tariff scheme does not align with the reality of operational costs in the field. Hospitals are implementing various mitigation measures, such as logistical efficiency, regular internal audits, the use of generic drugs, and encouraging increased accuracy in claims administration to prevent rejections from the BPJS. However, these efforts are insufficient to offset the persistent cost discrepancies.

In-depth Thematic Analysis

Theme 1: Tariff Inequality and Financial Burden

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"We have to cover all hemodialysis operational costs before the claim is paid. If the claim is rejected, the hospital is responsible." *(Informant: Head of Finance)* "Patients don't know that they're actually only being 'paid' less than the cost of the procedure. They just know the service is still running." *(Informant: Hospital Director)*

Theme 2: Institutional Survival Strategies
Hospitals take an efficiency approach by:
- The use of generic drugs, although not always equally effective.
- Reducing the frequency of certain patient procedures to meet claim quotas.
- Rationalizing staff schedules and extending shifts. "We've requested additional funding from the central state-owned enterprise, but the request was rejected on the grounds that it doesn't comply with the SPM." *(Informant: Director)*

Theme 3: Ethical Dilemmas in Service
Medical personnel face a dilemma between maintaining quality service and pursuing financial efficiency. "Medically, patient A requires additional treatment, but from a claims perspective, it's not feasible. So we often have to play it cool to maintain service." *(Informant: Hemodialysis Doctor)*

Theme 4: Pressure on HR
Staff feel overwhelmed by having to handle more patients with limited resources. "The number of patients is increasing, equipment is limited, and human resources are not increasing. We have to work extra hard, with a high risk of burnout." *(Informant: Nurse)*

Theme 5: Mismatch of INA-CBGs Scheme
BPJS claims are considered inflexible, even rejecting medically legitimate procedures simply because they don't match the INA-CBGs code. "If the diagnosis doesn't match the rate, the claim can be rejected immediately, even though the patient clearly needs treatment." *(Informant: Administrative Officer)*

DISCUSSION

The study results show a significant difference between actual hospital rates and INA-CBGs rates for hemodialysis services. This finding aligns with research by Yuniarti et al. (2022), which states that the majority of hospitals experience a deficit in dialysis service costs due to INA-CBGs claim rates not reflecting actual cost burdens. Several major contributing components, such as consumables, healthcare workers, and medicines, are not covered by the current financing scheme, as also found by Surya & Prasetya (2023), who highlighted that the cost of medicines and medical devices contributed more than 60% to the hemodialysis service deficit. Furthermore, the internal efficiency strategy and cost-sharing approach implemented by Pertamina Hospital Pangkalan Brandan are similar to the recommendations of Pratama & Hidayat (2021), who stated that hospitals need to restructure costs and renegotiate service rates with the payer (BPJS) to maintain service continuity.

From a policy perspective, INA-CBGs tariffs are considered to have not undergone substantive revisions since their implementation. This finding aligns with a study by the Ministry of Health (2021) which stated the need for periodic evaluations and a clinical risk-based approach to make the tariff scheme more adaptive. Theoretically, this research is supported by the Health Financing Equity Framework (WHO, 2021), which emphasizes the importance of balancing cost inputs and service outputs, particularly for chronic diseases such as end-stage renal failure. Based on the results and references above, the researchers assume that stagnant and inflexible INA-CBG tariffs are the primary cause of the mismatch between actual costs and funding. Without policy intervention and tariff adjustments, the risk of declining service quality and the sustainability of hemodialysis services is very high.

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Therefore, reform of the INA-CBG tariff system, based on clinical needs, and involving hospitals as strategic partners in formulating health financing policies, is necessary.

CONCLUSION

This study revealed a significant gap between actual hospital rates and INA-CBGs rates for hemodialysis services at Pertamina Hospital in Pangkalan Brandan. The largest cost components contributing to the difference include medications, medical equipment, and human resources. This gap directly impacts service quality and the sustainability of hospital operations. Efficiency strategies and internal financing are options for hospitals, but they cannot be long-term solutions. Furthermore, the current INA-CBGs rate policy is considered to not reflect the clinical needs and actual cost burden of hemodialysis patients, particularly given variations in treatment frequency and associated complications. The government and the Social Security Agency (BPJS) need to periodically evaluate and adjust INA-CBGs rates based on actual hospital cost data. The financing scheme needs to take into account clinical variations, treatment frequency, and comorbid conditions that affect hemodialysis service costs. Private and public hospitals should be involved in the tariff policy development process to ensure a more accommodating and equitable scheme. Transparency and accountability in the claims process are needed to ensure that administrative burdens do not become a barrier to optimal service delivery. Further research is recommended to examine cross-regional comparisons and alternative financing models to ensure the sustainability of hemodialysis services.

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