

DRUG COST ANALYSIS ON NATIONAL HEALTH INSURANCE ERA IN HEALTH SUPPORT FACILITIES

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ABSTRACT

Objective: In national health insurance (JKN) era, pharmacy can play roles in the form of behind refer pharmacies, or networking pharmacy and clinic pharmacy pratama. Behind refer pharmacies drug cost can be claimed directly to BPJS, meanwhile for the other type of pharmacy have to negotiation first with the primary health care. Drug cost variations in the JKN era affect the profitability of the business pharmacies. This research aims to the drug percentage charges against capitation and variety of drug costs.

Methods: This research is analytic observational cross-sectional. This research uses secondary data from a JKN prescription patient. This research was conducted on 6 affiliated pharmacies, 6 networking pharmacies, and 7 clinical pharmacy pratama in DIY. The sampling in this research is by purposive with 8.430 prescriptions. Data drug costs JKN era was analyzed by descriptive statistics and comparative test (Kruskal Wallis test).

Results: The result showed that average percentage of drug costs for capitation fee in the networking pharmacy is 13.58% and primary health care is 15.91%. Pharmacy in JKN era has drug cost variations ($p=0.000$). Drug cost in JKN era depends on the pattern of play roles with the health facilities and BPJS. The average percentage of drug costs against capitation health facilities in networking pharmacy is lower than clinical pharmacy pratama.

Conclusions: Drug costs in an era of JKN depending on the pattern of cooperation with health facilities pharmacies and BPJS. The average percentage of the cost of drugs to the pharmacy capitation health facilities in networking lower than clinic pharmacy pratama. Differences in drug costs JKN era influenced by the long days of drug administration, the number of prescription sheets, margin.

Keywords: Drug cost analysis, National health insurance (JKN), Pharmacy, Primary health care, Capitation.

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INTRODUCTION

Services national health insurance (JKN) implemented by doing a cooperation agreement between the Social Security Administrator (BPJS) and health facilities that exist throughout Indonesia, for health facilities who have no means of pharmacy can work together with the pharmacy in pharmacy services [2]. Pharmacy cooperation program with BPJS and family doctors are also supported by the regulation of health minister no. 71 years 2013 on Health Care in National Health Insurance in article 3 states that pharmacy services are as support services for health care services. Health facilities first level of BPJS earn rewards in the form of payment in the form of capitation rates with the specific amount to be transferred directly to the account of health facilities, capitation fee includes the cost of services and drugs [5].

Pharmacy services as support services should be taken into account in the capitation system, because pharmacists have an important role, especially in terms of adjustment of capitation fees to the cost of drugs adapted to the economic conditions of patients without neglecting the effects of therapy. The concept of the actual cost is by analyzing the resources used in producing a good or service [1]. In the era of JKN pharmacies can act as a pharmacy behind the reconciliation program (DRR) or the pharmacy network and clinical pharmacy pratama (KP). Areas that have been implementing the three types of the role of these pharmacies, one of the Special Region of Yogyakarta (DIY). A total number of pharmacies, family physicians, and clinics pratama that

joint with BPJS in DIY in 2014 that became the Giver of Health Services (KDP) and the first level of health support services are as much as 12 pharmacies PRB, 124 family physicians, 16 clinics pratama. In this case, only a few facilities that are directly related pharmacy health BPJS, which is only 12 pharmacies PRB (Lawrence, 2015).

Drug costs refer to the entire pharmacy program through a uniform that follows the price of drugs in the catalog plus a profit margin and factors pharmacy services in accordance with the Social Security Act. Pharmacy drug costs and pharmacy networks pratama clinic refers to an agreement made by pharmacists and health facilities. The cost of medicines included in the capitation fees earned each month from BPJS health facilities Health, but there are no clear rules related to margin and pharmacy services [2].

Pharmacies as cooperation with BPJS health support services and family doctor is a good momentum to enhance the role and welfare of pharmacists in Indonesia, which is able to collaborate in a comprehensive manner with a doctor and have a high bargaining power in the health system in Indonesia. The amount of drug costs varied greatly tangent to the profitability of the pharmacy and the pharmacist's welfare. In this study, researchers wanted to know the percentage of the cost of drugs to the primary health facilities capitation, and the cost difference behind refers pharmacy, drugstore networks, and clinical pharmacy pratama DIY.

METHODS

Research design

This research is observational analytic cross-sectional. This observation study uses secondary data JKN patient prescriptions.

Research instruments

The research material JKN patient prescriptions taken retrospectively in March 2015. The tools used in this research is a form created by the researchers based on the Regulation of the Minister of Health of the Republic of Indonesia Number 59 of 2014 About Standard rates Health Care and Health Insurance Program Implementation Guidebook practical Network First Level Health facilities (DPP) with a pharmacy.

Research subjects

Sampling was done by purposive sampling and was elected in March 2015 with 8430 sheet JKN patient prescription drugs, as listed in Table 1. The selection of recipes March 2015 because after the preliminary study, it turns JKN patient prescription data is available and is the most complete in March 2015 in each pharmacy.

Data analysis

Analysis percentage against drug costs capitation system

The percentage of drug cost network pharmacies to family doctors capitation fee and percentage numbers of patient visits per month pharmacy network against family physician capitation obtained as follows:

$(\text{Total cost of drugs per month}) / (\text{cost per month family physicians capitation}) \times 100\%$

Table 1: Number of samples cost drug research of national Health insurance era (sheet recipe)

Pharmacy type	Number of pharmacy	Number of prescription
Networking pharmacy	7	1966
Clinical pharmacy pratama	7	4870
Behind refer pharmacy	6	1594
Total		8430

Drug cost difference analysis era JKN

This study also conducted a comparative analysis of the cost of drugs in pharmacies PRB, pharmacy network, clinical pharmacy pratama using Kruskal-Wallis test and *post-hoc* test by Mann-Whitney.

RESULTS AND DISCUSSION

Analysis of the percentage of drug costs to the system of capitation

The cost of medicines in pharmacies and pharmacy network of pratama clinics included in the capitation fee family physicians and clinics pratama. The capitation system pays to the doctor or clinic pratama for services and the cost of drugs, so the cost of the drug to doctors and clinics pratama burden. Results of research conducted by Martiningsing, in 2009, obtained results that the high cost of drugs per patient on a capitation payment system is lower than the system of payment of fee for service [7].

Table 2 shows that the average percentage of the cost of drugs to the pharmacy network of family doctors capitation of 13.58%. Drug cost-sharing in the cost of capitation health facilities not regulated clearly in the act so that the results of this study can be used as a reference for setting the distribution of drug costs in capitation fees earned health facilities. The number of sheets pharmacy prescriptions received in 1 month is directly proportional to the amount of the drug on the capitation fee. J06 has numbers pharmacy prescription sheet smallest among other pharmacies because these pharmacies serving patients from the dentist. The cost of medicines in the pharmacy network is limited by a cooperation agreement made by pharmacists and family doctors. The family doctor to reduce the cost of drugs the patient to reduce the burden of the cost, while the pharmacist wanted drug costs including profit margin and pharmacist services follow the policy established by the pharmacy. The entire pharmacy network that is used as a place of research (6 pharmacy network) only working with one family doctor, while the number of registered family doctor cooperate with BPJS Health in the province amounted to 124 family physicians. Pharmacies still has a high chance of becoming pharmacy networks collaborate more family doctors. In the capitation payment system, all health-care providers should recalculate the allocation of the cost of services and the cost of medications, thus improving the quality of service. One study conducted by the Division of Health Services Research and Policy, University of Minnesota also has proved that this method of financing health-care provider influence behavior [3].

Table 2: Cost drugs and figures percentage patient visits per month against capitation family physicians pharmacy networking In DIY

Code	Capitation family physicians (persons)	Capitation fee (Rp)	Number of prescribe (n)	Total cost of drugs per month (USD)	Capitation fees against drugs (%)
J01	1012	10.120.000	36	477.500	4.72
J02	5579	55.790.000	338	3.890.100	6.97
J03	3751	37.510.000	1189	16.298.146	43.45
J04	3417	34.170.000	214	5.661.700	16.57
J05	3317	33.170.000	172	2.805.000	8.46
J06	6938	13.876.000	15	184.500	1.33
				Average	13.58

Table 3: Cost drugs and figures percentage patient visits per month against capitation system clinic primary In DIY

Code	Clinic capitation (persons)	Capitation cost (Rp)	Number of prescriptions (n)	Total drug cost per month (Rp)	Drug cost against capitation (%)
KP01	3858	46.296.000	778	11.670.000	25.21
KP02	2243	26.916.000	255	3.841.065	14.27
KP03	4929	59.148.000	1044	15.660.000	26.48
KP04	8142	97.704.000	296	4.440.000	4.54
KP05	653	7.836.000	60	718.603	9.17
KP06	10264	123.168.000	1252	15.615.000	12.68
KP07	7448	89.376.000	1062	17.028.250	19.05
				Average	15.91

Table 4: Comparative cost analysis of drugs in pharmacies era JKN

Pharmacy group	n	Mean±SD P value cost drugs	p value
Pharmacy network	6	Rp: 12.58946±8.87449	0.000
clinical pharmacy pratama	7	Rp: 14.17272±6.42409	
Behind refer pharmacies (PRB)	6	Rp: 143.80727±162.25130	

Pharmacy network versus clinical pharmacy pratama $P < 0.005$; pharmacy network versus behind refer pharmacies $P < 0.005$, clinic pharmacy pratama versus behind refer pharmacy $P < 0.005$

Table 3 shows that the average percentage of the cost of drugs to the clinic capitation pratama in clinical pharmacy pratama worth 15.91%, meaning that this value is greater than the pharmacy network. Pratama clinical pharmacy drug costs are relatively more flexible than the pharmacy network because the pharmacy and health facilities have one management managers and capitation fees earned clinic pratama greater than capitation fees earned family doctor. Pratama clinic can manage and set policy for its own pharmacy. Pharmacists at the clinic pratama can be employees who receive a fixed salary or contract employees pratama clinic. Insurers can better control the availability of drugs and drug price changes, so the service is faster and more efficient [9].

Comparative analysis of drug costs

The table 4 shows the comparison of drug cost in pharmacies era JKN. The results of comparison test drug costs have $p < 0.005$, meaning that at least there is a difference in drug costs for patients once treatment between the two types of pharmacies and statistically significant value ($p = 0.000$). *Post-hoc* test with Mann-Whitney test to determine the type of pharmacy obtained results behind refer Pharmacy (PRB) versus networking pharmacy, networking pharmacy versus clinics pharmacy pratama, behind refer pharmacies (PRB) versus clinical pharmacy pratama worth $p = 0.000$.

Differences in drug costs in three types depending on the pattern pharmacies owned by pharmacy good cooperation with health and health facilities BPJS primary, factors affecting the cost of drugs in JKN era is long days of drug administration, the number of prescriptions, profit margins, and pharmacy services.

Long days of drug administration

Pharmacies networks and clinic pharmacy pratama has average long days of drug administration for 3-5 days, while the average behind refers pharmacy (PRB) old days of drug administration for 30 days. The results of research supported by research conducted by Isnaini who conducts research on primary health facilities on utilization analysis outpatient antibiotic prescriptions first level (RJTK) in Tebet Puskesmas in 2005 showed that the average length of antibiotic drug delivery days 3.96 days or rounded to 4 days [4] (Isnaini, 2007).

Total prescriptions

Pharmacy networks research sample ($n = 6$) only in cooperation with the family doctor, while the family doctor who recorded in the province amounted to 124 doctors, so the recipes that netted less than clinical pharmacy pratama. Prescription the system can facilitate patient's pharmacy network to obtain prescription drugs, but bona fide high administrative costs for the family doctor. Drug costs borne by the family doctor so that not all patients netted prescription in pharmacies [9].

The profit margin

The profit margin pharmacies and pharmacy network of clinics pratama by 20-30%, while the profit margin of pharmacies PRB joined by a factor of pharmaceutical services specified by the Minister of Health Regulation No. 59 of 2014 on the Standard Rates of Health Services in the Implementation of Health Insurance Program. In 1994 in some American states (Idaho, New York, Pennsylvania, Rhode Island, and West Virginia) had a profit margin of prescription drugs by 16%, while in Florida only has a profit margin of 3.6% [8].

Pharmacy services

Pharmacies service in networks varies widely established in accordance with pharmacy policy and agreement with the family doctor. Services pharmacy services per item lowest highest worth Rp 200 and Rp 2,000 worth. Pharmacies service in the PRB has been determined by factors indicative price multiplied by the pharmacy services in accordance drugs e-catalogue [6] (Ministry of Health, 2014). Each state in America has its own rules for reimbursement of drug costs, for dispensing services and profit margins vary widely. For example, in 1994 a very low dispensing services in southern Virginia is US \$ 2.75, while in Maryland and Alaska have consecutive dispensing services of US \$ 6.18 and US \$ 7.45 [8].

CONCLUSION

Drug costs in an era of JKN depending on the pattern of cooperation with health facilities pharmacies and BPJS. The average percentage of the cost of drugs to the pharmacy capitation health facilities in networking lower than clinic pharmacy pratama. Differences in drug cost JKN era influenced by the long days of drug administration, the number of prescription sheets and margin.

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