

Difference analysis of National Health Assurance (JKN) claims based on Hospital Rates and INA-CBGs rates at Dr. Soekardjo Hospital Tasikmalaya

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Abstract. Cost Containment Program is one of hospital management efforts that need to conduct. One early step in the Cost Containment program in hospital is analyzing the differences of JKN claims based on INA-CBGs rates and Hospital rates of Dr. Soekardjo Hospital Tasikmalaya. The objective is to analyze the differences of JKN Claim based on INA-CBGs rates and Hospital rates of Dr. Soekardjo Hospital Tasikmalaya. The research method is quantitative, which non-intervention research, and the study design was observational analytical survey. Researchers used analysis of mean different test. The population in this study is JKN claims data and Rates Hospital Dr. Soekardjo Tasikmalaya by 1st January - 31st December 2015. The sample in this study is total population. Research was conducted for 6 months during May to October 2016. The survey resulted that the entire variable had significant difference with p value = 0.000, it can be concluded that there are differences in the JKN claim average based on INA-CBGs rates and hospital rates as a whole; there are differences in the JKN claim average of patients at Obstetrical and gynecology Departement , Pediatric Departement , surgery Departement , and Internal Medicine Departement ; There is a difference in the JKN Claim average of outpatient claims and inpatients; There is a difference in the JKN claim average of in patients who received surgery services/procedures and patients who received Non surgery services/procedures at Hospital.

Keywords: Difference, Hospital, Rate, INA-CBGs, DRGs.

INTRODUCTION

Quality health care which efficient financing is the expectations of today's society. Based on that every health care provider is required to provide quality services and competitive to attract customers. On the other hand condition that occurs today is the rising cost of health care providers, especially hospitals from year to year. The high costs are influenced by various factors such as inflation affects the value of the price of medical equipment and medicines. Competition among hospitals continues to increase, both from the technology and resources have a tendency Hospital to buy a Sophisticatedinsttumen to facilitate the diagnosis, this will lead to increase financing to be issued by the patients who receive services. For that we need to apply for the public financing system with health cost control program (Cost Containment Program) (Depkes, 2007).

Hospital is a health care institution that organizes personal health services in plenary that provides inpatient, outpatient, and emergency services. The current economic circumstances is a challenge for hospitals to survive and provide the finest quality services to the community with cost-efficient, it needs the right solution to control the cost of hospital services.

There are two methods of payment the hospital used, retrospective and prospective payment method. Retrospective is a method of payments made on health services provided to patients based on each activity of the services provided, the more care is given the greater the cost to be paid. Examples are the retrospective payment patternsis Fee For Service (FFS). Prospective is a method of payments made on health services is a method of reimbursement in which Medicare payment is made based on a predetermined, fixed amount.. Examples of prospective payment is a global budget, per diem, capitation and case-based payment / Diagnosis Related Group (DRG).DRGs are thought to improve efficiency because they provideincentives for hospitals to limit the services per patient and totreat more patients. Previously health systems had used fee forservice or globalbudgets. Fee for service encourages hospitalsto provide many services for each patient but may result inunnecessary or inappropriate treatment and a disregard oftreatment costs (Busse, Et al, 2013)

Prospective payment method known as casemix (case-based payment) / DRGin Indonesia has been applied since 2008 as a method of payment at the Community Health Insurance program (Jamkesmas). Casemix system is a grouping of diagnoses and procedures with reference to the clinical characteristics that are similar and the use of the resource of care that are similar, by using software grouper. Since 2014, along with of the National Health Insurance program (JKN) in Indonesia, Since 2014, along with National Health Insurance program (JKN) in Indonesia, the applicable payment system for participants JKN who get care at the hospital is Indonesian Case Base Groups (INA-CBGs).

Dr. Soekarjo Hospital Tasikmalaya is one of the state-owned health facilities providing services comprehensively covers ambulatory, Inpatient and Emergency, as the local government-owned Hospital Hospital Soekardjo providing services to a wide range of patients the participants of JKN. The current tariff scheme used by the Dr. Soekarjo Hospital using Regional Regulation (Perda) rate where the amount of the tariff is based on the calculation of unit cost, whereas patients who were participants of JKN, paid by BPJS using INA-CBGS package rate which is the development of methods casemix. System casemix is a grouping of diagnoses and procedures with reference to the clinical characteristics were similar and maintenance costs are similar, while hospital rates guided by the Perda tariff regulation system oriented payment of fee for service where more types of services who received by patient, the longer patient care will be higher then the cost of services. In some cases the hospital rates could be considerably lower than the rate INA CBGS which means that in that case the cost of patient care overpaid by BPJS, otherwise there are some cases by hospital higher than rates INA-CBGS which means that in that case the service charge underpaid by BPJS. The different types of rates in the financing of hospital services need to be addressed properly by the hospital management, as one of the bases to take steps to improve the quality with a more efficient cost.

The aim of the research is to analyzing the differences of JKN Claim based on INA-CBGS rates and Hospital rates of Dr. Soekardjo Hospital Tasikmalaya.

MATERIALS AND METHODS

Study area

Metode

The research method is quantitative, which non-intervention research, and the study design was observational analytical survey. Researchers used analysis of mean different test. The population in this study is JKN claims data and Rates Hospital Dr. Soekardjo Tasikmalaya by 1st January - 31st December 2015. The sample in this study is total population. Research was conducted for 6 months during May to October 2016

Procedures

Data Collecting

Data Research is a secondary data of INA-CBGS claim period 1 January 2015-31 December 2015, obtained from INA-CBGS casemix manager in the form of TXT files per month.

Processing / tabulating data

The collected data then processed according to the needs of research into multiple files such as overall claims file, file of claims based on services Departement 's (Obstetrical and gynecology Departement , Pediatric Departement , surgery Departement , and Internal Medicine Departement), file of claims based on services area (inpatient, outpatient), file of claims based onin patients with surgery and patients Non surgery.

Data analysis

Univariate

A univariate analysis performed to describe each variable studied by analyzing all of the data distribution, divided into The hospital revenues based on hospital rates and hospital revenue based on claim of INACBG rates.

Bivariate

This analysis performed to analyzing the difference between the expected value to the observed value, when both variables were no significant differences, then there are no significant relationship between those two variables.

RESULTS AND DISCUSSION

Results

1. The Difference of Overall Claim Of JKN Based On Hospital Rate And INA CBGS Rates

Tabel 1. Overall claim based on Hospital Rates Year 2015

No	Month	Hospital Rate			
		amount	mean	Min	max
1	jan	4.980.983.508	546.400	2.740	64.326.640
2	feb	5.121.699.476	576.054	500	27.470.352
3	mar	5.151.090.623	534.068	1.400	59.180.887
4	Apr	5.250.775.955	564.114	1	26.520.466
5	May	4.839.484.716	592.784	0	36.099.070

6	Jun	5.163.235.984	616.064	1	36.080.720
7	Jul	5.021.974.828	700.317	0	36.091.642
8	Aug	5.443.456.233	637.781	0	24.249.672
9	Sep	5.532.814.980	653.765	-	34.332.532
10	Okt	5.797.883.582	681.142	-	53.736.665
11	Nov	5.342.240.543	643.566	15.000	17.827.484
12	Des	5.496.446.075	651.469	3.734	61.667.577

Based on Table 1, the claim rates based on hospital rate ranging from Rp. 4,980,983,508 to Rp. 5.797.883.582 with the average claim per individual patient is between Rp. 534 068 up to Rp. 653 765. Minimum data rate found O rates were maximum rate were Rp. 64.326. 640.

Table 2. Overall claim Based on INA CBGs Rate Year 2015

No	Month	INACBGs			
		amount	mean	Min	max
1	jan	6.596.407.228	723.608	76.900	24.301.700
2	feb	7.141.056.272	803.178	76.900	48.593.700
3	mar	7.042.640.672	730.186	-	48.593.700
4	Apr	7.360.359.402	790.756	76.900	48.593.700
5	May	6.364.032.066	779.524	0	29.162.100
6	Jun	6.534.457.914	779.675	0	33.160.800
7	Jul	6.162.183.222	859.319	0	34.022.400
8	Aug	6.832.063.212	800.476	76.900	25.716.400
9	Sep	7.201.372.294	850.924	97.200	38.687.600
10	Okt	7.494.201.332	880.428	100.600	38.687.600
11	Nov	6.631.742.058	798.909	89.800	27.238.100
12	Des	6.831.670.304	809.727	-	48.593.700

Based on Table 2 the claim rates based on INA CBGs rate ranging from Rp. 6.162.183.222 to Rp. 7.494.201.332 each month, claim per individual ranging Rp. 723.608 to Rp. 880.428 minimal rate Rp. 0 while maximal Rp. 48.593.700.

Table 3. Difference of Overall Claim Based on Hospital Rate and INA-CBGs Rate

PairedT Test					
Hospital rate Mean	rate	INA-CBGs Mean Rate	T Test	Significant	R value
639.976		839.042	-53.005	0,000	0.78

Paired - samples t test result to test the hipotesis, there are differences in the average value, based on Hospital rate mean = 639 976 while INA-CBGs rates mean = 839 042 with a significant difference t value = -53 005 and p value = 0.000. The test results also showed a positive correlation values, very strong and significant ($r = 0.78$).

2. The Difference Claim of JKN Based On Hospital Rate and INA CBGs Rates According To Four Main Services Departement.

a. Obstetric and Gynecologic Departement

The JKN claim rates based on hospital rate ranging from Rp. 832.492.984 to Rp. 1.145.428.237 with the average claim per individual patient is between Rp. 1.056.463 up to Rp. 3.272.602. Minimum data rate found Rp. 4.825 and maximum rates were Rp. 64.326.640

The JKN claim rates based on INA CBGs rates, rate ranging from Rp. 1.107.423.600 to Rp. 1.363.862.500 with the average claim per individual patient is between Rp. 1.405.360 up to Rp. 3.899.486 Minimum rate found O and maximum rates were Rp. 48.593.700.

Table 4. Difference of Claim Based on Hospital Rate and INA-CBGs Rate in Obstetric and Gynecologic Departement

T Test Paired					
Hospital rate Mean	INA-CBGs Mean Rate	T Test	Significant	R value	
1.624.587	1.984.179	-21.638	0,000	.800	

Paired - samples t test result to test the hipotesis, there are differences in the average value, based on Hospital rate mean = 1.624.587 while INA-CBGs rates mean = 1.984.179 with a significant difference t value = -21.638 and p value = 0.000. The test results also showed a positive correlation values, very strong and significant (r = .800), which mean the increases of hospital rate following by increases of INA-CBGs rate.

b. Pediatric Departement

The JKN claim rates based on hospital rate ranging from Rp. 164.256.782 to Rp. 391.657.292 with the average claim per individual patient is between Rp. 1.405.360 up to Rp. 3.899.486 Minimum rate found Rp. 0 and maximum rates were Rp. 36.099.070.

The JKN claim rates based on INA CBGs rates, rate ranging from Rp. 325.868.444 to Rp. 832.629.948 with the average claim per individual patient is between Rp. 729.012 up to Rp. 1.522.387 Minimum rate found 0 and maximum rates were Rp. 48.593.700.

Table 5. Difference of Claim Based on Hospital Rate and INA-CBGs Rate in Pediatric Departement

Paired T Test					
Hospital rate Mean	INA-CBGs Mean Rate	T Test	Significant	R value	
658.417	1.353.497	-25.206	0,000	0,547	

Paired - samples t test result to test the hipotesis, there are differences in the average value in pediatric Departement , based on Hospital rate mean = 658.417while INA-CBGs rates mean = 1.353.497 with a significant difference t value = -21.638 and p value = 0.000. The test results also showed a positive correlation values, strong and significant (r = .547), which mean the increases of hospital rate following by increases of INA-CBGs rate.

c. Surgery Departement

The JKN claim of surgery Departement each month based on hospital rate ranging from Rp. 476.585.552 to Rp. 999.927.074 with the average claim per individual patient is between Rp. 392.217 up to Rp. 1.668.928 Minimum rate found Rp. 0 and maximum rates were Rp. 43.144.273.

The JKN claim rates of surgery Departement each month based on INA CBGs rates, ranging from Rp. 248.974.900 to Rp. 1.241.591.400 with the average claim per individual patient is between Rp. 485.331 up to Rp. 2.180.478 Minimum rate found 0 and maximum rates were Rp. 38.687.600

Table 6. Difference of Claim Based on Hospital Rate and INA-CBGs Rate in Surgery Departement

Paired T Test						
N	Hospital rate Mean	INA-CBGs Rate	Mean	T Test	Significant	R value
7.859	1.167.556	1.444.167		-13.402	0,000	0,809

Paired - samples t test result to test the hipotesis, there are differences in the average value in SuegeryDepartement , based on Hospital rate mean = 1.167.556 while INA-CBGs rates mean = 1.444.167 with a significant difference t value = -13.402 and p value = 0.000. The test results also showed a positive correlation values, very strong and significant (r = .809), which mean the increases of hospital rate following by increases of INA-CBGs rate.

d. Internal Medicine Departement

The JKN claim of Internal Medicine Departement each month based on hospital rate ranging from Rp404.585.497 to Rp1.214.144.909 with the average claim per individual patient is between Rp. 949.651 up to Rp. 1.697.852 Minimum rate found Rp. 500 and maximum rates were Rp. 19.116.510.

The JKN claim rates of Internal Medicine Departement each month based on INA CBGs rates, ranging from Rp. 1.403.901 to Rp. 1.702.155.600 with the average claim per individual patient is between Rp. 1.167.556 up to Rp. 1.868.123 Minimum rate foundRp. 97.200 and maximum rates were Rp. 34.022.400.

Table 7. Difference of Claim Based on Hospital Rate and INA-CBGs Rate in Internal Medicine Departement

Paired T Test						
N	Hospital rate Mean	INA-CBGs Rate	Mean	T Test	Significant	R value
9.714	1.255.463	1.821.734		-34.80	0,000	0,686

Paired - samples t test result to test the hipotesis, there are differences in the average value in Internal medicineDepartement , based on Hospital rate mean = 1.255.463 while INA-CBGs rates mean = 1.821.734 with a significant difference t value = -34.80and p value = 0.000. The test results also showed a positive correlation values, strong and significant (r = .686), which mean the increases of hospital rate following by increases of INA-CBGs rate.

3. The Difference of Claim Of JKN Based On Hospital Rate And AndINA CBGs Rates According To Type of Services

a. Outpatient

The JKN claim of Outpatient Serviceseach month based on hospital rate ranging from Rp1.259.477.915 to Rp. 1.379.800.836 with the average claim per individual patient is between Rp. 177.764 up to Rp. 1.202.423 Minimum rate found Rp. 0 and maximum rates were Rp. 64.326.640.

The JKN claim rates of Outpatient Services each month based on INA CBGs rates, ranging from Rp. 1.748.175.400 to Rp. 1.964.764.100 with the average claim per individual patient is between Rp. 225.222 up to Rp. 249.685 Minimum rate found Rp 0and maximum rates were Rp. 3.780.000.

Table 8. Difference of Claim Based on Hospital Rate and INA-CBGs of Outpatient Services

T Paired T Test						
N	Hospital rate Mean	INA-CBGs Rate	Mean	T Test	Significant	R value
83.636	232.063	291.419		-36.38	0,000	0,726

Paired - samples t test result to test the hipotesis, there are differences in the average valueof Outpatient Services , based on Hospital rate mean = 232.063 while INA-CBGs rates mean = 291.419 with a significant difference t value = -36.38and p value = 0.000. The test results also showed a positive correlation values, very strong and significant (r = .726), which mean the increases of hospital rate following by increases of INA-CBGs rate.

b. Inpatient

The JKN claim of inpatient Services each month based on hospital rate ranging from Rp3.383.926.883 to Rp. 4.363.565.029 with the average claim per individual patient is between Rp. 3.290.263 up to Rp. 3.964.696 Minimum rate found Rp. 0 and maximum rates were Rp. 61.667.577

The JKN claim rates of Inpatient Services each month based on INA CBGs rates, ranging from Rp4.706.923.128 to Rp. 5.691.956.932 with the average claim per individual patient is between Rp. 4.347.971 up to Rp. 4.842.199 Minimum rate found Rp 0and maximum rates were Rp. 48.593.700.

Table 9. Difference of Claim Based on Hospital Rate and INA-CBGs of Inpatient Services

Paired T Test						
N	Hospital rate Mean	INA-CBGs Rate	Mean	T Test	Significant	R value
20.717	2.267.378	2.997.668		-41,208	0,000	0,707

Paired - samples t test result to test the hipotesis, there are differences in the average value of Inpatient Services , based on Hospital rate mean = 2.267.378 while INA-CBGs rates mean = 2.997.668 with a significant difference t value = 41,208and p value = 0.000. The test results also showed a positive correlation values, very strong and significant (r = .726), which mean the increases of hospital rate following by increases of INA-CBGs rate.

4. The Difference of Claim Of JKN Based On Hospital Rate And AndINA CBGs Rates According to Services With And Without Surgery Procedure

a. Services With Surgery Procedure

The JKN claim of Services With Surgery Procedure each month based on hospital rate ranging from Rp3.085.358.466 to Rp. . 4.014.777.791 with the average claim per individual patient is between Rp. 749.846 up to Rp. 1.852.689 Minimum rate found Rp. 0 and maximum rates were Rp. 64.326.640.

The JKN claim rates of Services With Surgery Procedureeach month based on INA CBGs rates, ranging from Rp. 4.099.920.728 to Rp. 5.051.739.232 with the average claim per individual patient is between Rp. 1.801.441 up to Rp. 2.331.213 Minimum rate found Rp 0and maximum rates were Rp. 48.593.700.

Table 8. Difference of Claim Based on Hospital Rate and INA-CBGs of Services With Surgery Procedure

Paired T Test						
N	Hospital rate Mean	INA-CBGs Rate	Mean	T Test	Significant	R value
25.588	1.605.702	2.066.519		-40.49	0,000	0,803

Paired - samples t test result to test the hipotesis, there are differences in the average value of Outpatient Services, based on Hospital rate mean = 1.605.702 while INA-CBGs rates mean = 2.066.519 with a significant difference t value = -40.49 and p value = 0.000. The test results also showed a positive correlation values, very strong and significant (r = . 803), which mean the increases of hospital rate following by increases of INA-CBGs rate.

b. Services Without Surgery Procedure

The JKN claim of Services Without Surgery Procedure each month based on hospital rate ranging from Rp1.887.521.262 to Rp. 2.036.341.010 with the average claim per individual patient is between Rp. 190.587 up to Rp. 318.217 Minimum rate found Rp. 0 and maximum rates were Rp. 64.326.640.

The JKN claim rates of Services Without Surgery Procedure each month based on INA CBGs rates, ranging from Rp. 1.739.446.800 to Rp. 2.848.520.500 with the average claim per individual patient is between Rp. 240.270 up to Rp. 358.176 Minimum rate found Rp 0 and maximum rates were Rp. 19.054.200.

Table 9. Difference of Claim Based on Hospital Rate and INA-CBGs of Services Without Surgery Procedure

Paired T Test						
N	Hospital rate Mean	INA-CBGs Rate	Mean	T Test	Significant	R value
78.765	285.188	379.048		-30.91	0,000	0,589

Paired - samples t test result to test the hipotesis, there are differences in the average value of Outpatient Services, based on Hospital rate mean 285.188 while INA-CBGs rates mean = 379.048 with a significant difference t value = -30.91 and p value = 0.000. The test results also showed a positive correlation values, strong and significant (r = .0589), which mean the increases of hospital rate following by increases of INA-CBGs rate.

Discussion

1. The Difference of Overall Claim Of JKN Based On Hospital Rate And INA CBGs Rates

The results showed a difference in the average value of the overall claim based on hospital rates and INA-CBGs rates with a significant difference, which shows a positive correlation values, very strong and significant. These results provide evidence that hospitals rates were below the average rates for the INA-CBGs rates for Hospital Type B non Educational. This is supported by the fact that hospital rate today is rate which applied since 2006, while the INA-CBGs rates were applied rates since 2014.

Hospital rates are tariffs imposed by the rules of regulation (Perda) No. 4 of 2006 on Special Provisions Dan Levy Health Care Dr. Soekardjo General Hospital In Class B Non Educational. These hospital rate prepared by the drafting team in the hospital with a unit cost method, every expenditure is calculated, to know the value or real cost. Then the costs arising from the results of these calculations submitted for approval by the City Council, will be calculated will be adjusted to the capacity of people. The rates determined based on the unit cost adjusted for the increase in price of fuel oil (BBM) and considering the economic ability and the surrounding Hospital Structure Determination Principle and tariffs are as follows:

Principles and objectives in determining the structure and size of the tariff is to cover part or all of the costs:

- a. investment;
- b. equipment and its maintenance;
- c. examination and medical treatment,
- d. treatment,
- e. board and lodging;
- f. procurement patient card
- g. operations; (Regulation no. 24 of 2006)

Basiss of calculation for INA-CBGs is different, Rates INA-CBGs a tariff issued by the Center for Health Insurance (PPJK) Ministry of Health. INA-CBGs tariff has 1,077 tariff group consists of 789 code group / group hospitalization and group code 288 / outpatient group, using a coding system to ICD-10 for diagnosis and ICD-9-CM for procedure / action. Grouping diagnosis codes and procedure done using UNU Grouper. Which is developed by the United Nations University (UNU).

Basic grouping in INA-CBGs use codification system of final diagnosis and procedure being output services, with reference to ICD-10 for diagnoses and ICD-9-CM for procedure. Grouping using information technology systems in the form of Application INA-CBGs thus produced 1,077 Group / Group Cases group consisting of 789 inpatient cases and 288 cases of outpatient group. INA-CBGs rates used in the National Health Insurance program (JKN) per January 1st, 2014 enacted by Ministry of Health, Grouping rate based on the adjustment after seeing the magnitude Hospital Base Rate (HBR) pain is obtained from calculation of total hospital expenses. If in a group terdapatlebi of one hospital, then used the Mean Base Rate. (Permenkes no. 27, 2014)

Based on the description above can be concluded tariff hospital that is still valid today is a vastly Out of Date because it is a product of the team's calculations the unit cost in 2006, or approximately 10 years ago, in which up to this time the price of fuel alone has several times adjusted , While INA-CBGs rates was starting since 2014 is the result of the calculation year 2010, which is more updated with the current conditions.

The next step that needs to be done by the hospital management is doing a costing analysis, one of which is by way of a cost-accounting system. Cost-accounting systems could enable hospital managers to collect, summarize, analyse and control the most relevant information regarding the allocation of resources and reimbursement of hospital services , Finkler et al., 2007; Horngren et al., 2006 in Siok et al.

Comprehensive cost-accounting systems are able to identify the costs which are generated by some unit of analysis (such as by a diagnosis-related group (DRG) and could support the development of DRG-based payment rate-setting mechanisms based on standardized cost data (Nathanson, 1984 in Siok et al.).

Hypothesis there are difference in average JKN claim based on Hospital and INA-CBGs at dr. Soekardjo Hospital Tasikmalaya accepted.

2. The Difference of JKN Claim Based On Hospital Rate and INA CBGs Rates According To Four Main Services Departement.

The result showed there are differences in the average value of JKN claim in four main service Departement such as Obstetric and Gynecologic Departement , Pediatric Departement , Surgery Departement and Internal Medicine Unit based on Hospital and INA-CBGs rate with a positive correlation values which is strong and very strong also significant, and that was mean the increases of hospital rate following by increases of INA-CBGs rate.

The four main Departement are serving various types of services, namely: Outpatient, Emergencies and Inpatient include observation, care, diagnosis, treatment, medical rehabilitation, Medical Operative, Medical Non-Operative and or other health occupying; (Local Regulation / Perda No. 24, 2006).

Those Departements were the main speciality Departement that must exist at the Hospital Type B non educational. Rates in cases handled by Departement Obstetrics and Gynecologi was already covered by hospitals rates in 2006 has an average tariff is less than the tariff INA CBGs. In this Departement many services that should be done with surgery such as Cesaria Sectio. In addition to surgery are also many other measures, such act of non-operative labor and other procedures.

Hypothesis there are difference in average JKN claim based on Hospital and INA-CBGs in four main Departement at dr. Soekardjo Hospital Tasikmalaya accepted.

3. The Difference of JKN Claim Based On Hospital Rate And And INA CBGs Rates According To type of services

a. Outpatient

The result showed there are a bit wider range between average of individual claim base on hospital rate and INA-CBGs rate. Nonetheless T test results showed that there are differences in the value of the claim based on the rates of outpatient hospital and INA-CBGs with significant. The test results also show positive and strong correlation value which means increased hospital rates also followed by an increase in INA-CBGs rates.

Outpatient is a service that can be provided in the installation of the Outpatient and installation of emergency being treated for less than 24 hours, including the observations therein care, diagnosis, treatment, medical rehabilitation, Operative and Non operative Treatment, and other health care without occupying a bed; (Local Regulation No. 24 of 2006).

Rates of service refers to the tariff regulation dr. Soekardjo hospital year 2006 with an average tariff is less than the tariff INA-CBGs. Hypothesis there is differences in the average JKN claim based hospital rates and INA-CBG'S of outpatient at dr. Soekardjo Hospital Tasikmalaya accepted.

b. Inpatient

The results showed a very large range between the average claim per individual based on hospital rates with the INA-CBGs rates, amounting to Rp. 730 289. T test results that show that there are differences in the average value of inpatient claims based on hospital rates and INA-CBGs rates significantly. The test results also showed a positive correlation value, and very strong, which means an increase in hospital rates also followed by an increase in INA-CBGs rates.

Inpatient care is a service that can be provided in the Inpatient Departemen and department of Emergency were hospitalized more than 24 hours, including the observations therein care, diagnosis, treatment, medical

rehabilitation, Operative and Non Operative Procedure other health services that occupy bed; (Regulation No. 24 of 2006). Hospital Rates refers to the regulation of tariffs 2006 with an average tariff is less than the tariff INA CBGs. The number of patients with inpatient care totaled 20.7174 patients over 1 year of the patient's total as much as 104 353 (19.86%). Hypothesis there is differences in the average JKN claim based on hospital rates and INA-CBG'S of inpatient at Dr. Soekardjo Hospital Tasikmalaya accepted.

5. The Difference of Claim of JKN Based On Hospital Rate And And INA CBGs Rates According to Services With And Without Surgery Procedure

a. Services With Surgery Procedure

The results showed a fairly large range between the average claim per individual based on hospital rates and tariff-CBGs INA, amounting to Rp. 460 817. T test results showed that there were differences in the average value of the claim cases with surgery based on hospital rates and INA-CBGs rates significantly. The test results also showed a positive correlation values and very strong which means increased hospital rates also followed by an increase in INA-CBGs rates.

Surgery services served by the entire department, Outpatient, Emergency, Inpatient, including observation, care, diagnosis, treatment, medical rehabilitation, (Regulation No. 24 of 2006).

These include services with medical procedures nonoperative and operative medical procedures performed in the operating room. Rate refers to the hospital rate of Dr. Soekardjo 2006 with an average tariff is less than the tariff INA-CBGs. The number of patients given medical treatment, there were 25.588 patients over 1 year of the patient's total as much as 104 353 (24.5%).

Hypothesis there is differences in the average JKN claim based on hospital rates and INA-CBG'S of Services With Surgery Procedure at Dr. Soekardjo Hospital Tasikmalaya 2015 accepted.

b. Services Without Surgery Procedure

The results showed a not too large range between the average claim per individual based on hospital rates and tariff-CBGs INA, amounting to Rp. Rp. 93.859. This value is much smaller than the average difference in surgery rates. Nevertheless, T test results showed that there were differences in the average value of the claim cases with surgery based on hospital rates and INA-CBGs rates significantly. The test results also showed a positive correlation and strong which means increased hospital rates also followed by an increase in INA-CBGs rates.

Non Surgery services also served by the entire department, Outpatient, Emergency, Inpatient, including observation, care, diagnosis, treatment, medical rehabilitation, (Regulation No. 24 of 2006).

The number of patients given medical treatment, there were 78.765 patients over 1 year of the patient's total as much as 104 353 (75,4%).

Hypothesis there is differences in the average JKN claim based on hospital rates and INA-CBG's of Services Without Surgery Procedure at Dr. Soekardjo Hospital Tasikmalaya accepted.

CONCLUSION

1. There are differences in average value of overall JKN claim based on Hospital and INA-CBGs in Dr. Soekardjo Hospital Tasikmalaya,
2. There are differences in the average value of JKN claim in four main service Department such as Obstetric and Gynecologic Department, Pediatric Department, Surgery Department and Internal Medicine Department based on Hospital and INA-CBGs rate.
3. There are differences in the average value of JKN claim based on hospital rates and INA-CBG'S of both outpatient and inpatient
4. There are differences in the average value of JKN claim based on hospital rates and INA-CBG'S of both in surgery case and non surgery case.
5. Differences occur because of differences in the rate calculation method and different calculating time. Hospital rates are calculated using the method of unit cost, while the INA-CBGs calculated by using the method NCC average basis. The magnitude of the differences also occur because of the time difference calculations where rates calculated Hospital before 2006, while the INA-CBGs rates were calculated using the data in 2010 and in use 2014.

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REFERENCES

- BPJS. 2012. Pedoman Administrasi BPJS
- Busse, Reinhard. Et al. 2013. Diagnosis related groups in Europe: moving towards transparency, efficiency, and quality in hospitals? University of Wollongong, Research Online. BMJ (Clinical research ed.), 347 (7916), 1-7.
- Depkes. 2007. *Penggunaan system Casemix* taken: <http://www.depkes.go.id/index.php?option=news&task=viewarticle&sid=1522&itemid=2>. Downloaded March 14th 2007
- Dharma, K.K. 2011. Metodologi Penelitian Keperawatan: Panduan Melaksanakan Dan Menerapkan Hasil Penelitian. Jakarta
- Hendrartini. 2007. Alternatif pembayaran provider dalam asuransi kesehatan. <http://www.aihhw.gov.au>. Downloaded February 5th 2016.
- Hartono, D. 2007. DRG. <http://www.gizi.net/cgi-bin/berita/fullnews>. Downloaded February 5th 2016.
- Heurgren M. 2000. Casemix and Costing the report patient classification system For nursing. <http://www.federation.of Country councils: Swedia>. Downloaded April 5th 2007
- ICN. 2007. *Diagnosis Related Group*. dari <http://www.icn.ch/matters.drg.htm>. Downloaded February 5th 2016
- Peraturan Daerah Kota Tasikmalaya Nomor 4 Tahun 2006 Tentang Ketentuan Khusus Dan Retribusi Pelayanan Kesehatan Pada Rumah Sakit Umum Daerah Kelas B Non Pendidikan Kota Tasikmalaya
- Permenkes No. 69 tahun 2014 ttg Tarif Pelayanan Kesehatan Program JKN.
- Permenkes No. 27 tahun 2014 ttg Petunjuk Teknis Operasional sistem INA CBGS.
- RSUD dr. Soekardjo, Profil RSUD dr. Soekardjo Tahun 2015 Kota Tasikmalaya
- Siok Swan Tan, et all. 2011. Which is driving which? In : Reinhad Busse, et al. (eds) *Diagnosis-related Groups in Europe: Moving Towards Transparency, Efficiency and Quality in Hospitals?*. Open Oniversity Press. berkshire
- Undang-undang NO. 40 Tahun 2004 tentang Rumah Sakit.
- WHO. 2007. *Diagnosis Related Group*. <http://www.icn.ch/matters.drg.htm>. Downloaded February 3rd 2016