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COMPARISON OF INACBGS, HOSPITAL, UNIT COST BASED ON THE ACTIVITY BASED COSTING METHOD DELIVERY AT CLASS C PRIVATE HOSPITALS

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INACBGS Rates; Activity Based Costing; Hospital Rates; Normal Delivery; Caesarean Section.

ABSTRAK
The era of the National Health Insurance (JKN) made hospitals have to make efficiency in their services, one of which is childbirth. Payment of BPJS Kesehatan through INACBGS is deemed insufficient to cover the hospital's profit margin. Moreover, the INACBGS rates is currently a rates product issued in 2016. It makes hospitals have to make efficient service rates so that they can develop their service quality and sustain them. Dinda Hospital is a class C private hospital with a business focus and BPJS Kesehatan patient care and has excellence in maternal care. The unit cost calculation technique using the Activity Based Costing (ABC) technique can provide an overview of rates efficiency. The purpose of this study was to compare the differences of 3 hospital rates, INACBGS rates, and ABC rates for normal delivery and caesarean section. Research is comparative analytic with cross sectional design. The clinical pathway is used to calculate ABC rates. The sample used was 30 samples of BPJS class 1 patients from each action (normal delivery and caesarean section) and the three rates were compared, namely hospital rates, INACBGS rates, and ABC rates using t-test dependent. Showed a significant difference in rates (p <0.005) between the INACBGS rate and the hospital rate for normal delivery (mean INACBGS 2,227,700, mean rate rs 5,491,462) and Caesarean (mean INACBGS 6,965,200, mean rate of rs. 6,557,208). there was a significant difference (p <0.005) between the hospital rate and the ABC rate for normal delivery (mean ABC rate 2,206,588).

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INTRODUCTION

The era of National Health Insurance (JKN) in Indonesia made public access to health services easier. The increasing number and growth of hospitals that collaborate with the Health Social Security Administration (BPJS) indicates this. Access to health services for pregnant women, especially hospitals, has also increased since the implementation of this JKN (Baer, 2020).

The highest JKN service for maternal and child health is for childbirth financing. The average expenditure for childbirth is 74% of maternal and child health services. JKN spending on hospital deliveries increased by 31.5% from Rp 2.48 trillion in 2014, to Rp 3.26 trillion in 2015. This is in line with data in private hospitals that work with BPJS Kesehatan, where there is a significant increase in human resources for maternal and child services, the average addition of obstetrician increased from 3.7 in 2013 to 4.7 in 2016 (Baer, 2020).

Hospitals need to adjust the efficiency of the costs generated from JKN services, especially delivery services for pregnant women. The Government of the Republic of Indonesia has regulated the pattern of claim payments to advanced health facilities by implementing Indonesian Case Based Groups (INACBGs). INACBGs rates have been stipulated in the Minister of Health Regulation Number 52 of 2016 concerning the Standard for Advanced Level Health Service Rates in the Implementation of Health Insurance (Hagopian et al., 2009)

This rate is the amount of claim payment by BPJS Kesehatan to advanced level health facilities for service packages based on disease diagnosis grouping according to hospital regional, hospital class and treatment class. Normal delivery is one of the diagnoses where the payment rate is regulated in INACBGs with code O-6-13, while caesarean section (SC) is included in the diagnosis where the payment rate is regulated with code O-6-10 (Ministry of Health, 2016).

In the JKN era, hospitals that served JKN patients were required to be able to make efficiency in terms of services so that the real cost of a service could be lower than the rate in INACBGs. This is for the hospital can take advantage of the services provided to patients, so that the hospital can continue to develop the quality of its services.

Research conducted conducted at RSUD Konodale stated that the disparity in INACBGs rates and real hospital rates was very large, from the results of research in October-December 2017, it was found that the disparity was IDR 110,530,344.00. In addition, it was also stated that the unit cost rates were found to be lower than INACBGs for class 1 and VIP services. In addition, it is stated that the rates at the hospital are higher than the existing INACBGs rates.

This is also in line with the research conducted which examined the rates for Caesarean without complications at XY Hospital in Kudus Regency, from the results of the study it was found that there was a difference between the real costs incurred by the hospital and the standard INACBGs rates (Widjayanto & Suryawati, 2017). INACBGs rates cannot cover hospital expenses in providing Caesarean services without complications (Widjayanto & Suryawati, 2017)

The concept of the Activity Based Costing (ABC) system is generally applied to increase the effectiveness and efficiency in the use of costs in various organizations, which is reflected in the creation of a cost system that refers to activities. For health organizations, this concept is very good to support the social mission they carry, because this concept will create efficiency and effectiveness in terms of cost consumption which

will ultimately benefit the poor through lowering the overall tariff for health services (Anjara et al., 2019).

From research conducted by Damayanti in 2017, unit cost calculations using the ABC method obtained lower results compared to the unit cost at Bhayangkara Hospital Yogyakarta. The results of calculating the unit cost of Caesarian services through the ABC method were also found to be lower than the applicable INACBGs rates (Damayanti, 2017).

The INACBGS rates currently used also still use the rates issued in 2016 through the Minister of Health Regulation Number 52 of 2016 concerning Standard Rates for Advanced Level Health Services in the Implementation of Health Insurance. This rate is deemed irrelevant for use in hospitals due to several inflationary factors per year, increased capital prices such as medicines and employee salaries.

Dinda Tangerang Hospital is a class C private hospital that serves BPJS Kesehatan patients. BPJS Kesehatan patients in this hospital account for 90% of the total patients. The advantages of Dinda Tangerang Hospital are in maternal and child health services, one of which is childbirth services. This hospital has been fully accredited by the Hospital Accreditation Commission (KARS).

The act of giving birth to both normal delivery and caesarean section is one of the big revenue sources for this hospital. Because of this, in this study the researcher wanted to know how the 3 rates were compared, namely the Hospital Rate, the INACBGS Tariff and the ABC-based unit cost rate for normal labor and caesarean section. Furthermore, the researcher wants to find out whether there is a significant difference between the three rates with the hope that this research can be good literacy for hospitals, BPJS Kesehatan, and stakeholders in determining future policy directions (Organization, 2016).

METHODS

This type of research is a comparative analytical observation using a cross sectional study design according to the perspective of the hospital. The data collection method was carried out retrospectively, namely tracing the patient's medical record documents, claiming BPJS Health payments, medical expenses for Caesarean and Normal delivery patients, hospital clinical pathways, and calculation of hospital rates.

Population and Sample

The sampling technique was purposive sampling where the researcher took a sample of patients with the inclusion criteria of BPJS Kesehatan participants, performed sectio and normal delivery without complications, and treatment was in accordance with the clinical pathway in the hospital. While the exclusion criteria included patients who did not fit the clinical pathway, were treated in intensive care, and there were complications of the action. The study population was taken from patients with Normal delivery and Caesarean action with BPJS Kesehatan guarantor in the months of service from January to March 2020.

The sample of this research is BPJS Kesehatan class 1 service because it is the patient with the largest population in the hospital and the most beneficial for the hospital where the study is located. The total population was 43 patients for normal delivery and 75 patients for caesarean section. The sample taken from each action was 30 patients, this

is based on the opinion for a comparative study, the recommended sample size is 30 research subjects (Adler et al., 2016).

Research Variable

The variables in this study were normal delivery rates for normal delivery, INACBGS rates for normal delivery, ABC rates for normal delivery, rates for Caesarean Hospital, INACBGS rates for caesaria section, and rates for ABC section caesaria.

From this research variables, the researcher wants to know whether there are significant differences between the three levels, so that the relationship between the research variables in the research constellation framework is as follows:

RESULTS AND CONCLUSIONS

Results

Calculation of Activity Based Costing (ABC) Rates, Hospital Rates, and INACBGS

The ABC rate calculation uses clinical pathways for normal labor and caesarean section as a guide for calculating resources and activities. ABC activity-based costing systems are designed on the premise that the resulting product or service requires activity. Activities in the form of resource consumption (Anjara et al., 2019).

Researchers created a matrix for calculating ABC rates by mapping the activities and resources used on clinical pathways. Furthermore, from each activity the weight of financing is measured based on the weight of the financing available in the hospital in the finance and rates sections. (tables 1 and 2)

Resources are an economic element that is used to support the performance of activities. Salary expenses and inventory, for example, are resources used to support activities. Activity is a collection of actions carried out in an organization / hospital that is useful in the ABC method (Baker, 1998).

Table 1 matrix of the proportion of activities based on the cost driver for normal labor

	AKTIVITAS DALAM CLINICAL PATHWAY											
	Tindakan Partus Normal						Perawatan Pasca Persalinan					
	Tempat bersalin		aktivitas;kamar				Ruang perawatan nifas					
	Pendaftaran	Pemeriksa...	Pemeriksa...	Asuhan ...	Pemberia...	akomond...	Resusitas...	akomond... asi	Pem. ...	visite	Asuhan ...	Pemberia...	administrasi	total
1. Biaya Langsung														
Sp. Obsgyn				90						10				
Sp. Anak														
Bahan medis habis pakai		5	5	50	5		20		5		10			
Gizi						40		60						

Dokter Umum									100			
2. Biaya Overhead Langsung												
Bidan		10		60	10		20					
Apoteker					60						40	
Analis			60						40			
Perawat							60				25	15
Sewa alat VK				70			30					
Akomodasi Ranap Nifas								100				
3. Biaya Overhead Tidak Langsung												
Laboratorium			60									
Farmasi					70							
LPSRS												
Rekam Medis	5	20	5	30	5		10		5	5	10	5
Kasir									5			
Keuangan												
ATK	5	10	5	25	3	3	10	5	4	5	20	5
Telepon/Air/Listrik	3	10	3	15	3	20	10	20	2	2	10	2
Sarana Prasarana	3	10	3	15	3	20	10	20	2	2	10	2
Biaya Pemeliharaan	3	10	3	15	3	20	10	20	2	2	10	2
Laundry				50		20		30				
CSSD				80			20					

Table 2 matrix of the proportion of activities based on the cost driver in the caesarean section.

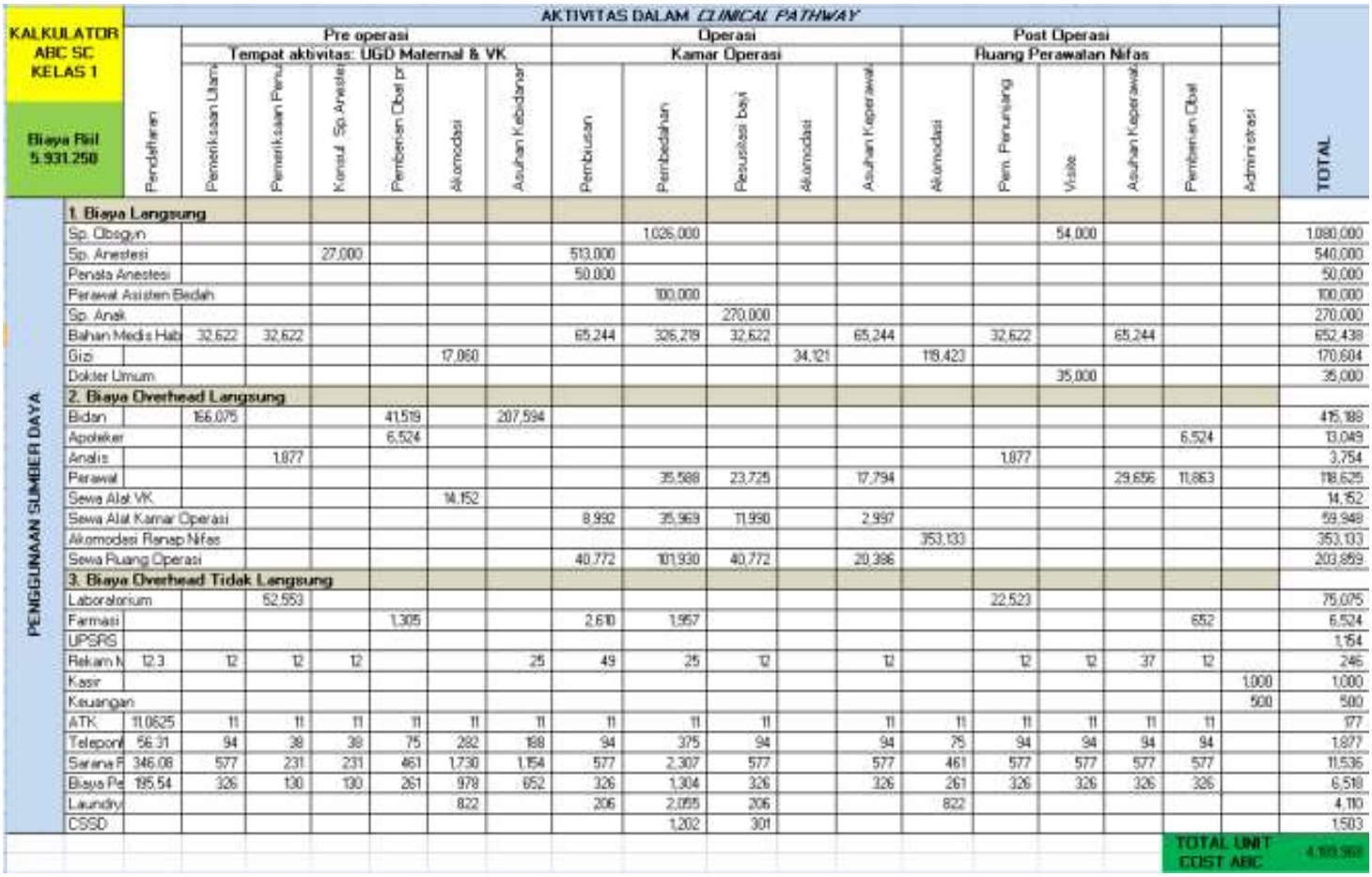
		AKTIVITAS DALAM *CLINICAL PATHWAY*																	
			Pre operasi						Operasi					Post Operasi					
			Tempat aktivitas: UGD Maternal & YK						Kamar Operasi					Ruang Perawatan Nifas					
		Pendaftaran	Pemeriksaan Utama	Pemeriksaan Penunjang	Konsul Sp.Anestesi	Pemberian Obat pre-op	Akomodasi	Asuhan Kebidanan	Pembiusan	Pembedahan	Resusitasi bayi	Akomodasi	Asuhan Keperawatan	Akomodasi	Pem. Penunjang	Visite	Asuhan Keperawatan	Pemberian Obat	Administrasi	TOTAL
PENGGUNAAN SUMBER DAYA	**1. Biaya Langsung**																		
	Sp. Obsgyn									95						5			100
	Sp. Anestesi				5				95										100
	Penata Anestesi								100										100
	Perawat Asisten Bedah									100									100
	Sp. Anak										100								100
	Bahan Medis Habis Pakai		5	5					10	50	5		10		5		10		100
	Gizi						10					20		70					100
	Dokter Umum															100			100
	2. Biaya Overhead Langsung																		0
	Bidan		40			10		50											100
	Apoteker					50												50	100
	Analis			50											50				100
	Perawat									30	20		15				25	10	100
	Sewa Alat YK						100												100
	Sewa Alat Kamar Operasi								15	60	20		5						100
	Akomodasi Ranap Nifas													100					100
	Sewa Ruang Operasi								20	50	20		10						100
	3. Biaya Overhead Tidak Langsung																		0
	Laboratorium			70											30				100
	Farmasi					20			40	30								10	100
	UPSRS																		0
	Rekam Medis	5	5	5	5			10	20	10	5		5		5	5	15	5	100
	Kasir																	100	100
	Keuangan																	100	100
	ATK	6.3	6.3	6.25	6.25	6.25	6.25	6.25	6.3	6.3	6.3		6.3	6.3	6.3	6.3	6.3	6.25		100
	Telepon/Air/Listrik	3	5	2	2	4	15	10	5	20	5		5	4	5	5	5	5		100
	Sarana Prasarana	3	5	2	2	4	15	10	5	20	5		5	4	5	5	5	5		100
	Biaya Pemeliharaan	3	5	2	2	4	15	10	5	20	5		5	4	5	5	5	5		100
	Laundry						20		5	50	5			20						100
	CSSD									80	20									100

From the activity proportion matrix above, the researcher then calculates the cost of each resource by making an ABC calculation calculator so that the value or amount of unit cost for each patient is obtained as in Tables 3 and 4

Table 3 the calculation results of the ABC calculator for normal labor

Kalkulator ABC Kelas 1		Biaya Riil:	3,509,404											
		AKTIVITAS DALAM *CLINICAL PATHWAY*												
		Tindakan Partus Normal						Perawatan Pasca Persalinan						
		Tempat aktivitas: Kamar Bersalin						Ruang Perawatan Nifas						
		Pendaftaran	Pemeriksaan Ulang	Pemeriksaan Penunjang	Asuhan Persalinan	Pemberian Obat-obatan	Akomodasi	resusitasi bayi	Akomodasi	Pem. Penunjang	Visite	Asuhan Keperawatan	Pemberian Obat	Administrasi	TOTAL
PENGGUNAAN SUMBER DAYA	**1. Biaya Langsung**														
	Sp. Obsgyn				544,500						60,500				605,000
	Sp. Anak							151,250							151,250
	Bahan Medis Habis		12,283	12,283	122,829	12,283		49,132		12,283		24,566			245,658
	Gizi						45,494		68,242						113,736
	Dokter Umum										35,000				35,000
	2. Biaya Overhead Langsung														
	Bidan		28,075		168,451	28,075		56,150							280,752
	Apoteker					2,948							1,965		4,913
	Analis			2,252						1,502					3,754
	Perawat							42,113				17,547	10,528		70,188
	Sewa Alat VK				9,906			4,246							14,152
	Akomodasi Ranap Nifas								235,422						235,422
	3. Biaya Overhead Tidak Langsung														
	Laboratorium			45,045						30,030					75,075
	Farmasi					1,720							737		2,457
	UPSRS														652
	Rekam	12	49	12	74	12		25		12	12	25	12		246
	Kasir													1,000	1,000
	Keuangan													500	500
	ATK	9	18	9	44	5	5	18	9	7	9	35	9		177
	Telepor	56	188	56	282	56	375	188	375	38	38	188	38		1,877
	Sarana	346	1,154	346	1,730	346	2,307	1,154	2,307	231	231	1,154	231		11,536
	Biaya P	196	652	196	978	196	1,304	652	1,304	130	130	652	130		6,518
	Laundry		411		2,055	123	822	411	1,233						4,110
	CSSD		150		1,202	45	301	301							1,503
													Total unit cost ABC		1,865,476

Table 4 calculation results of the ABC caesaria section calculator



KALKULATOR ABC SC KELAS 1		AKTIVITAS DALAM *CLINICAL PATHWAY*																
		Pre operasi						Operasi					Post Operasi					
		Tempat aktivitas: UGD Maternal & VK						Kamar Operasi					Ruang Perawatan Nifas					
Biaya Bsl 5.931.250	Pendaftaran	Pemeriksaan Ulang	Pemeriksaan Perut	Konsul. Sp. Anestesi	Pemberian Obat pr	Akomodasi	Asuhan Kebidanan	Pembusan	Pembedahan	Resusitasi bayi	Akomodasi	Asuhan Keperawat	Akomodasi	Pem. Penunjang	Visite	Asuhan Keperawat	Pemberian Obat	Administrasi	TOTAL
PENGGUNAAN SUMBER DAYA																		
1. Biaya Langsung																		
Sp. Obsgyn									1,026,000						54,000				1,080,000
Sp. Anestesi				27,000				513,000											540,000
Perata Anestesi								50,000											50,000
Perawat Asisten Bedah									100,000										100,000
Sp. Anak										270,000									270,000
Bahan Medis Hab		32,622	32,622					65,244	326,219	32,622		65,244		32,622		65,244			652,438
Gizi						17,060					34,121		119,423						170,604
Dokter Umum															35,000				35,000
2. Biaya Overhead Langsung																			
Bidan		166,075			41,519		207,594												415,188
Apoteker					6,524												6,524		13,049
Analis			1,877											1,877					3,754
Perawat									35,588	23,725		17,794				29,656	11,863		118,625
Sewa Alat VK						14,152													14,152
Sewa Alat Kamar Operasi								8,992	35,969	11,990		2,997							59,948
Akomodasi Ranap Nifas													353,133						353,133
Sewa Ruang Operasi								40,772	101,930	40,772		20,386							203,859
3. Biaya Overhead Tidak Langsung																			
Laboratorium			52,553											22,523					75,075
Farmasi					1,305			2,610	1,957								652		6,524
UPSRS																			1,164
Rekam M	12.3	12	12	12			25	49	25	12		12		12	12	37	12		246
Kasir																		1,000	1,000
Keuangan																		500	500
ATK	11.0625	11	11	11	11	11	11	11	11	11		11	11	11	11	11	11		177
Telepon	56.31	94	38	38	75	282	188	94	375	94		94	75	94	94	94	94		1,877
Sarana P	346.08	577	231	231	461	1,730	1,154	577	2,307	577		577	461	577	577	577	577		11,536
Biaya Pe	195.54	326	130	130	261	978	652	326	1,304	326		326	261	326	326	326	326		6,518
Laundry						822		206	2,055	206			822						4,110
CSSD									1,202	301									1,503
																	TOTAL UNIT COST ABC		4,193,992

From the calculation of the above calculators, the researcher obtained the results of calculating ABC rates for 30 research samples, then the 3 rates were compared according to normal delivery and caesarean section as in tables 5 and 6.

Table 5: Comparison of sample rates for normal delivery of labor

No	INACBGS Rates	Hospital Rates	ABC Rates
1	2,227,700	5,743,557	2,249,974
2	2,227,700	5,555,014	2,217,525
3	2,227,700	5,261,451	2,167,003
4	2,227,700	7,090,897	2,481,851
5	2,227,700	5,245,234	2,164,212
6	2,227,700	5,168,459	2,150,999
7	2,227,700	5,570,189	2,220,137
8	2,227,700	5,602,764	2,225,743
9	2,227,700	6,175,282	2,324,274
10	2,227,700	6,076,110	2,307,206
11	2,227,700	5,394,766	2,189,947
12	2,227,700	5,139,450	2,146,007

13	2,227,700	5,203,274	2,156,991
14	2,227,700	5,941,591	2,284,055
15	2,227,700	5,207,148	2,157,658
16	2,227,700	5,390,503	2,189,213
17	2,227,700	4,821,715	2,091,325
18	2,227,700	4,448,070	2,027,020
19	2,227,700	4,948,060	2,113,069
20	2,227,700	6,683,806	2,411,791
21	2,227,700	5,192,661	2,155,165
22	2,227,700	4,883,489	2,101,956
23	2,227,700	6,087,453	2,309,158
24	2,227,700	5,664,383	2,236,348
25	2,227,700	5,507,812	2,209,402
26	2,227,700	4,318,295	2,004,686
27	2,227,700	5,540,482	2,215,025
28	2,227,700	4,877,870	2,100,989
29	2,227,700	6,339,583	2,352,550
30	2,227,700	5,664,504	2,236,369

Table 6 samples of comparative rates for caesarean section action.

No	Rate	INACBGS Rate	Hospital Rate	ABC Rate
1		6,965,200	6,490,258	4,447,496
2		6,965,200	6,242,252	4,303,615
3		6,965,200	6,386,894	4,253,195
4		6,965,200	6,641,323	4,282,601
5		6,965,200	6,016,995	4,334,326
6		6,965,200	6,633,978	4,207,400
7		6,965,200	6,454,596	4,332,833
8		6,965,200	6,931,211	4,296,365
9		6,965,200	6,171,323	4,393,261
10		6,965,200	6,915,706	4,238,775
11		6,965,200	6,638,602	4,390,108
12		6,965,200	6,044,159	4,333,773
13		6,965,200	6,729,106	4,212,923
14		6,965,200	5,884,506	4,352,173
15		6,965,200	6,530,734	4,180,465
16		6,965,200	6,586,099	4,311,844
17		6,965,200	6,863,437	4,323,099
18		6,965,200	6,612,337	4,379,482
19		6,965,200	6,605,723	4,328,433

20	6,965,200	6,410,060	4,327,089
21	6,965,200	6,227,421	4,287,311
22	6,965,200	6,477,362	4,250,180
23	6,965,200	6,904,646	4,300,993
24	6,965,200	6,765,164	4,686,333
25	6,965,200	6,631,642	4,407,492
26	6,965,200	7,242,488	4,387,860
27	6,965,200	7,159,297	4,359,503
28	6,965,200	6,222,717	4,332,358
29	6,965,200	7,159,297	4,231,780
30	6,965,200	6,136,914	4,387,100

From tables 5 and 6, it can be seen the comparison of the three rates for normal delivery and caesarean section. The INACBGS rate for class 1 with severity level 1 or without complications for normal labor is Rp. 2,227,700 while for Caesarean is Rp. 6,965,200. This rate is determined through a Regulation of the Minister of Health of the Republic of Indonesia in 2016.

Hospital rates are service rates that must be paid by patients from a period of service at the hospital. The hospital rates in this study include the capital price plus the profit margin obtained by the hospital, the hospital rates themselves are regulated in the Director's Decree on Standard Service Rates in 2019 at Dinda Hospital Tangerang. The hospital rates in this study were taken from the patient's final billing data after the patient was discharge from hospital (Iskamto, 2021).

The ABC rate is the unit cost rate issued by the hospital for normal delivery and caesarean section by calculating the unit cost of the activities and resources used by the hospital (Oktorina et al., 2019). ABC rate calculation is expected to find out how efficient the costs incurred by the hospital for a particular action. This rate is calculated using the existing clinical pathway by making a calculation matrix between the activities and resources used.

Normality Test

The calculation of the normality test is carried out using the SPSS program. The normality test serves to determine whether the sample data in this study is normally distributed or not. The results of the normality test using the Kolmogorov-Smirnov were obtained for normal labor, hospital rates, INACBGS rates, and ABC rates obtained sig> 0.05, which means that the data is normally distributed. The results of the normality test on the caesaria section action rates, namely the hospital rates, the INACBGS rates, and the ABC rates, obtained a normality test of sig> 0.05, meaning that all data were normally distributed (Sinurat et al., 2021). Then the researcher will continue to test the hypothesis with the parametric test.

Hypotesis test

This research hypothesis test was conducted by analyzing the normality test on the previous variable data, it was obtained that the normality test was normally distributed, so the researcher continued the test with the parametric test, namely the paired t-test because the variables were interrelated (O'connor, 2000).

Hypothesis 1 is accepted with a significance value of p = 0.000 (<0.05) for normal labor. Hypothesis 1 is also accepted with a significance value of p = 0.000 (<0.05) for Caesarian action, this shows that there is a significant difference in rates between hospital rates and INACBGS rates both in normal labor and CS action.

Hypothesis 2 is accepted with a significance value of p = 0.000 (<0.05) for normal labor. Hypothesis 2 is also accepted with a significance value of p = 0.000 (<0.05) for Caesaria action. This shows that there is a significant difference in tariffs on ABC rates with RS rates for both Caesarian and normal delivery.

Table 7 Hypothesis 1 testing result

Variable	n	Mean	SD	p-value
INACBG Rates Normal delivery	30	2227700.000	.0000	.000
Hospital Rates Normal Delivery	30	5491462.400	609821	
INACBGS Rates Caesarean	30	6965200.000	.0000	.000
Hospital Rates Caesarean	30	6557208.233	347771.0203	

Table 8 Hypothesis 2 testing result

Variable	N	Mean	SD	p-value
Hospital Rates Normal Delivery	30	5491462.400	609821.1051	.000
ABC Rates Normal Delivery	30	2206588.267	104950.2709	
Hospital Rates Caesarean	30	6557208	347771	.000
ABC Rates Caesarean	30	4328672	93453	

Discussion

H1There is a difference in rates between Type C Private Hospital rates and INA-CBGs rates for SC and Normal delivery

From the results of the Hypothesis 1 test which was carried out using paired t-test, hypothesis 1 was accepted both in the act of SC and both normal delivery with a

significance value of p = 0.000 (<0.05). This means that in this hypothesis there is a significant difference between the private hospital rate type C and the INACBGS rate. This is in line with the research conducted which states that there is a difference between the real hospital rates and the INACBGS rates for Caesarean without complications. In the case of this study, the hospital rate for Caesarean obtained a mean of Rp. 6,557,208 while the INACBGS Caesarean class 1 rate was Rp. 6,965,200, meaning that in class 1 Caesarean action there was still a positive difference of Rp. 407,992 which was obtained by the hospital. Whereas in the case of labor, the hospital rate obtained a mean of Rp. 5,491,462 compared to the INACBGS rate for class 1, which was Rp. 2,227,700, meaning that in normal labor, the negative difference was – Rp 3.263.762.

Table 9 Difference of mean INACBGS and hospital rates

Variable	N	Mean	Difference in rates
Tarif INACBGS SC	30	Rp 6.965.200	Rp 407.992
Tarif RS SC	30	Rp 6.557.208	
Tarif INACBGS Partus	30	Rp 2.227.700	-Rp 3.263.762
Tarif RS Partus	30	Rp 5.491.462	

In this study, it was found that the Caesarean action was more profitable for the hospital because the hospital still got a margin on the Class 1 Caesarean procedure, which was IDR 407,992 compared to the normal BPJS class 1 labor, the hospital had to bear the negative difference of - IDR 3,263,762. This can be a consideration for the hospital regarding the calculation of rates and actions that benefit the hospital. In a study conducted in private hospitals serving JKN, there was a high increase in the number of cesarean section operations (Baer, 2020). This may occur because access to health services is easier and also the possibility of incentives obtained from Caesarean measures is greater than normal delivery. Another study states that the number of caesarean sections has increased in almost all private for-profit hospitals (Hoxha et al., 2017). Another study in type D hospitals in the action section, the INACBGS rate was smaller than the existing hospital rates (Organization, 2016). However, on the one hand, at Dinda Hospital Tangerang, where the researchers collected data, the number of Sectio Caearia has decreased with the establishment of a Clinical Pathway and Clinical Practice Guidelines for Obstetrics and Gynecology specialist to avoid Caesarean action without clear medical indications. The Caesarean figure that exceeds the standard (20%) at Dinda Hospital is also affected because Dinda Hospital is a referral from the First Level Health Facility (FKTP) in maternal terms, this has implications for the diagnosis status of maternal patients who come are patients who cannot be born normally in FKTP so that further action is needed, one of which is Caesarean action (Statistics et al., 2017).

The INACBGS rate is also still in accordance with where the last rate was updated in 2016. The increase in inflation, prices for medical goods, doctor and nurse services, hospital overhead costs are not comparable to the flat INACBGS rates from 2016, of

course. both Caesarean and normal delivery less and less. From this study, the difference obtained by the hospital for labor was the negative difference or loss of - Rp 3,263,762 from each act of delivery, for SC there was still a positive difference of Rp 407,992 from each Caesarean action performed. From this positive difference, it is good for the development of the hospital in the future, but on the one hand, the hospital has to cross-subsidize to cover the losses from normal labor (Schmidt et al., 2019).

H2: There is a difference in the rates between the activity based costing rate and the tariff for Type C Private Hospital for Caesarean and normal delivery.

From the results of hypothesis testing using paired t-test, hypothesis 2 is accepted both for SC action and normal delivery with a significance value of both p = 0.000 (<0.05) meaning that in this study, the results of the significant difference between the rates of Activity Based Costing (ABC) with hospital rates for both SC and normal delivery. In the results of this study, the SC class 1 mean of the ABC tariff is Rp. 4,328,672, while the RS rate is Rp. 6,557,208, the difference is Rp. 2,228,536. In normal class 1 labor, the mean ABC rate is Rp. 2,206,588, while the mean hospital rate is Rp. 5,491,462. There is a difference of Rp. 3,284,874 for normal labor.

Tabel 10 Difference of Mean ABC rates and Hospital Rates

Variabel	N	Mean	Difference in Rates
Tarif ABC SC	30	Rp 4.328.672	Rp 2.28.536
Tarif RS SC	30	Rp 6.557.208	
Tarif ABC Partus	30	Rp 2.206.588	Rp 3.284.874
Tarif RS Partus	30	Rp 5.491.462	

The concept of the ABC system is generally applied to increase the effectiveness and efficiency in the use of costs in various organizations, which is reflected in the creation of a cost system that refers to activities (Anjara et al., 2019). The ABC system concept affects the cost efficiency incurred by the hospital from an action. It can be seen that there is a significant difference in the results of the study. This means that the unit cost incurred by the hospital at the ABC rate is smaller than the real cost of the hospital. This can help the hospital in terms of cost efficiency and calculation of costs incurred. From the results of the study, it can be said that the Caesarian class 1 action mean ABC tariff is Rp. 4,328,672, meaning that the unit cost rate incurred by the hospital from the class 1 Caesarian action is Rp. 4,328,672. This is enough to be able to see approximately how much margin is obtained by the hospital from the CAESAREAN procedure. When compared with the INACBGS CAESAREAN class 1 rate, the ABC rate is still below the INACBGS CAESAREAN class 1 rate, meaning that the hospital can still take a profit margin from the action. This is in line with research which states that the unit cost using ABC is lower than the average INACBGS tariff claim (Nay et al., 2016).

In normal class 1 labor, the mean ABC rate was Rp. 2,206,588, meaning that the unit cost rate incurred by the hospital for class 1 labor was Rp. 2,206,588. This can be

seen from the margin that approximately the hospital gets from one BPJS class 1 delivery. This profit margin is very small for hospital operational costs where Dinda Hospital has a standard profit margin policy so that the hospital can grow and develop is 30-40%.

CONCLUSSION

From this research, several conclusions can be drawn including: 1). There is a significant difference between the INACBGS rate and the hospital rate for normal delivery and caesarean section. 2). There is a significant difference between hospital rates and ABC rates for normal delivery and caesarean section. 3). The application of unit cost calculations based on ABC can be done with guidance from the clinical pathway to map the activities and resources used. 4). ABC rates can describe the efficiency of how much real costs incurred by the hospital from an action or service. 5). Delivery by caesarean section method is more profitable financially than normal delivery. 6). The current INACBGS rate is deemed irrelevant for the payment of childbirth procedures.

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