

Conference Paper

Strategic Efforts of X Hospital Towards Universal Health Coverage in 2019

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Abstract

With the change in payment system from retrospective to prospective for National Health Insurance (NHI) patients, X Hospital must perform strategic efforts for managing the acceptance of service cost (46%) and facility cost (54%) for every Indonesia Case-Based Group (INA-CBG) payment. This study aimed to describe the difference in service cost and facility cost acceptance based on the hospital's billing and INA-CBG payment plus additional costs for patients with wards of an upgraded class, and it also describes X Hospital's strategic efforts toward universal health coverage (UHC). This study has an observational-descriptive design, and it collects quantitative and qualitative data. For this purpose, a total of 432 hospital bills and INA-CBG payments for NHI inpatients in January-February 2016 are collected, and in-depth interviews with several participants from the management, service providers, and administration are conducted. The results show that the total payment acceptance of INA-CBG plus additional costs is lower than the hospital's billing. The total service cost acceptance increased by IDR 99,034,017.00. The highest increase came from the internist ward and the highest decrease, from the obstetric ward. The total facility cost acceptance decreased by IDR 279,521,491.00. All wards showed a decrease, with the highest decrease coming from the internist ward. The proportion of service and facility costs must be balanced with behavior management of healthcare providers, arrangement of clinical pathways, optimization of various costs without reducing the quality of care, providing the hospital's formulary and ensuring usage of drugs and medical devices, and using the hospital management and information system to improve efficiency. By doing so, X Hospital will become ready to provide high-quality healthcare services under UHC.

Keywords: universal health coverage; national health insurance; service cost; facility cost

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1. INTRODUCTION

Universal health coverage (UHC) is defined as equal access to health services in terms of promotion, prevention, treatment, and rehabilitation [8]. In January 1, 2014, the Indonesian government committed to achieve UHC by establishing the "Jaminan Kesehatan Nasional" (JKN) or National Health Insurance (NHI) program. JKN will be the embryo of the UHC implementation planned for 2019 in Indonesia [1]. The government will run the entire public healthcare service through the NHI. The NHI is organized by one institution, the "Badan Penyelenggara Jaminan Sosial" (BPJS). The BPJS will manage healthcare costs, including the benefits package received by NHI participants [11]. Costs for NHI patients will be based on Indonesia Case-Based Group (INA-CBG) patients, and BPJS will pay the hospital bill for a package of services based on grouping disease diagnoses [4]. The guaranteed benefits packages of NHI healthcare will cover comprehensive medical needs and services including promotive, preventive, curative, and rehabilitative services and drugs, materials, and medical consumables. Service providers (healthcare centers, clinics, family physicians, and hospitals) must provide services according to the benefits package that has been determined by a predetermined fee (prospective payment system). A prospective payment system is a reimbursement method in which healthcare payment is made based on a predetermined, fixed amount [1]. Under prospective payment, it is profitable for hospitals to reduce the lengths of stays and to increase the number of treated cases [3].

The healthcare financing system of NHI Indonesia is based on the social health insurance system, and its aims to improve access, equity, quality, and cost efficiency. The payment system for NHI patients uses capitation payments for NHI patients and INA-CBG payments for NHI inpatients. The costs to be paid by the BPJS are stipulated by the Ministry of Health through the "Peraturan Menteri Kesehatan Republik Indonesia Nomor 59 Tahun 2014 tentang Standard Tarif Pelayanan Kesehatan dalam Penyelenggaraan Program Jaminan Kesehatan." The tariffs applied in NHI Indonesia require valid calculations to avoid harming service providers and reducing the quality of services itself [14].

X Hospital is a B-type public hospital that has been implementing NHI since January 1, 2014. For performing operational activities, X hospital accepts the local government's budget and receives revenues from various sources including general patients with no insurance; patients with "JamKesDa", "JamKesProv", or company insurance; and NHI patients with INA-CBG payments. Each patient uses a different payment system. Patients with no insurance or with company insurance pay hospital costs based on

retrospective payment systems. A retrospective payment system provides the fees to be paid by the patient after the services are provided [13]. For patients with NHI insurance, the service cost will be paid by the BPJS by using a capitation payment for NHI patients and INA-CBG payment for NHI inpatients. There must be a difference between the acceptance of INA-CBG payments and hospital tariffs because of the change in payment system from a retrospective to a prospective payment system. Significant efforts should be made to improve existing mechanisms for the internal financing of healthcare [9].

Hospitals' acceptance of INA-CBG payments for NHI inpatients will be used to pay the service costs for service providers through the remuneration system and to pay for the hospitals' facility costs. The proportion of service costs in public hospitals is 30%-50% of Indonesia Case-Based Group (INA-CBG) payment [6]. The proportion of service costs and facility costs is determined by the hospital itself. X hospital has determined the proportion of service costs and facility costs to be 46% and 54%, respectively, from every INA-CBG payment plus additional costs if NHI patients want to upgrade the class of the ward.

2. METHODS

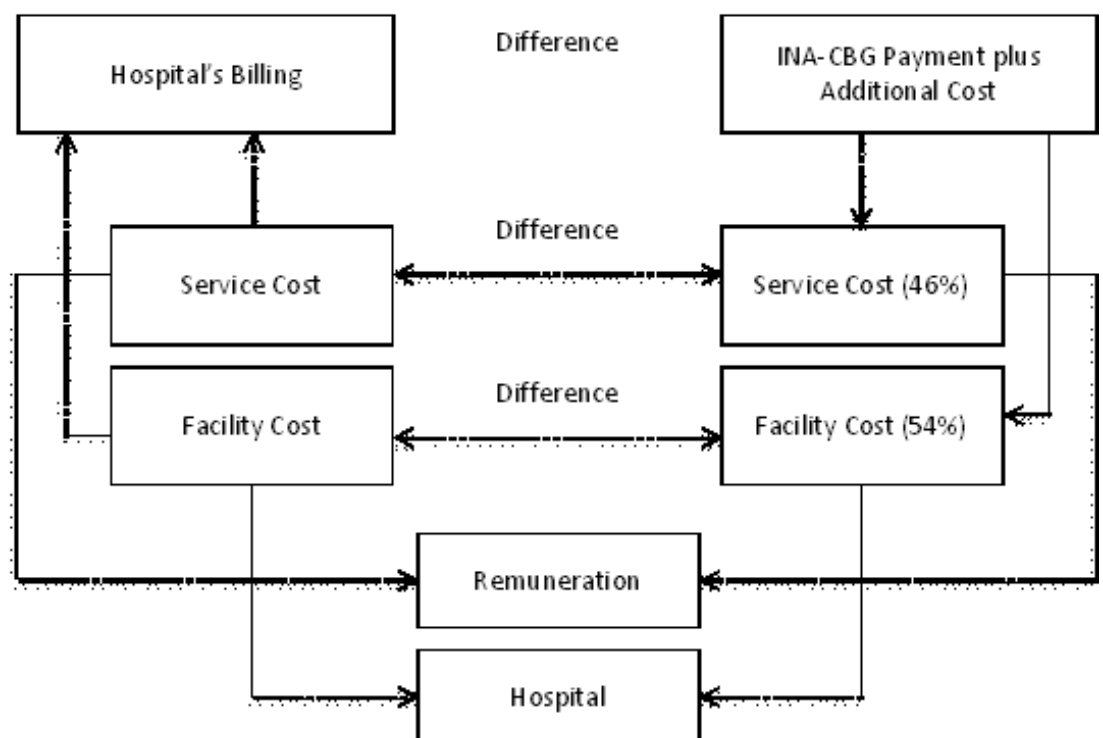


Figure 1: Difference in Acceptance in X Hospital's Scheme.

This study is an observational descriptive study, and it aims to describe the difference in acceptance between service costs and facility costs based on the hospital's billing and INA-CBG payment plus additional costs for NHI inpatients who upgrade the class of the ward (Fig. 1); it shows the strategic effort of X Hospital toward UHC. Primary data was obtained from in-depth interviews of several participants from management, service providers, and administration. Secondary data was obtained from 432 hospital bills and INA-CBG payments plus additional costs for NHI inpatients who upgraded the class of their ward in January and February 2016.

3. RESULTS

The results of in-depth interviews showed that the hospital management and healthcare providers have directly contributed to the result. Healthcare providers played a direct role in controlling the quality and costs of the hospital. Behavior control for NHI patients differed from that for non-NHI patients. Non-NHI patients are charged for all healthcare costs based on a retrospective or a free for service payment system; however, for NHI patients, all healthcare costs are paid according to INA-CBG payment. The hospital management arranges for clinical pathways and optimizes various cost by reducing the length of stay without reducing the quality of care. X hospital will also provide its formulary, ensure standard usage of drugs and medical devices, and use its management and information system to improve hospital efficiency.

TABLE 1: Total acceptance based on hospital's billing and INA-CBG payment plus additional costs.

Wards	Total Inpatient	Hospital's Billing (IDR)	INA-CBG Payment + Additional Cost (IDR)	Difference Acceptance (IDR)
Internist	102	448,421,720	465,942,530	17,520,630
Surgery	43	287,876,516	230,830,800	-57,045,716
Obstetric	104	581,230,450	399,369,650	-181,860,800
Pediatric	124	381,067,790	391,062,262	9,994,472
VIP	59	347,413,140	378,317,080	30,903,940
Total	432	2,046,009,616	1,865,522,142	-180,487,474

IDR: Indonesia Rupiah

4. DISCUSSION

Table 1 shows that total hospital acceptance based on INA-CBG payment plus the additional cost of NHI inpatients in wards with an upgraded class is lower than the hospital's billing. Hospital loses were IDR 180,487,474. The obstetric and surgery wards

TABLE 2: Service cost acceptance based on hospital's billing and INA-CBG payment plus additional costs.

Wards	Total Inpatient	Service Cost Based on Hospital's Billing (IDR)	Service Cost 46% of INA-CBG Payment + Additional Cost (IDR)	Difference Acceptance (IDR)
Internist	102	110,574,290	214,333,481	103,759,191
Surgery	43	138,415,780	106,182,168	-32,233,612
Obstetric	104	293,013,650	183,710,039	-109,303,611
Pediatric	124	117,348,288	179,888,641	62,540,353
VIP	59	99,754,160	174,025,857	74,271,697
Total	432	759,106,168	858,140,185	99,034,017

IDR: Indonesia Rupiah

TABLE 3: Facility cost acceptance based on hospital's billing and INA-CBG payment plus additional cost.

Wards	Total Inpatient	Facility Cost Based on Hospital's Billing (IDR)	Facility Cost 54% of INA-CBG Payment + Additional Cost (IDR)	Difference Acceptance (IDR)
Internist	102	337,847,430	251,608,869	-86,238,561
Surgery	43	149,460,736	124,648,632	-24,812,104
Obstetric	104	288,216,800	215,659,611	-72,557,189
Pediatric	124	263,719,502	211,173,621	-52,545,881
VIP	59	247,658,980	204,291,223	-43,367,757
Total	432	1,286,903,448	1,007,381,957	-279,521,491

IDR: Indonesia Rupiah

showed negative differences, and the internist, pediatric, and VIP wards showed positive differences. This could be because INA-CBG payment is lower than the hospital costs, and the capitation received from the UC scheme might not be enough to replace these revenues [7]. One aim of using capitation is to provide a financial incentive for increased efficiency in public hospitals [12]. Furthermore, the hospital's tariffs may be higher than the amount received from INA-CBG payments. These differences need to be evaluated in detail. Hospitals need to reevaluate the rates for diagnosing diseases in the obstetrics and surgical wards based on their unit costs to the hospital. This difference may also be caused by imprecision in coding processes. In terms of the hospital's coding structure, the use of software, number of medical statisticians, and experience of physicians seemed to be the most important factors [10]. The causes for the differences between INA-CBG payment and hospital rates should be investigated, especially in anticipation of an increase in NHI patient visits to the hospital. Moreover, the fact that hospitalization will increase and that reporting of minor illnesses will decrease (although not significantly) among rural residents actually supports the idea that UHC benefits the poor more [2].

Table 2 shows that the total acceptance of service cost increased by IDR 99,034,017. The highest increase came from the internist ward and the highest decrease, from the obstetric ward. The costs can sometimes be problematic. Some wards may receive higher service costs than that based on the hospital's billing, whereas others may receive lower service costs than that based on the hospital's billing. This is evidenced by the hospital director's statement that acceptance of service cost arise from 46% of INA-CBG payments plus additional costs for NHI inpatients in wards of an upgraded class. The acceptance of service cost is distributed to all healthcare providers in the wards and the entire hospital staff based on the remuneration system. If a positive difference is obtained from this cost, the service received is greater than the services in the hospital's billing. If a negative difference is obtained, the service received is lesser than the services in the hospital's billing.

Based on Table 3, the total facility acceptance cost decreased by IDR 279,521,491, and all wards showed a decrease. The highest decrease came from the internist ward and the lowest decrease, from the surgery ward. The internist ward showed a positive difference in total acceptance and service cost acceptance, whereas the facility cost acceptance showed the highest negative difference. A negative difference in facility cost acceptance causes a financial loss to the hospital. However, to determine the hospital's financial loss, the difference between the facility acceptance cost and actual cost incurred needs to be calculated. Based on accounting concepts, the surplus is determined by comparing the income earned and expenses incurred by the hospital [1]. The differences in acceptance can be caused by several factors such as class of wards, number of diagnoses, and length of stay [5].

The results of in-depth interviews showed that the hospital management and healthcare providers have directly contributed to the results. Healthcare providers played a direct role in controlling the quality and cost at the hospital. Behavior control for NHI patients differed from that for non-NHI patients. All healthcare costs are charged to non-NHI patients based on a retrospective or free for service payment system, and all healthcare costs for NHI patients are paid according to INA-CBG payment. The hospital management arranges for clinical pathways and optimizes various costs by reducing the length of stay without reducing the quality of care. Longer lengths of stay seem to reduce the level of efficiency [12]. X Hospital also provides its formulary, ensures standard usage of drugs and medical devices, and uses its hospital management and information system to improve efficiency.

5. CONCLUSIONS

Hospitals will play an important role in helping Indonesia achieve UHC. Good financing management of NHI patients will help provide high-quality healthcare with thorough and efficient services. The proportion of service and facility costs must be balanced with behavior management of healthcare providers, arrangement of clinical pathways, optimization of various costs without reducing quality of care, providing the hospital's formulary and ensuring standard usage of drugs and medical devices, and using the hospital's management and information system to improve efficiency. By doing so, X Hospital will be ready to provide UHC with high-quality healthcare services.

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References

- [1] Ambarriani, Anastasia Susty. 2014. "Hospital Financial Performance in the Indonesian National Health Insurance Era." *Society of Interdisciplinary Business Research* 4 (1): 367-79.
- [2] Ghislandi, Simone, Wanwiphang Manachotphong, and Viviana M E Perego. 2014. "The Impact of Universal Health Coverage on Health Care Consumption and Risky Behaviours: Evidence from Thailand." *Health Economics, Policy, and Law* 10 (3): 1-16. doi:10.1017/S1744133114000334.
- [3] Herwartz, Helmut, and Christoph Strumann. 2012. "On the Effect of Prospective Payment on Local Hospital Competition in Germany," 48-62. doi:10.1007/s10729-011-9180-9.
- [4] Indonesia Ministry of Health. 2013. "Peraturan Menteri Kesehatan Republik Indonesia No. 69/2013 [Regulations of the Indonesia Ministry of Health No. 69/2013 Regarding Standard Health Service Fees at Level I and Higher-Level Health Facilities in the Operation of the National Health Insurance." doi:10.1017/CBO9781107415324.004.

- [5] Jauharin, Adib. 2014. "Faktor-Faktor Yang Mempengaruhi Selisih Tarif Rawat Inap INA-CBG'S Dengan Tarif Rumah Sakit Pasien Jaminan Kesehatan Nasional (JKN) RSUD Leuwiliang Periode Januari-April 2014." University of Indonesia.
- [6] Menteri Kesehatan RI. 2014. "Peraturan Menteri Kesehatan Republik Indonesia Nomor 28 Tahun 2014 Tentang Pedoman Pelaksanaan Program Jaminan Kesehatan Nasional." Kementrian Kesehatan RI, 1-48. doi:10.1002/cplu.201490022.
- [7] Ngorsuraches, Surachat, and Attapon Sornlertlumvanich. 2006. "Determinants of Hospital Loss in Thailand: Experience from the First Year of a Universal Coverage Health Insurance Program." *Health Care Management Science* 9 (1): 59-70. doi:10.1007/s10729-006-6280-z.
- [8] O'Connell, Thomas, Kumanan Rasanathan, and Mickey Chopra. 2014. "What Does Universal Health Coverage Mean?" *The Lancet* 383 (9913). Elsevier Ltd: 277-79. doi:10.1016/S0140-6736(13)60955-1.
- [9] Okoroh, Juliet S., Victoria Chia, Emily A. Oliver, Marisa Dharmawardene, and Robert Riviello. 2015. "Strengthening Health Systems of Developing Countries: Inclusion of Surgery in Universal Health Coverage." *World Journal of Surgery* 39 (8). Springer US: 1867-74. doi:10.1007/s00268-015-3031-7.
- [10] Pongpirul, Krit. 2011. *Hospital Coding Practice, Data Quality, and DRG-Based Reimbursement under the Thai Universal Coverage Scheme*. ERIC.
- [11] Presiden Republik Indonesia. 2011. "Undang-Undang RI No. 24 Tahun 2011 Tentang Badan Penyelenggara Jaminan Sosial." *Journal of Chemical Information and Modeling*. doi:10.1017/CBO9781107415324.004.
- [12] Puenpatom, Rajitkanok A; Rosenman, Robert. 2008. "Efficiency of Thai Provincial Public Hospitals during the Introduction of Health Coverage Using Capitation." *Health Care Management Science* 11: 319-38. doi:10.1007/s10729-008-9057-8.
- [13] Thabrany, Hasbullah. 2015. *Jaminan Kesehatan Nasional*. Cetakan Ke. Jakarta: Rajawali Pers.
- [14] Yuniarti, Endang, Tri Murti Handayani, Magister Manajemen, Farmasi Universitas, and Gadjah Mada. 2015. "Analisis Biaya Terapi Penyakit Diabetes Melitus JAMINAN KESEHATAN NASIONAL di RS PKU Muhammadiyah Yogyakarta - Perbandingan Terhadap Tarif INA CBGS" 4 (3): 97-103.