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The superior service based on the highest number of visits and income of Hajj Hospital Surabaya in The National Health Insurance era

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Abstract

Background: A hospitals' superior service is expected to be of higher value than other available provisions, which consequently differentiates the facility from others, as the branding easily attracts the community attention. The purpose of this study, therefore, is to identify the most needed and profitable health services from existing hospitals.

Design and methods: This was a descriptive research performed with a *cross* sectional study approach. The variables studied include the number of visits, and revenue based on National Health Insurance (JKN).

Results: Findings show that the polyclinics were the highest number of visits between 2016 and 2017 include Cardiac, Internal Medicine, Medical Rehabilitation, Nerve, General Surgery, and also Dental & Mouth. Conversely, those with the most significant income include Heart, Polyclinics, Dental & Mouth, as well as General Surgery Polyclinics. Moreover, the Medical Rehabilitation and Internal Medicine outpatient installations demonstrated negative INA income, while the already running featured Services in high demand were Heart, Nerve, Dental & Oral, and also General Surgery polyclinics.

Conclusions: In can be concluded that not all polyclinics with high traffic generate positive income, hence it is necessary to monitor and analyze National Health Insurance (JKN) monthly income.

Introduction

The Leading Services rendered by hospitals are based on strategic management decisions, due to the expectation that superior services possess more value. This feature differentiates hospitals from one another, with the aim of attracting the public through branding.[1] Furthermore, this practice is possibly realized by increasing the focus on resources and budget allocation. However, the absence of a developable superior service causes in less optimal outcomes, compared with the investment spent.[2]

Based on the Evaluation Report of Featured Services, Directors set the Letter Decision of Director Number 445/279/304/2009 dated 8 June 2009 in the General Hospital Hajj Surabaya, which regulate the hospital services, that were subsequently revised.[3] The total patient referral at General Hospital Hajj, Surabaya in 2015 for both embarked and disembarked experienced a two-fold increase, even though one-third decline of the total revenue was observed when compared to the previous year. For service of diagnostics and interventions, it is observed that the visits in 2014 declined, and then the service was reportedly damaged in 2015, beginning to work again in March 2016, with an average of 1.24 patients/day.

However, there was a decline in the number of visits to the patient for medical cosmetic care from 2014 to 2016, which surmounted to an average rate of 2.84 patient/day. Meanwhile, the amount of income generated through activities of the medical cosmetic clinic from 2014 to 2016 fluctuated, with a major decline experienced in 2015 followed by an increase in 2016.

Services such as surgical endoscopy showed an increase in the number of visits, with an average of 14.46 patients/day, as a joined value with polyclinics of gastroenterohepatology. The total revenue obtained in this clinic increased in 2015 compared with the previous year. Conversely, services linked to cancer treatment were not realized, being the only one in the form of a building master plan. Based on the evaluation of service flagship, a low total average visits was reported at General Hospital Hajj Surabaya, at 6.11 per day. The aim of this research, therefore, is to identify the most desired and profitable health care needs by and for the health care community at the General Hospital Hajj, Surabaya.

Design and methods

The research type is descriptive with design *cross sectional study,* performed at the Polyclinic of an Outpatient Installation General Hospital Hajj, Surabaya in 2018. Meanwhile, the sample include patients visiting the Jalan ward between 2016 and 2017, with a focus on the billing Medical Records. The variables studied include the number of visits, and revenue based on the JKN.

Significance for public health

A hospitals' superior service is expected to be of higher value than other available provisions, which consequently differentiates the facility from others, as the branding easily attracts the community attention. This study identifies the most needed and profitable health services from existing hospitals.

Results and discussion

Table 1 shows the total income of the polyclinic was in high traffic numbers, although actual revenue loss for INA JKN was reported in internal medicine and medical rehabilitation. The polyclinics with the highest number of visits was evaluated based on the number of doctors at the outpatient installation of heart, dental & mouth and surgical polyclinic (Table 2).

Figures 1 and 2 show a total of 3 disease diagnosis that were recorded in the polyclinics cardiac outpatient Installation in 2016, including hypertensive heart disease, angina pectoris, and essential (primary) hypertension. This list consisted of hypertensive heart disease, angina pectoris, and left ventricle failure in 2017.

Figure 3 illustrates the highest three diagnosis based on patient visits in internal medicine unit in 2017, diabetes mellitus (9,860 patients), thyrotoxicosis (1,124 patients), and dyspepsia (1,072 patients).

Figure 4 shows the top 3 diseases diagnosis in rehabilitation medical outpatient installation was arthrosis (209 patients), psychotherapy (169 patients), and low back pain (116 patients) were mainly reported in 2017. Figure 5 explains the top 3 diseases diagnosed in the nerve outpatient installation were cerebral infarction (3,926 patients), arthrosis (2,451 patients), and low back pain (1,781 patients) in both 2016-2017. Figure 6 describes the 3 (three) most diagnosed diseases at the poly dental and mouth outpatient installation were necrosis of pulp (3,896 patients), impacted teeth (770 patients), and pulpitis (7,761 patients).

Based on the results obtained in 2016 and 2017 at General Hospital Hajj Surabaya, 4 polyclinics regularly had a high number of visits, including heart, medicine, medical rehabilitation and nerves poly. This shows the frequency of people visiting clinics, as both private and government hospitals continuously find ways to succeed in business. Therefore, people are observed to only desire satisfying services.[4] Hence several hospitals engaged in this sector by trying new patterns and improving quality.[5]

Based on the data obtained, the top 3 diseases diagnosed in the Cardiac outpatient installation for 2016 include hypertensive heart disease, angina pectoris, and essential (primary) hypertension, which was subsequently hypertensive heart disease, angina pectoris, and left ventricle failure in 2017. Moreover, the outpatient installation for diseases in 2016 reported a high prevalence of non-insulin-dependent diabetes mellitus without complications, thyrotoxicosis, and dyspepsia, which was then diabetes mellitus, thyrotoxicosis, and dyspepsia in 2017. The rehabilitation medical outpatient installation for 2016 includes arthrosis, psychotherapy, and obesity, while arthrosis, psychotherapy, and low back pain

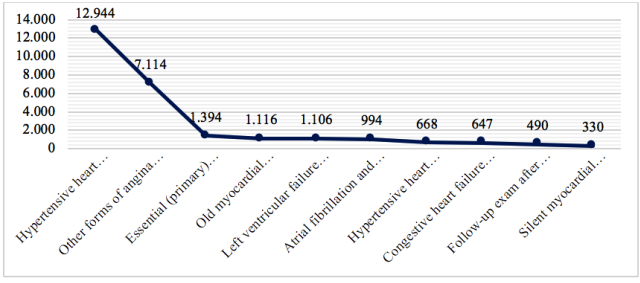

Figure 1. Outpatient installation polyclinic in 2016.

were reported in 2017. Furthermore, the nerve outpatient

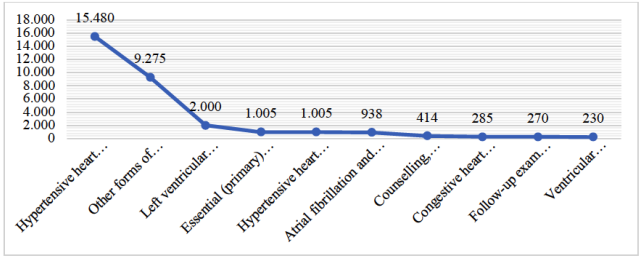

Figure 2. Diagnosis of heart disease by visits in 2017.

Table 1. Revenue data based on polyclinic visits between the periods of november-december 2017 and january 2018 (*in IDR).

Hospital Unit	November*	December *	January*	Total*
Heart disease	305,925,371	262,188,859	264,747,253	832,861,483
Neurological disease	112,830,196	112,436,676	112,830,195	338,097,067
Tooth & mouth disease	77,602,321	58,021,594	72,933,442	208,557,357
Surgical ailment	39,976,276	30,395,336	39,976,274	110,347,886
Internal disease	- 43,155,577	- 25,922,810	- 102,384,127	- 171,462,514
Medic rehabilitation	59,298,955	- 104,064,945	- 143,542,435	- 188,308,425

Table 2. The polyclinic income for the highest visits per number of doctors in 2016 & 2017 (*in IDR).

Hospital Unit	Total *	Number of doctors	Amount *
Heart disease	832,861,483	6	138,810,247
Neurological disease	338,097,067	6	56,349,511
Tooth & mouth disease	208,557,357	9	23,173,040
Surgical ailment	110,347,886	2	55,173,943
Internal disease	- 171,462,514	7	- 24,494,645
Medic rehabilitation	- 188,308,425	3	- 62,769,475

installation for both 2016 and 2017 was cerebral infarction, arthrosis, and low back pain, while general surgery outpatient clinic in 2016 stated the highest incidence in malignant neoplasm-breast, benign neoplasm and fibroadenosis of the breast. In addition, the dental and oral outpatient installation reported the highest incidence in pulp necrosis, impacted teeth, and pulpitis.

Low back pain refers to the experience of hurting behind an individual, and data from the Institute of Health Metrics and Evaluation Database in 2015 showed the Top Ten Causes of Morbidity and Premature Mortality (1990-2015). These include low back and neck pain, which ranked sixth after cerebrovascular disease, ischemic heart disease, diabetes mellitus, and tuberculosis worldwide.[6] The case of a single service physiotherapy at private hospital lead to the assignment of real costs amounting to Rp 120,000, while the cost of claims INA-CBGs was about USD 114,100, making a difference of IDR 5,900, This indicates the ability for the service to provide risk finance that only hurt sick homes. Despite the financial detriments incurred to the hospital, physiotherapy service is currently being conducted.

With respect to high traffic numbers, the total income of polyclinic, in terms of actually lose revenue INA JKN occurred with internal medicine and medical rehabilitation unit, while payment of INA-CBGs is a model for Advanced Referral Health Facilities, which is made on the principle of each diagnosis group.[7] Furthermore, regarding the Minister of Health Regulation No. 71 of 2013, one of the efforts possibly made for quality and cost control was based on the use assessment process (Utilization review) of health services, including the tiered referral scheme held. Therefore, adopting an appropriate implementation is very important to guarantee the effectiveness and efficiency of program funding.[8]

Figure 1 shows the 5 polyclinics with the highest amount of visits in 2016 at the outpatient installation, including heart, disease, rehabilitation medicine, nerve, and general surgery unit. in 2017 the most visited unit was heart, rehabilitation medical, internal medicine, neural, and dental and oral polyclinics. This results show a regularly high number of visits in 4 polyclinics between 2016 and 2017.

This surplus hospital in the JKN era is capable of implementing efficiency and cost effectiveness, subsequently building good health management, coding and claim quality and also evade fraud.[9] In addition, the observation results affiliated the highest tendency in referral patterns to the hospital control requests. This excessive demand by participants shows the potential for moral hazard in Advanced Referral Level Health Facilities cases. Hence, there is a need to initiate more improvement efforts in a hospitals' mechanism of referral administration, in order to alleviate the burden of policy establishment for First Level Health Facilities, being a reference number indicator.

Conclusions

In conclusion, polyclinics with the highest number of visits in 2016 and 2017 were in the unit of heart, internal medicine, medical rehabilitation, neurology, general surgery as well as dental & mouth. Additionally, polyclinics with the highest number of visits based on INA package income sorting, are in the following order: heart, neural, dental & mouth and general surgery. Conversely, medical rehabilitation and internal medicine units actually demonstrated negative INA income value.

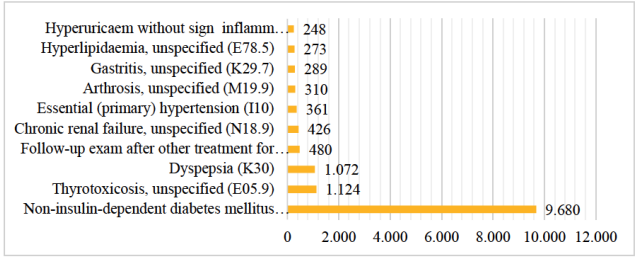

Figure 3. Disease diagnosis is based on visits internal medicine 2017.

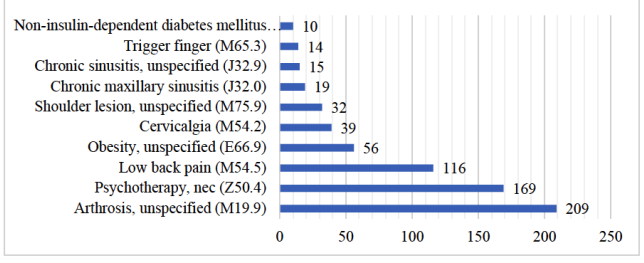

Figure 4. The top 3 diseases diagnosis in clinics/rehabilitation.

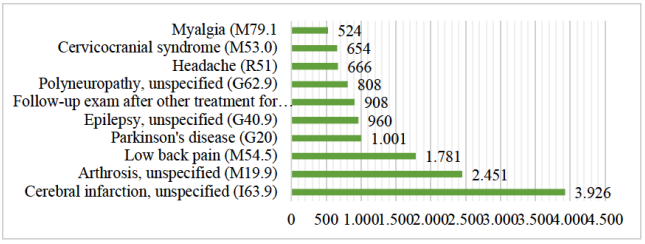

Figure 5. Disease diagnosis based on visits to neural polyclinic in 2016.

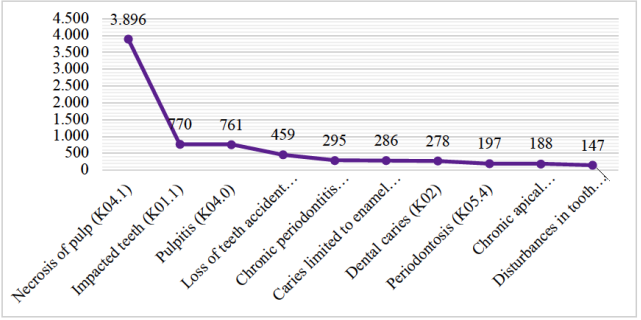

Figure 6. Disease diagnosis based on visits to the dental and oral polyclinic in 2017.

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