



## Revenue and financing of patients with national health insurance by the social security organizing agency to improve health services<sup>☆</sup>

Syarifuddin Yusuf<sup>a,\*</sup>, Nuzul Achmar<sup>b</sup>, Haniarti<sup>a</sup>, Hasdiana<sup>a</sup>, Mahkrajani Madjid<sup>a</sup>, Muhammad Aswad<sup>c</sup>, Tenri Esa<sup>d</sup>

<sup>a</sup> Universitas Muhammadiyah Parepare, Indonesia

<sup>b</sup> Welfare Health Care Community, Indonesia

<sup>c</sup> Universitas Sulawesi Barat, Indonesia

<sup>d</sup> Universitas Hasanuddin, Indonesia

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### KEYWORDS

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### Abstract

**Objective:** This study was aimed to analyze the comparison of income claims by social security organizing agency or *Badan Penyelenggara Jaminan Sosial* (BPJS) and non-BPJS and analyze the cost of health services.

**Method:** It was a descriptive analytic approach, this study analyzed the acceptance of BPJS and non-BPJS claim revenue with quantitative data, then the study analyzes the financing for BPJS patients in regional public hospital Andi Makkasau Parepare.

**Result:** BPJS claims revenue has increased very significantly, reached IDR 56.60 billion (86%), while for non-BPJS, it was IDR 7.98 billion (14%). BPJS patient visits hospital has reached 3793 people and absorbed around 1.8 billion funds per third quarter, and BPJS Health patient spending expenses are dominated by handling non-communicable diseases as high-cost diseases namely cataracts IDR 376 million (21.26%), cancer IDR 371 million (20.98%) and heart disease IDR 219 million (13.53%) are seen as a burden that dominates the absorption of national health insurance funds, but health services are already being felt by the community, and users are getting bigger as the participants increase BPJS.

**Conclusion:** BPJS claims revenue increased very significantly, reaching 86%, as BPJS patient visits at regional hospital Andi Makkasau Parepare continued to increase and absorb funds of around 7.5 billion per year along with patient financing dominated by handling non-communicable diseases (PTM).

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\* Corresponding author.

E-mail address: [aryus\\_umpar@yahoo.com](mailto:aryus_umpar@yahoo.com) (S. Yusuf).

## Introduction

Health is an investment to support economic development and has an important role in poverty alleviation efforts. Health development must be viewed as an investment to improve the quality of human resources.<sup>1</sup> Health care is the main priority because it is one of the fundamental rights of the community, and its provision must be held by the government. Social security organizing agency called *Badan Penyelenggara Jaminan Sosial* (BPJS) has appointed by the government in Indonesia to organize national health insurance.<sup>2</sup> The source of funds spent to pay BPJS Health claims is from contributions provided by the government, participants, and employers.<sup>3</sup> In health services for BPJS patients in hospitals, discrimination is still found in the delivery of services.<sup>4</sup>

Based on financial statements and program management until the end of May 2018, the number of BPJS participants reached 196.66 million. Along with the increasing number of participants, the amount of health care costs incurred by the BPJS also increased. The largest number of BPJS Health participants are recipients of health insurance contribution assistance (PBI) financed by the APBN budget, reaching 92.27 million people or around 46.92%, participants from private Wage Recipient Workers (PPU) 27.92 million people (14, 2%) and non-wage participant participants 27.65 million people (14.06%), health service expenditure reached 81.97 trillion.<sup>5</sup> While through the analysis of fees and income in the report on the activities carried out, it was found that the income of contributions always lower each year, when compared to the costs, incurred. The biggest benefit-cost that absorbs the burden of BPJS Health is the service at the advanced level of inpatient.<sup>6</sup>

One form of health care facility for the community organized by the government is a hospital. Health services provided by hospitals, in this case, the role of BPJS are comprehensive health services, including treatment services (curative), preventive measures, health promotion (rehabilitative), and rehabilitation (rehabilitative).<sup>7</sup> These services are aimed at all residents, does not distinguish between sexes and age groups, from conception in the womb until closing age. Implementation of health services for the community requires adequate health financing to meet the fundamental rights of the community. If patient safety, effectiveness, and efficiency of patient-oriented services, the higher patient satisfaction in getting health services.<sup>8,9</sup>

Andi Makkasau General Hospital, which is an international standard hospital in Parepare City, receives advanced health care services for BPJS patients. BPJS problems in this hospital are the social protection budget increasing from year to year, increasing coverage of membership, and the number of health facilities that work with BPJS Health also increases. However, the current government has not been able to increase the monthly contributions of BPJS participants; this fact shows that the current BPJS fees are not in accordance with the calculation of the minimum fee that has been calculated. Another thing, late payment of contributions by BPJS participants, causes obstacles in payment of health service costs. The purpose of this study is to analyze the comparison of BPJS claims and non-BPJS claims at the Andi Makkasau Regional Hospital in Parepare City and analyze the utilization of health service costs.

## Method

This study used descriptive-analytic method with Miles and Huberman's interactive model of data analysis techniques, namely data reduction, presentation, verification and conclusion.<sup>10</sup> Data was secondary data collection in the form of financial documents of BPJS and non-BPJS claim receipt, while qualitative data on health services through interviews with hospital management Andi Makkasau Parepare and BPJS Health data. Qualitative data for the utilization of health service costs through interviews with the manager of Andi Makkasau Parepare Hospital and BPJS Health data.

## Result

### Comparison of BPJS claim income and non-BPJS claims

The average in 5 years (2014–2018), the amount of BPJS claims amounted to Rp 56.60 billion (86.33%) and experienced an increasing trend, while non-BPJS claims only amounted to Rp 7.97 billion (13.67%) or have decreased significantly from year to year. This shows that BPJS social security fund users are getting bigger, while non-BPJS fund users are getting smaller (**Table 1**).

Interview results can be mentioned factors that cause an increase in BPJS revenues from year to year, among others: (1) transition of patients from non-BPJS to BPJS, as an effort by the government to divert people to use BPJS and reduce local government budgets and (2) increase referral patients from hospitals around the Ajatappareng area.

Furthermore, the receipt of non-BPJS claims actually decreased, partly due to: (1) non-BPJS patients have switched to using BPJS services and (2) reduction of the budget for service and health costs for non-BPJS users, so patients need to add costs, some of which must be paid through non-BPJS.

### Disease types and BPJS service financing

**Table 2** shows 3793 patient visits in the last three months on 13 types of disease management in BPJS patients in Makkasau Hospital A, all categories of non-communicable diseases. The highest patient visits were hypertension (15.71%) and heart disease (12.97%), while the two smallest diseases were thalassemia (3.14%) and cancer (3.32%). Furthermore, there are 5 (five) diseases that most absorb BPJS funds, namely cataracts of IDR 376 million (21.26%), cancer IDR 371 million (20.98%), cesarean delivery IDR 239 million (13.53 %), Heart IDR 219 million (12.42%), Kidney failure IDR 207 million (11.70%), while the smallest financing is HHD IDR 9.6 million (0.54%), dyspepsia IDR 18 million (1.03%), and typhoid fever IDR 28 million (1.58%). Disease management that absorbs the largest BPJS funds in Type B General Hospital is found in non-communicable diseases (PTM) or mostly in degenerative diseases whose prevention through community awareness will regulate a healthy lifestyle and improve balanced eating patterns.

**Table 1** Comparison of BPJS and non BPJS claim revenue in Andi Makkasau Hospital period 2014–2018 (in millions of rupiah).

Years	Claim revenue BPJS		Claim revenue Non-BPJS		Total income	
	(Rp)	(%)	(Rp)	(%)	(Rp)	(%)
2014	38,286.34	71.43	15,313.16	28.57	53,599.50	100
2015	42,277.21	77.49	12,261.38	22.51	54,558.59	100
2016	62,393.42	92.30	5,200.06	7.69	67,593.48	100
2017	72,282.34	94.63	4,094.54	5.32	76,376.88	100
2018	67,763.79	95.76	3,000.40	4.24	70,764.19	100
Average	56,600.62	86.33	7,973.91	13.67	64,578.53	100

**Table 2** Disease types, visits, and utilization of BPJS patient funds in Andi Makkasau Hospital (third quarter of 2019 period).

No.	Disease types	Patient visits		Value (IDR)	
		Frequency	%		%
1.	Cataract	331	8.73	375,650,000	21.26
2.	Hypertension	596	15.71	50,400,000	2.85
3.	Stroke	339	8.94	29,900,000	1.69
4.	Diabetes mellitus (DM)	239	6.30	127,600,000	7.22
5.	Dyspepsia	268	7.07	18,200,000	1.03
6.	Typhoid fever	259	6.83	27,890,000	1.58
7.	Hypertensive heart disease	163	4.30	9,600,000	0.54
8.	Arthritis	262	6.91	43,722,000	2.47
9.	Heart disease	492	12.97	219,388,051	12.42
10.	Cancer	126	3.32	370,619,068	20.98
11.	Kidney failure	228	6.01	206,620,580	11.70
12.	Cesarean delivery	371	9.78	239,003,510	13.53
13.	Thalassemia	119	3.14	48,139,770	2.72
	Total	3793	100	1,766,732,979	100

## Discussion

### Comparison of BPJS and non-BPJS claim revenue

Claims from BPJS and non-BPJS claims have a comparison of average revenues reaching Rp. 56.60 billion or 86.33% compared to non-BPJS claims receipt of Rp 7.97 billion or 14%. BPJS revenue itself has increased significantly five years (2014–2018). The increasing the number of admissions from BPJS, due to the transition of patients from non-BPJS users to BPJS users. In 2018, revenue from BPJS claims had indeed decreased from Rp 72.28 billion to Rp 67.76 billion or decreased by 6.25%. This is due to the existence of government regulations regarding tiered referral so that not all patients can go directly to type B referral hospitals to get health services, but it is necessary first to first-rate service hospitals or health service doctors, if necessary further action or not healed, then you can submit a referral for treatment at RSUD A. Makkasau, City of Parepare while non-BPJS revenue receipts decreased continuously from 2014 to 2018, due to non-BPJS patients who have switched and are using BPJS Health services.

The quality of services provided to BPJS Health and non-BPJS Health patients is good, and in accordance with community needs seen from direct evidence, Reliability, Responsiveness, Assurance, and Empathy.<sup>1</sup> Reliability, responsiveness, and empathy affect the satisfaction of BPJS inpatients.<sup>11</sup> While the supporting factors of service are the attitude of friendliness and courtesy of employees, the simplicity of the flow, and affordable costs.<sup>6</sup> Other Research results are different than the Quality of Health Services for BPJS participants in UNHAS Hospital is not optimal because there are still BPJS patient rights not accommodated especially in the dimensions responsiveness (responsiveness) Hospital staff that is the patient waiting for service for more than one hour. The responsibility dimension is that the doctor prescribes the drug, sometimes it is not available at the pharmacy, and the inpatient room is insufficient/full for BPJS patients.<sup>12</sup>

This also indicates that public awareness of healthy values at all levels is increasingly important as an investment in human development and certainly becomes a productive and useful generation. Other indications are increasingly showing good health services, so many are turning to the BPJS program, both at the regional and national levels.

## Disease types and BPJS service financing

The results of the study ([Table 2](#)) showed that 3793 patient visits in the last three months in Makkasau Parepare Hospital were entirely in the category of non-communicable diseases. The highest patient visits were hypertension (15.71%) and heart disease (12.97%), while the two smallest diseases were thalassemia (3.14%) and cancer (3.32%). Furthermore, there are 5 (five) diseases that most absorb BPJS funds, namely eye cataracts (20.68%), cancer (21.26%), a cesarean delivery (13.53%), heart (12.42%), kidney failure (11.70%), while the smallest funding is HHD (0.54%), dyspepsia (1.03%), and typhoid fever (1.58%). Disease management that absorbs the largest BPJS funds in Type B General Hospital is found in non-communicable Diseases or mostly in degenerative diseases whose prevention through community awareness will regulate a healthy lifestyle (lifestyle) by routinely exercising, doing physical activities and improving patterns eat balanced, i.e., eat balanced nutritional food, multiply eat fruits and vegetables.

The amount of health financing spending from BPJS is dominated by the handling of catastrophic diseases; namely, high-cost diseases are seen as a burden that absorbs JKN funds a lot and is one of the reasons BPJS Health continues to the deficit. The cost of catastrophic diseases absorbs about 30% or 16.9 trillion of the JKN budget. Catastrophic diseases that must be borne, among others, heart disease (13%), chronic kidney failure (7%), cancer (5%), stroke (2%), thalassemia (1%), and leukemia (0.3%). Until August 2018, BPJS Health expenditure to finance catastrophic diseases reached 12.0 trillion or 21.07% of the total cost of health services.<sup>13</sup>

The findings of this study indicate that degenerative diseases (non-communicable diseases) pose the greatest threat to suction BPJS funds in the present and future, if not prevented through the application of a healthy lifestyle. In the end, government management through BPJS needs to anticipate the increasing financing of high-cost (catastrophic) diseases, while trying to further improve the health services of BPJS patients who are better aware of and promote the importance of a healthy lifestyle.

## Conclusion

The comparison of BPJS claim income is IDR 56.60 billion (86%), while for non-BPJS is IDR 7.98 billion (14%) at A. Makkasau Regional Hospital, Parepare. The increasing the number of admissions from BPJS, due to the transition of patients from non-BPJS users to BPJS users. BPJS Health patient financing expenses are dominated by handling non-communicable diseases as high-cost diseases are seen as a burden that dominates the absorption of JKN funds and is one of the causes of BPJS Health continues to the deficit, but the health services have been greatly felt by the community.

## Conflict of interest

The authors declare no conflict of interest.

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