

Research Article

# Quality Control of Health Services of The National Health Insurance Era in East Java - Indonesia: Barriers and Strategy

Nugroho Mardi Wibowo<sup>1\*</sup>, Woro Utari<sup>1</sup>, Yuyun Widiastuti<sup>1</sup>, Abdul Muhith<sup>2</sup>

<sup>1</sup>Department of Management, Universitas Wijaya Putra, Indonesia

<sup>2</sup>Nursing Department, Universitas Nahdlatul Surabaya, Indonesia

## Abstract.

The National Health Insurance (JKN) system is designed to provide the availability of quality health services, but until now JKN participant have not felt the quality health care. The purpose of this study is to identify threats and weaknesses in health care quality control and formulate the implications of its strategy. The study was conducted at four Regional General Hospital (RSUD) in East Java - Indonesia, namely RSUD IbnuSina Gresik, RSUD NgudiWaluyoWlingiBlitar, RSUD dr. H. SlametMartodirdjoPamekasan, and RSUD dr. H. KoesnadiBondowoso. The sampling of research samples was conducted by purposive sampling and data retrieval with questionnaires and interviews. Analysis techniques used are external factor analysis, internal factor analysis, and SWOT analysis. The results of the study found that the barriers to quality control of JKN health services are the delay in payment of hospital claims by the Social Security Regulatory Agency of Health (BPJS Health), INA-CBGs rate, BPJS Health Regulations and low people awareness for a healthy lifestyle. In terms of internal hospitals, fraud prevention systems have not been affective. The implication of the strategy is that hospitals must develop and implement fraud prevention information systems properly.

**Keywords:** JKN; BPJS; quality control; health services

## 1. Introduction

The National Health Insurance Program (JKN) is a comprehensive health care protection guarantee that includes promotive, preventive, curative and rehabilitative services provided in a tiered way for the community. JKN program aims to improve access and quality of health services to all Indonesians. The presence of the National Health Insurance Program – Health Indonesia Card (JKN-KIS) organized by Social Security Regulatory Agency of Health (BPJS Health) is in fact felt by the public. This is seen from the number of participants as well as the increasing utilization rate since it was implemented. As of January 10, 2019 the number of participants enrolled in the JKN-KIS Program has reached 216,152,549 people or covers 82% of the total population of Indonesia (bpjskesehatan.go.id).

Corresponding Author: Nugroho  
Mardi Wibowo; email:  
nugrohomardi@uwp.ac.id

**Published** 03 March 2023

**Publishing services provided by**  
Knowledge E

© Nugroho Mardi Wibowo et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the PVJ-ISHESSH 2021 Conference Committee.



The implementation of the national health insurance program (JKN) has entered its sixth year, but until the end of 2020 this quality aspect has not been felt by the community. The high quality of health services makes the community will have a high level of satisfaction[1]. The quality dimensions of health care play an important role in building patient satisfaction[2]. Quality control and management in health organizations has a significant contribution to perceived quality. Furthermore, the perceived quality has implications on improving patient satisfaction [3].

Based on BPJS Health Regulation No. 8/2016 on The Implementation of Quality Control and Cost Control states that quality control and cost control in health facilities is carried out by Health Facilities and BPJS Health, coordinating with professional organizations, the District/City Health Office, the Provincial Health Office and the Ministry of Health. In the implementation of quality control and cost control in the implementation of the National Health Insurance program (JKN) implemented by the quality control and cost control (KMKB) team. One of the members of KMKB team is the medical committee at the Hospital as a technical team. KMKB team is the team tasked to perform quality assurance and control in hospitals. The team is one of the teams in the hospital that has an important role to improve the quality of service and performance of the hospital[4].

The results of the evaluation of the implementation of quality control and cost show that KMKB Team in general has utilization review, coaching ethics and professional discipline, and socialization of medical personnel authority in accordance with its competence. But medical audit duties have not been carried out to the maximum. The task of utilization review by KMKB Team but not yet fully carried out independently. KMKB team has the perception that the utilization review process is carried out by reviewing the utilization review report that has been made by BPJS Health. KMKB team obtained and reviewed the utilization review report from BPJS Health. Medical audits have not been conducted properly due to the limitations of specialist doctors. There is an overlap of the duties of coaching ethics and professional disciplines as well as the authority of health workers, between the KMKB Team and professional organizations. The independence of KMKB team is still questioned so that the implementation of the work plan is not optimal because the source of funds is limited. The implementation of KMKB team activities is subject to availability of operational funds from BPJS Health [5].

As for this study aims, the first identifies strengths and weaknesses in the quality control of health services of JKN Program in hospitals. Second, identify opportunities and threats in controlling the quality of health care JKN program in hospitals. Third, find the implications of strategies for developing quality control of health services.

The quality of health care is as a measure, the extent of health services to individuals and communities that can increase the likelihood of expected health outcomes with the consistent application of professional science. The health service consists of the application of medical science and technology in a way that can maximize the benefits for health without increasing the risk [6].

Quality control is a series of activities to ensure that the health services provided are of quality. While quality assurance focuses on improving the process to provide quality services or products to customers. An organization must ensure that the process is efficient, and effective in accordance with the quality standards specified for its products or services [7]. In this study, quality control of health services is the process of guaranteeing the quality of health services. It is based on that BPJS Health Regulation No. 8 of 2016 on Quality Control and Cost Control of JKN Health Service program includes quality assurance. The analysis of the quality control of JKN program health services in this study also follows Deming cycle namely Plan Do Check Act (PDCA).

## 2. Method

The research approach used is a qualitative descriptive research design. Descriptive approach is used to understand the perception of hospital management team in East Java related to the identification of strengths, weaknesses, opportunities and threats in the development of health service quality control strategies in the era of JKN program. The qualitative approach to exploiting information related to the problem of applying quality control in hospitals to complement and strengthen the descriptive approach.

The population in this study is the entire Regional General Hospital (RSUD) in all districts /cities in East Java Province – Indonesia. The determination of district or city as a research sample is determined based on purposive techniques taking into account the cultural representation that exists in East Java Province, So the sample of selected hospitals is RSUD dr.H. KoesnadiBondowoso (representing *Pendalungan* culture), RSUD IbnuSina Gresik (representing *arek* culture), RSUD NgudiWaluyoWlingi of Blitar Regency (representing *Mataraman* Culture), and RSUD dr. H. SlametMartodirjoPamekasan (representing *Madura* culture) as suggested by [8].

Identification of strength factors and weaknesses in the development of quality control of health services is based on the process of controlling the quality of health services by following the PDCA cycle [9]. The identification of opportunity factors and

threats to the development of health care quality control refers to economic, socio-cultural, and legal factors that have an impact on the quality control of health services [10].

The data retrieval method in this study uses questionnaires and in-depth interviews. The filling of questionnaires and interviews was conducted with respondents and informants consisting of the Deputy Director of Medical and Nursing, The Deputy Director of General and Financial Affairs, the Control Team, the Fraud Prevention Team, the Internal Supervisory Unit, the Committee on Quality and Patient Safety, and the Medical Committee. Respondents filled out a questionnaire that included indicators of internal and external factors developing health care quality control strategies with a four-point Likert scale measurement ranging from a score of 1 = very bad to a score of 4 = very good. The data analysis used in this study is descriptive analysis, interactive analysis, internal factor analysis, external factor analysis, SWOT analysis. As for determining the position of opportunities and threats for external factors as well as strengths and weaknesses for internal factors used criteria as in table 1.

TABLE 1: Criteria of Internal and External Factor Analysis Result.

Value Range	Criteria	Internal Factors	External Factors
3.25 – 4.00	Very Good	Strength	Opportunity
2.50 – 3.24	Good	Strength	Opportunity
1.75 – 2.49	Bad	Weakness	Threat
1.00 – 1.74	Very Bad	Weakness	Threat

### 3. Result and Discussions

#### 3.1. Identification of Health Service Quality Control Strengths and Weaknesses - JKN Program

The results of internal factor analysis show that the culture of quality and patient safety as well as continuous improvement is included in the criteria very well and positions as a strength in the development of quality control strategies of health services - JKN programs in hospitals. This condition reflects that hospitals in East Java have made efforts and procedures to develop a culture of quality and patient safety as well as continuous improvement of health services. Patient safety is one indicator of the quality of health care. In addition, the hospital considers the patient safety aspect to be a very important indicator because it is included in the accreditation assessment [11].

TABLE 2: Internal Factor Analysis Summary (IFAS) Quality Control of Health Services - JKN Program.

	Indicators	Rating	Criteria	Strengths / Weaknesses
1	Culture of quality and patient safety	3.4003	Very Good	Strength
2	Continuous improvement	3.4722	Very Good	Strength
3	Development of service quality indicators	3.2052	Good	Strength
4	Cost control	3.1502	Good	Strength
5	Fraud prevention system	2.4169	Bad	Weakness
6	Coaching ethics and professional disciplines of health workers	3.1072	Good	Strength
7	Implementation of utilization review	3.1161	Good	Strength
8	Application of medical audits	3.0353	Good	Strength
9	Monitoring & evaluation of the use of medicines, medical devices, medical materials consumables	3.1613	Good	Strength
10	Monitoring & evaluation of quality achievement	3.1575	Good	Strength
11	Quality-oriented leadership	3.3198	Good	Strength

Continuous improvement has been made by hospitals in East Java in providing health services of JKN Program. This means that hospitals are already improving service procedures and improving health services. Continuous improvement of procedures and services has a positive impact in meeting the characteristics of health care quality. Health care results can be improved through the implementation of quality continuous improvement system [12]. Continuous improvement is an important factor in the successful implementation of quality management in health organizations [13].

It appears in table 1, that the indicators of the implementation of medical audits are identified as good criteria and in position as a strength in the development of health care quality control strategies in hospitals but have the lowest average rating scores. This fact is reinforced by interviews with the hospital's medical committee showing that the hospital has conducted medical audits but has not been optimal. The implementation of medical audits is carried out by the KMKB Team which is mostly a member of the hospital's medical committee. Medical audit requires detailed technical aspects ranging from the aspect of setting audit topics, setting audit criteria, data collection, data analysis, drawing up improvement plans, and re-auditing. The entire medical audit stage requires the technical capabilities of the medical audit implementer [5].

The weakness in the quality control of JKN health care program is fraud prevention system in hospitals. The results of interviews with the hospital's fraud prevention team show that some hospitals, newly formed fraud prevention teams. The establishment of fraud prevention team was forced by the hospital as a requirement for filing claims to

BPJS Health. While fraud potential detection activities have not been optimally carried out by the hospital’s fraud prevention team. Including hospitals do not yet have an application tool to detect potential fraud in JKN program health services.

Fraud is common in the health care industry in health insurance programs. Fraud is a deliberate act to gain unauthorized profits. A doctor can prescribe unnecessary medications and examinations to patients for hospital income[14]. Fraud in the health service has the potential to degrade the quality of health care, harming patients and the country’s finances. However, the implementation of fraud prevention in health services has not been fully implemented [15].

### 3.2. Identification of Health Service Quality Control Opportunities and Threats - JKN Program

TABLE 3: External Factor Analysis Summary (IFAS). Quality Control of Health Services - JKN Program.

	Indicators	Rating	Criteria	Opportunities / Threats
1	Determination of health care rates based on INA-CBGs	2.4911	Bad	Threat
2	Disbursement of hospital claims payments by BPJS Health	2.3094	Bad	Threat
3	Budget support from local governments	3.0968	Good	Opportunity
4	JKN dues eligibility for JKN sustainability	2.8068	Good	Opportunity
5	Infrastructure conditions (transportation, highways) that people need	3.1297	Good	Opportunity
6	Local Government Policy in JKN Program	3.1385	Good	Opportunity
7	Support of Regulations/Laws in JKN program	3.1083	Good	Opportunity
8	BPJS Health Regulations	2.4784	Bad	Threat
9	Public awareness and understanding of JKN Program Health Service procedures	2.6988	Good	Opportunity
10	The level of public awareness of preventive action and healthy lifestyle	2.4901	Bad	Threat

The results of external factor analysis show that the threat of health service quality control activities JKN program there are four indicators. The delay indicator of the disbursement of hospital claims payments by BPJS Health is an indicator that has the lowest average rating. This means that delays in disbursement of claims payments by BPJS Health are a threat faced in providing health services to the public. This is felt by almost all hospitals in Indonesia in cooperation with BPJS Health. This fact is reinforced by the results of an interview with the deputy director of general and finance who stated that the condition of the hospital’s financial cash flow was compromised by the

delayed payment of claims from BPJS Health. Other indicators that pose a threat to the implementation of quality control of JKN health services programs in hospitals are the determination of health service rates based on Indonesia Case Based Groups (INA-CBGs), the often changing BPJS Health Regulations, and the lack of public awareness to behave in healthy living.

The determination of health care rates based on INA-CBGs is a separate issue for hospitals. Health care rates based on INA-CBGs of a particular disease service are often smaller than the unit cost incurred by the hospital. This condition is a dilemma faced by hospitals in cooperation with BPJS Health. Hospitals on the one hand are required to provide quality health care to all patients. Hospitals must be completely quality oriented towards their services, while BPJS Health with its INA-CBGs rates requires hospitals to provide efficient health services that can sometimes degrade quality. This fact encourages fraud in hospitals [15].

### 3.3. Implications for Strategy

Based on SWOT analysis on internal and external factors of health care quality control JKN program, can be formulated quality control development strategy. First, develop and implement the Fraud Prevention Information System. Second, revitalize the fraud prevention team to obtain competent personnel and integrity. Third, increased commitment of hospital leaders to quality control and fraud prevention. Fourth, develop and implement a medical audit information system.

## 4. Conclusions

The results of internal and external factor analysis found that the implementation of fraud prevention system in hospitals became a weakness in the quality control of JKN program health services in hospitals. The threat in the quality control of JKN health care program is the determination of INA-CBGs rates which according to the hospital is smaller than the unit cost issued by the hospital. This condition indirectly encourages fraud. Frequent delays in payment of claims from BPJS Health to hospitals become a matter of liquidity for hospitals. The problem of fraud can arise because BPJS Health often issues new regulations that are not yet understood by hospitals. The low level of public awareness of healthy and clean lifestyle is an obstacle also in the quality control of JKN program health services.

## Acknowledgments

This research was funded based on the Decree of the Budget User Power, Deputy for The Strengthening of Research and Development, Ministry of Research and Technology / National Research and Innovation Agency of the Republic of Indonesia Number 26/E1/KPT/2020. On this occasion we would like to thank the Director of Research and Community Service, Deputy for Strengthening Research and Development of the Ministry of Research and Technology / National Research and Innovation Agency of the Republic of Indonesia.

## References

- [1] Fatima T, Malik SA, Shabbir A. Hospital healthcare service quality, patient satisfaction and loyalty: An investigation in context of private healthcare systems. *Int. J. Qual. Reliab. Manag.* 2018;35(6):1195–1214. doi: 10.1108/IJQRM-02-2017-0031.
- [2] Jandavath RKN, Byram A. Healthcare service quality effect on patient satisfaction and behavioural intentions in corporate hospitals in India. *Int. J. Pharm. Healthc. Mark.* 2016;10(1):48–74. doi: 10.1108/IJPHM-07-2014-0043.
- [3] Nguyen TLH, Nagase K. The influence of total quality management on customer satisfaction. *Int. J. Healthc. Manag.* 2019;12(4):277–285. doi: 10.1080/20479700.2019.1647378.
- [4] Al-Shdaifat EA. Implementation of total quality management in hospitals. *J. Taibah Univ. Med. Sci.* 2015;10(4):461–466. doi: 10.1016/j.jtumed.2015.05.004.
- [5] Hasri ET, Wulan S, Djasri H. Evaluasi kebijakan kendali mutu dan kendali biaya, pencegahan kecurangan dan kapitasi berbasis komitmen dalam era JKN di provinsi bengkulu menggunakan pendekatan realis evaluasi. Yogyakarta; 2020.
- [6] Gupta KS, Rokade V. Importance of quality in health care sector: A review. *J. Health Manag.* 2016;18(1):84–94. doi: 10.1177/0972063415625527.
- [7] Vidya N. A regulatory affair and contribution of total quality management towards quality assurance in healthcare management. *Int. J. Manag. Soc. Sci.* 2017;5(12):132–145. Available from: [https://www.academia.edu/38551097/A\\_Regulatory\\_Affair\\_AndContribution\\_Of\\_Total\\_Quality\\_Management\\_Towards\\_Quality\\_](https://www.academia.edu/38551097/A_Regulatory_Affair_AndContribution_Of_Total_Quality_Management_Towards_Quality_)
- [8] Wibowo NM. Strategi pengembangan pelayanan rawat inap puskesmas berbasis service delivery system. *EKUITAS (Jurnal Ekon. dan Keuangan)*. 2020;17(3):337–356.
- [9] Wibowo NM, Utari W, Muhith A, Widiastuti Y. Pengembangan model dan strategi pengendalian mutu pelayanan kesehatan pada era jaminan kesehatan nasional



sebagai upaya menuju pelayanan kesehatan berkeadilan pada faskes tingkat pertama dan rujukan di Jawa Timur. Surabaya; 2018.

- [10] Hojabri R, Manafi M, Eftekhari F, Ghassemzadeh H, Sharifi M, Kaliannan M. Effective methods for health care organizations: An evaluation of excellence models. *African J. Bus. Manag.* 2013;7(27):2665–2675. doi: 10.5897/AJBM11.2747.
- [11] Ulumiyah NH. Meningkatkan mutu pelayanan kesehatan dengan penerapan upaya keselamatan pasien di puskesmas. *J. Adm. Kesehat. Indones.* 2018;6(2):149–155. doi: 10.20473/jaki.v6i2.2018.149-155.
- [12] McCalman J et al. Continuous quality improvement and comprehensive primary health care: A systems framework to improve service quality and health outcomes. *Front. Public Heal.* 2018;6. doi: 10.3389/fpubh.2018.00076.
- [13] El-Tohamy AE, Al Raoush AT. The impact of applying total quality management principles on the overall hospital effectiveness: An empirical study on the HCAC accredited governmental hospitals in Jordan. *Eur. Sci. J.* 2015;11(10).
- [14] Matloob I, Khan S. A Framework for fraud detection in government supported national healthcare programs. Paper presented at: Proceedings of the 11th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2019; 2019. doi: 10.1109/ECAI46879.2019.9042126.
- [15] Wibowo NM, Utari W, Muhith A, Widiastuti Y. Detection of healthcare fraud in the national health insurance program based on cost control. Paper presented at: International Conference on Tourism, Economics, Accounting, Management, and Social Science (TEAMS 19); 2019 December. doi: 10.2991/teams-19.2019.46.

