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Evaluation of the implementationof the outpatient referral system in a communityhealth center in the national health insurance era

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Abstract: It has been reported that there are some obstacles in the implementation of the National Health Insurance, one of which is its referral system.The high number of referral in public health centers indicates that the implementation of the referral system has not gone well.This study aims to evaluate theimplementation of the outpatient referral system in a public health center in the national health insurance era. This study was qualitative research with a case study approach on eightinformants selected by purposive sampling method that was conducted in Singgani Community Health Center, Central Sulawesi, as one of the communityhealth centers in Indonesia. The data was obtainedthroughobservation, in-depth interviews, and document studies. The validity test was done with source triangulation and methodological triangulation and was analyzed by using Miles and Huberman analysis model.The results showed that the input in the form of human-related to doctors, machines-related to medical devices, and materials-related to the availability of drugs wasnot in line with the rules. The doctor's process of deciding to refer patients did not follow the rules of 155 diagnoses of diseases and the process of implementing referrals from the communityhealth center to the hospital was not listed in the waiting room. Besides, the output of the referral system was not optimal, seen from the suitability of the referral implementation at Singgani Community Health Center, which exceeded the ratio. Thus, it can be concluded thatthe application of the outpatient referral system on nationalhealth insurance participants is still not appropriate.

Keywords: *referral system;first-level health facility; national health insurance*

Introduction

Health development contains fundamentalvalues based on thoughts and actions in developing health services. The principle of health services development is that everyone has the same right to obtain the best possible health services, regardless of ethnicity, class, religion, and socioeconomic status(1), (2), (3). The Indonesian government began implementingthe National Health Insurancesystem or so-called *JaminanKesehatanNasional* (JKN) system in 2014.The JKNpolicycovers all health services at theprimary level to the tertiary level. Health services areimplemented in stages through a referral system.The first-level health facilitiesor so-called*"Fasilitas Kesehatan Tingkat Pertama"* (hereafter, FKTP)must be strengthened because itbecomes the main gate of the Social Security Administrative Body for Health(hereafter, BPJS Health) participants inaccessing health services. If FKTPs are not strengthened,the public health centers will continue to access hospitalsas advanced health facilities that may cause hospitals tobeoverloaded(4).

The leveling referral system starts from FKTPs that are provided by community health centers (*puskesmas*), clinics, or family doctors selected by participants at the registration stage. FKTP that has the highest number of visits is community health centers(5), (6), which function is to provide comprehensive health services by prioritizing promotive and preventive health services.Communityhealth centers as primary health facilities are expected to be the gatekeepers in the

National Health Insurance era so that it is likelythat most health services can be carried outat community health centers(7).

Based on the data from Primary Care (P-Care)services of BPJSHealthat Singgani Community Health Center, the referral ratio in 2017 was 30.2%. From January to November 2018, the ratio experienced an increase to32.4%, which indicated that Singgani Community Health Center had not performed its function as a referral deterrent.Based on the preliminary study conducted at the P-Care services of BPJS HealthatSinggani Community Health Center, it was noticed that there was anissue regarding a high number of referral ratios. There was also a problem in the form of lack of human resources, especially doctors,besides its limited health facilities and inadequate drug availability. Due to the difficulty of handling diseases managed by the doctors in the signified community health center, the patients had to be referred to advanced health facilities. Thus, the P-Care application was not running optimally thatit hampered the patients' referral processes. At the quarterly output, there was an increase in the number of patient referrals.

Based on the background elucidated above, therefore, this study aims to evaluate the implementation of an outpatient referral systemin a community health center in the national health insurance era.

Material and Methods

This study is qualitative research with a case study approach. In-depth interviews were carried out on eight informants from Singgani Community Health Center, Central Sulawesi of Indonesia,including the head of the center, doctors, dentists, the heads of pharmaceutical installations, P-Care officers of BPJS Health, and the patients who were also members of BPJS Health. The study was conducted on January 14, 2019 - April 4, 2019.

This study further used primary and secondary data, which were gathered through observation, in-depth interviews, and document study. The validity test was completedby source triangulation and technical triangulation. The data were then analyzed by employing Miles and Huberman analysis model, which consists of data collection, data reduction, data presentation and drawing conclusions and verification.

Results

Evaluation of inputs in the implementation of theoutpatient referral system at Singgani Community Health Center in the national health insurance era

Community health centers often lacked human resources, especially the number of doctors. At Singgani Community Health Center, if a doctor was absent, the head of the center had to request a substitute doctor to the regional health office to provide temporary services to Singgani Community Health Center. As a consequence, the substitution certainly affected the accuracy of the center in delivering the best service to patients.

The informant also described that there were only five doctors at Singgani Community Health Center, namely one dentist and fourgeneral practitioners who worked in 4 sections, including pediatricsection, adolescent section, adult section, and elderly section.

The available equipment at Singgani Community Health Center, moreover, was inadequate to carry out the referral. One example was the damaged dentist equipment, such as light curing and scaler tools. Hence, patients were forced to be referred to the hospital, although the health problems could be solved at the center. Besides, the authorsfound that many of the standard pieces of equipment recommended for the first-level facility did not meet the medical device standards listed in the annex of Minister of Health Regulations No. 75 of 2014 onCommunity Health Center.

Furthermore, the number of raw materials forthe implementation of the referral system at Singgani Community Health Center was inadequate and not followingthe national formulary standards recommended for FKTPs as stated in the Minister of Health of the Republic of Indonesia Decree Number HK 02.02/Menkes/523/2015 onFormulary National in First-Level Health Facility. As a result, many patients were referred to hospitals. Regarding drugs, the workers at community health centers could give the patients drugs, includingmedicines for poisoning, especially atropine, sodium

bicarbonate and sodium thiosulfate; diagnostic drugs, such as Fluorescein; cardiovascular drugs; topical drugs for the skin, and tetra Caine drugs for the eyes.

Evaluation of processes in the implementation of the outpatient referral system at Singgani Community Health Center in the national health insurance era

The results of this study explained that when deciding to refer patients from Singgani Community Health Center to the hospital, the doctors had not fulfilled the 155 diagnoses of diseases. The decision was found consistent with the patients' referral documents with conditionswhich anaphylactic reactions wereincluded in the 155 diagnoses of diseases, such as Hepatitis A, DHF, Malaria, Leptospirosis who must be referred to hospitals. Besides, the list of 155 diagnoses of diseases could not be found anywhere on the doctor's desk.

When doctors at the community health centers are unable to handle the patients' conditions, the patients will be referred to hospitals to get treatments from a specialist doctor. However, Singgani Community Health Center did not provide referral systems that were under the standards so that many patients did not understand the referral procedure. Thus, Singgani Community Health Center officials should provide the information in the waiting room.

Evaluation of outputs in the implementation ofthe outpatient referral system at Singgani Community Health Center in the national health insurance era

The results indicated that the output of the referral system at SingganiCommunity Health Centerwas not optimal. Additionally, the inavailability of the equipment and drugs as well as the ability of the doctors that did not meet the standards caused the referral ratio atSinggani Community Health Centertoexceed the limit, since many patients were referred to hospitals.

Discussion

Workforcerefers to the human resources managed by anorganization. In management, the human factor is the most important in determining organizational success. The aspects seen from health workers in implementing the referral system for the National Health Insurance (JKN) patients are the number of health workers and their readiness(8), (9).

The availability of doctors at SingganiCommunity Health Center greatly influenced the implementation of services as one of the functions of community health centers that roles as a quality service provider in meeting the needs of the community. The results of this study, thus, in line with prior research, which stated that the doctor's ability to carry out his/her tasks and functions was the most influencing factor in the leveling referral system in community health centers(10), (11).

The availability of facilities or service facilities in conducting medical checkups is essential to diagnose patients and provide appropriate actions(12), (13). Inadequacy of health facilities in the Singgani Community Health Center, hence, affected the quality of the services provided to patients. It can be argued so sincehealth equipment in community health centers must meet the requirements of quality, safety standards, and marketing authorization under statutory provisions, as well as regularly tested and calibrated by competent testing and calibration institutions(4). Furthermore, the lack of complete health facilities and supporting facilities will interfere with the patient's diagnosis process. As a result, the condition often forces health workers to refer patients to the hospital, which will have an impact on the increase in the referral ratios(14).

The availability of drugs in health service units dramatically affects the quality of health services. Therefore, it surely needs drug management. The procurement of medicines, primarily for JKN participants, is not separated from the other medication. Based on JKN technical guidelines, drugs at community health centers must always be available because the capitation funds payto community health centers by 20%, which includes the cost of purchasing medicines. Hence, patients or JKN program participants do not have the burden of buying drugs sinceThe pharmacists carry out drug services for JKN participants in every FKTP.Furthermore, a pharmacist at a drug installation implements drug services for JKN participants in FKTPs. Drug services further refer to the list of drugs listed in the national formulary and drug prices listed in the drug e-catalog(5).

The fundamentalprocess of decision-making involves identifying and diagnosing problems. These two factors include recognition (identifying) and determining (defining) problems. The collection of relevant data, thus, is indispensable to make the right decision(15), (16). The process by which the doctor diagnoses the patient determines the patient's condition to get treatment. In other words, if the patient needs further treatment or subspecialist doctor's treatment, then the patient must be referred to advanced health services. Another research also argued that high referral rates are often associated with inefficiencies, poor service, and failure to diagnose (17). Diagnosis by doctors is the most crucialfactor implemented as primary care. Diagnostic errors occur when a patient's diagnosis is incorrect(18).The process of handling patients at the health center is inseparable from the process of providing services for patients. To improve the quality of services better, it needs to give patients the right treatment as established.

Some *Jamkesmas* (Public Health Insurance) patients who feel disadvantaged due to complicated administration, unsatisfactory services, and discrimination can claim their legal rights. Apatient's right is to obtain safe, quality, and affordable services. Moreover, a patient can also receive compensation if the service received is not appropriate. People who use *Jamkesmas* can submit their complaints to community health centers or hospitals as an internal improvement effort in their services or to institutions that pay attention to consumers(19).

The implementation of non-optimal referral system at community health centers and the unavailability of supporting facilities can increase the number of patient referrals to hospitals so it may reduce the quality of services provided (20). The appropriateness of system implementation coversdata and information about the picture of a referral system as regulated in Ministerial Regulation Number 001 of 2012 onIndividual Health Services Referral System, article 4 paragraph 1, which states that health services implemented in stages according to the medical needs of the first level health services. Minister of Health Decree Number 75 of 2014 onCommunityHealth Center states that Community Health Center can handle 155 diagnoses of diseases, which implies that health workers in community health centers should not refer patients if their disease is one of the155 diagnoses of diseases.

Conclusion

The implementation of the outpatient referral system in communityhealth centers in the national health insurance era, especially at Singgani Community Health Centeris still not appropriate. The argumentis based on the input point of view that indicates if the doctors' services are not optimal andthe medical devices are inadequate, such as the damaged equipment used in the dentist's room, and the inavailability of certain drugs. These factors hence cause many patients to be referred to hospitals. In the process, namely making decisions to refer the patients, moreover,is the doctors are still not following the rules of 155 diagnoses of diseases.Even worse, the list of 155 diagnoses of diseasescannot be found anywhere on the doctor's desk. Thus, when a doctor at the Singgani CommunityHealth Center is unable to handle a patient's illness, he/she will refer the patient to ahospital. As a consequence, the output of referral from Singgani Community Health Center to hospitals still has a very high ratio.

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