CLAIM MANAGEMENT ANALYSIS OF THE SOCIAL SECURITY AGENCY (BPJS) IN HEALTH WITH BUSINESS PROCESS REENGINEERING APPROACH: A CASE STUDY AT GOVERNMENT HOSPITAL IN INDONESIA

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Abstract
Social Security Agency (BPJS) program in health as a follow up of the National Health Insurance (JKN) aims at financing the health of Indonesian society. Therefore, in order to clearly and completely understand health system, health financing subsystems needs to be comprehended as well. But in fact, the hospital unit cost is higher than the BPJS rates lead to the difference in revenue for the government hospital. This research applied depth interview method which is a qualitative method. To reach the research objective, re-engineering of business processes was implemented by using the latest methodology namely revision. From the research result, the researcher found an impact on revenue in one of district general hospitals in Indonesia, especially in the management process of BPJS claim. It was proved from the difference that arose from the difference between the Perval rates used by general hospital and CBGs INA rates used by BPJS. To minimize the difference, clinical pathway is needed by making casemix team and changing the plot of the claims.

Keywords: plot of BPJS claim, BPJS, business-process re-engineering, clinical pathway, casemix team

Introduction
Health is a fundamental right of every individual which is declared globally in the WHO constitution. In the last decade, it has been agreed as global commitment to the Millennium Development Goals (MDGs), which states health development is the intelligence base, productivity as well as human welfare as the Ministry of Health has set a vision stated "Healthy Community The Independent and Justice "(Ministry of Health, 2010). Health insurance is a protection system given to every citizen to prevent unpredicted situations because of the socio-economic risks that could lead to loss of jobs and threaten health. Therefore, health insurance exists as one of the welfare pillars which is operational. Position, meaning and nature of health is all citizens' right and nation’s investment for today and in the future, therefore, all citizens are entitled to a healthy life, specifically for low-income society. Therefore, a system that is set up for the implementation is needed for the efforts of fulfilling the rights of citizens to remain healthy, which emphasizes on health care and service for community. The program of Social Security Agency (BPJS) in health as a follow up of the National Health Insurance (JKN) aims at financing the health of Indonesian society. Therefore, in order to clearly and completely understand health system, it is needed to understand the health financing subsystems well. But in reality, it is still poorly comprehended in which there are problems detected between the health service received and the submission claim demands that does not comply with the procedures and hospital rates. It then causes problems happened in one district general hospital in Indonesia where the researcher conduct a research.

Based on BPJS claims data from September 2014 to May 2015 there are BPJS outpatient claim losses and based on BPJS claims data from September 2014 to May 2015 there is a difference between the hospital rate and package rate of INA CBGs which is used by BPJS for BPJS inpatient claims. In addition, other problems that raised due to the lack of clinical pathways, and incompleteness of the unit cost (real cost) as compared to hospital rate, the difference is quite significant.

Literature Review
A hospital is a health care institution for people with special characteristics which is influenced by the development of medical science,
technological advances, economic and social life of the people and which also must be able to increase service quality and more affordable so that the better health status is achieved. According to Indonesian dictionary, hospital is a building where sick people are well-taken care of and a building where health service/care is supplied and provided, covering a wide range of health problems. The laws of the Republic of Indonesia no. 44 stated that area hospital chapter 1 is in this act referred to hospital: "Hospital is a health care institution that organized personal health services providing inpatient, outpatient and emergency care".

A patient or a sick person is someone who receives medical care. The word patient in Bahasa Indonesia is an analog from the word patient in English. Patient derived from the Latin, patient’s which is similar in meaning with verb "suffering". For patients, what he/she needs the most is not associated with self-esteem to be powerfuly recognized but more to belongingness and social needs. Feeling loved, listened to, not considered as being troublesome, not also treated as useless human beings (Lijan, 2006). One fairly comprehensive definition of insurance is raised by Athearn (1979), it is as follows; "Insurance is one of social instruments that combines individual risk into group risks and use the funds collected by the group to pay for the losses suffered. The essence of insurance is a social instrument that conduct fundraising activities voluntarily, including risk groups and any individuals or entities that are its members divert any risk to the whole group".

Meanwhile, Black and Skipper (1994) convey two important components in health insurance, namely the transfer of risk from the individual to the group and share losses (Sharing of Losses) between the group members. Based on that understanding, they define health insurance as follows A social insurance where the financial transfer is done by individuals associated with the loss of health for individuals or groups, involving the accumulation of funds by a group of individuals to cover financial losses from the prevention of illness or disease.

Social Security Agency or BPJS is an institution established to administer social security program in Indonesia under Law No. 40 of 2004 and Act No. 24 of 2011. In accordance with Law No. 40 of 2004 on National Social Security System, BPJS is non-profit legal entity. Based on Law No. 24 of 2011, BPJS would replace a number of social security institutions in Indonesia, namely health insurance agency like PT. Askes Indonesia. This company PT. Askes Indonesia became BPJS Health and social security institutions, and the social security institution for labour or PT. Jamsostek changed into BPJS for labour.

The purposes of clinical pathways are among others; reducing variations in service, costs are more predictable, services are more standardized, improving the service quality (quality of care), improving costing procedures, improving the quality of information which has gathered and as the (counter-check), especially in the certain cases (high cost, high volume and high risk). Parameters related to the implementation of clinical pathways in hospitals can be seen from the Average Length of Stay (ALOS). Policies of the Ministry of Health that the phealth financing patterns of JAMKESMAS members in hospital applies casemix INA-DRG system via a circular letter of the Minister of Health No. 586 / Menkes / VII / 2008, dated 3rd of July 2008. On the implementation guidelines for Community Health Insurance (Manlak; 2009) it is emphasized that hospitals which carry out JAMKESMAS service, for well-managed enforcement of INA-DRG, hospitals must implement services in accordance with clinical pathway and use most efficient and effective resources (MOH, 2009).

Based on the government's policy above, hospitals that serve BPJS patients, must adjust the pattern of health financing that are fee for service into Prospective Payment System. One of related elements is that hospitals must make a patient care plan before the patient is treated which is an integration of various medical standards, nursing, pharmacy and support (clinical pathways). Clinical pathway implementation needs support from hospitals in the form of policy. As highlighted on the theory that the key to successful implementation of clinical pathways is the support organization in the form of a policy (Currey and Harvey, 1998). INA-CBGs (Indonesia Case Based Groups) is a payment system to health care providers that are grouped based on clinical characteristics and the same usage resources. INA tariff-CBGs is designated by National casemix Centre (NCC) of the Ministry of Health which is currently composed of representatives of
government hospitals and the ranks of the Ministry of Health.

Payment reform of the advanced payment facility is conducted according to the Minister of Health 59 2014 on the Standard Rates of Health Services at first-level health facilities and at advanced level health facilities in JKN implementation and the Regulation of the Minister of Health 71 Year 2013 on Health Services on JKN. In the implementation of Jamkesnas, claim payment in 2009 until end of 2010 was carried out by Indonesian Diagnoses Related Group (INA-DRG), whereas at the end of 2010 until now claim payment is carried out by using the INA-CBGs developed from INA-DRG. Since 2014, INA-CBG has not only used for PBI patients but also for Non-PBI members.

Hospital management information system (SIMRS) is a set of organized activities and procedures, interrelated and interdependent, designed in accordance with the plan in the effort of presenting accurate and in time information in hospitals. In addition, the system is useful to support process management functions and decision-making in providing health care in hospitals. The system, is currently intended to support the functions of planning and evaluation of hospital work performance, among others, quality assurance of service in that hospital, financial control and work result improvement of the hospital, usage reviews and assessment on hospital health services demanded by community, planning and evaluation of hospital programs, improvement of hospital report as well as for education and training according to Sabarguna (2005).

Regulation of the Minister of Health No. 1171 / Menkes / Per. / VI / 2011 About the Hospital Information System defined as SIRS refers to a process of collecting, processing and presenting hospital data. SIMRS is an order that deals with data collection, data processing, presentation of information, analysis and inference of information as well as delivery of information required for hospital activities. Verifier is the administrative assessment claim activities proposed by hospital and carried out by verification executive with reference to the claims assessment standards by applying the principles of cost control and quality control. Claim administration is a process of preparing the file and assessment procedures of the paid claim appropriateness related to documents, namely a letter of reference, examination, supporting diagnostic service and medical treatment approved by the physician in charge, as well as drugs/medicine consumed up to disbursement claims to hospitals. Coder is providing disease code and treatment code on patient diagnosis according to ICD X and ICD 9. With the purpose of classifying the diagnosis of disease, facilitating morbidity report, and facilitating most 10 disease report. Coder is associated with medical record.

Reengineering business process is fundamental rethinking and radical redesigning of an organization's business process that leads the organization to achieve improved business performance dramatically. Some companies have implemented this new innovation paradigm to achieve improvements in cost, quality, and efficiency. In fact, even more and more companies are looking for opportunities to implement the re-engineering projects and methodologies that assist them in achieving such improvement efforts.

To control or support re-engineering process, a methodology called revision (khoong, 1995) has been developed. This methodology was developed based on extensive research, dissemination of technological change (technology change deployment), and consulting experience (consulting experience). Revision methodology underlines the needs to review the company's organization (Revisit), reinvent (Reinvent) vision of their business. The unit costs are all expenses incurred to carry out production activities or providing services / activities. (Hansem and Mowen, 2005). It is obtained by dividing the total cost (TC) by the number of products (Q). The unit cost is the cost calculated for one unit of the service product, obtained by dividing the total cost (TC) with the amount of product (Q) or total output.

\[ UC = \frac{TC}{Q} \]

Rates are part or all costs of services provided in the hospital charged to people for services that they received.

Research Methods

This research applied qualitative method. Discussion concerning the analysis unit, data collection technique, the validity which consisted of the construct validity, content validity, internal validity and external validity and reliability. Analysis unit for this study are individuals from top management of Tangerang municipality hospital.
and related to the policy or regulation, and the verifier in an interview with the object of research on the claim management of Social Security Administering Agency (BPJS) in Health for classification General Hospital Class C or non-class which is equivalent to class 3 that rested on a services provided in the era of National Health Insurance (JKN). Data collection is conducted in several ways, among others: pilot interviews, case study protocol and depth interview.

Pilot Interview has formally been carried out to four informants. Three of them are from the Regional General Hospital and the other one is from another hospital as the benchmarking. Pilot interview was conducted with semi-structure way. Everything is done with the recording. The purpose of this pilot interview, among others: (1) to determine the relevance of the variables that would be used in the analysis; (2) to formulate the questions that reflect the content of the study; (3) to check whether the questions are focused and easy to understand; (4) to help build a case study protocol and; (5) to introduce research and gain access to informants. In addition, it is conducted to check content validity and construct validity, as well as to build network.

Case studies would be conducted to the informant representing hospitals and equivalent private hospitals. For the hospital top Management, they were key informants, verifier, Coder and Chairman of the Medical Committee functioned as validation, and private hospitals would serve as a compared benchmarking. Data were collected by interviewing face-to-face in a semi structure way, focused and recorded. The data collected would reported and sent to the informant for confirmation.

Here are the frameworks of this study:

The questions would refer to the study protocol arranged below, and details of questions refer to the attachment.

## Variables Affecting the Frame of Thought

<table>
<thead>
<tr>
<th>VARIABEL</th>
<th>CENTRAL QUESTION</th>
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<tbody>
<tr>
<td>Clinical pathway</td>
<td>Is clinical pathway available or not?</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Are they well-trained or not?</td>
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<tr>
<td>IT Infrastructure</td>
<td>Does SIMRS performance meet the needs or not?</td>
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## EVALUATION

| Performance Financial     | What and how can performance financial be obtained if the BPJS claim management is more effective? |

Indepehth-interview is a way to explore the results of observation. Depth interview was originally conducted in general and then specifically, it is the process to obtain information for research objective by face to face questioning and answering session between the interviewer and informants or interviewees with or without interview guide, the interviewer and the informants are involved in social life. By conducting in-depth interview, the research would explore the involvement in the informants’ lives. In this depth interview, the researcher was face to face with the informant. Data collection techniques and the information is used through direct communication with the informant, based on the interview guide, in order to obtain data and information related to the BPJS claim management in one of government hospitals.

Construct validity is the degree to which conclusions can be made on the operationalization in theoretical studies of the theoretical construct in which the operations are made (Trochim and Donnelly, 2008). So that ideas and theories are built into concrete programs and measures accordingly. Therefore, the pilot interviews have been conducted to determine how to comprehend the informants’ desires through the questions we made. We changed questions several times in order to understand the essence data easily as it is in theory. The questions we asked are always focused and we controlled the interviews in order to stick with the theoretical references and be valid (no bias). The questions and the data we
obtained is real data which would assist and support the theory of *theory construct* made.

*Content validity* is the extent to which a measurement scale gives adequate coverage of the investigative questions (Cooper and Schindler, 2008). *Content validity* is conducted by *expert rating*. *Expert rating* is to make sure every question is relevant to the content of this study, It was carried out by checking questions to four informants in the pilot interviews. The four people were from government hospitals and RS Annisa, with different background types of hospitals but equal-type C classification and cooperate with BPJS. These questions have got the approval of Dr. Tantri Rahmat Yanuar Syah, SE, MSM, as a consultant of *Marketing and Strategic Management*, dr. Ediansyah, MARS as a hospital consultant. They are both relevant to this study.

*Internal validity* is the predicted truth of conclusions concerning causation or causal relationship (Trochim and Donnelly, 2008). Internal validity is intended to obtain relevant data and information. The results are valid and in accordance with the intent and purpose of this study. To be able to photograph what is the purpose of this study, we used a variety of methods such as: *Triangulation* which is obtained from various sources during the data collection (pilot interviews, case studies and depth interviews). *Depth interviews* will involve various people with different positions. Data for this study will be collected from two places, Local government hospitals and triangulation will be conducted with Annisa Hospital, in which this hospital is a private hospital with equal-type class, but it has no equal obligation as Tangerang Municipality Hospital (RSUD Kota Tangerang).

*External validity* means that the proportion could occur in other conditions so that the findings of this study can be generalized. The degree to which the conclusions in this study can be applied to other people, different places and different times (Trochim and Donelly, 2008). For the external validity of this research, *Thick description* is applied. For data collection, voice recording is carried out, so it would reveal complete data. Besides the voice, the atmosphere when data were being collected would also be captured such as; the emotions that raised, emphases, facial expression and body language. It helped to gain causality relationship on research material by obtaining data from various sources to complete the data from the existing information. Detailed data is evaluated and saved in case they are needed later on.

*Reliability* is the degree of consistency for a category, from different or same observers at different times. *Reliability* is required for validation (Cooper and Schindler, 2008). For *reliability* of this research, the researcher did it in 3 ways, namely: *a case study protocol, inter-rater, and thick description*. A case study protocol is made based on the core issues in order to answer the research questions. *Case study protocol* performed several revisions after conducting the *pilot interviews*, thus it is expected to get trustworthy result. To get a good reliability, the researcher had gained a pilot interview. In the pilot interview, the researcher made a report which was then returned to the readers and informants to give comments and evaluate the accuracy of the report. This method would be performed for other data to be collected in the future. The second way is to get input and feedback from experts, or management consultants.

Data collection in depth interviews was conducted by recording, so that complete data would be obtained. It is intended to gain causality relationship in research material. By having these data; it would complete the available data and information. These data are broken down and stored any time whenever it is going to be used.

**Discussion**

From the research result, that the class C of Government Hospital has unique characteristics, both in terms of policy, infrastructure and in terms of services provided.
The first stage of the business process re-engineering is to find out that there are problems occur, in this case, due to the difference in BPJS claim management. The second stage in the business process re-engineering is to determine the target business process to be re-engineered. The third stage in the business process re-engineering is to analyse and redesign the process and key issues. The fourth stage of the business process re-engineering is to redesign business process. The redesign of business process is carried out by changing the flow of BPJS claim. The fifth stage in the business process re-engineering is to fix the blueprint of recommended business process engineering. Blueprint reengineering consists of: Clinical pathway, Unit Cost, casemix team.

The sixth stage in the business process reengineering is to make methodology changes and the last stage is the seventh stage of the business process reengineering which is to make successful indicator of business process engineering changes implementation made. Steps in the preparation of clinical pathway in RSUD Kota Tangerang for quality control and cost control due to general hospital nowadays still applies area perwal rate. It is called the first period which determines the topic: the main topic chosen are those which are high-cost, high volume, high risk and predictable outcomes for the patients. The researcher clearly found several diagnosis criteria that can be used as clinical pathway of typhoid fever, dengue hemorrhagic fever, the operating procedures of section Caesarea without complications, the surgical procedure of appendectomy and stroke hemorrhagic, appoint a coordinator (advisory multidisciplinary): main coordinator served as a facilitator, so that there is no need to understand the content of clinical pathway, determine the key players. The second period was a site visit, literature search, conduct customer focus group. The third period is the study of clinical practice guidelines (KDP), casemix analysis, set clinical pathway design and process measurement and outcomes, and the last period is disseminations and education. Each period has a deadline of 1 to 2 months.

**Composing Casemix Team**

**Changing BPJS claim Flow**

**Conclusion**

This study found the impact of government hospital revenue on BPJS claim management process. It is seen from the difference between the Perwal rate used and the rate of CBGs INA used by BPJS. Business process re-engineering implemented the latest methodology, namely revision.

The government hospitals still do not have a clinical pathway and is currently in the process of manufacture, and clinical pathway is important.
because clinical pathway is one of efficient ways that can help minimize the difference occurred in the BPJS claim management which affected the government hospital revenue.

The unit cost which is still not yet made, government hospitals also still use perwal rate that still cannot be counted, the amount of the difference that occurs in BPJS claim management, Coder team still do not optimally code diagnosis due to the incomplete and unclear diagnosis writing. It is caused by verifier team who in this case are not well-trained medical personnel.

The enactment of reward and punishment which are not yet applied in the government hospitals and the lack of regular evaluation conducted due to the difference in the BPJS claims RSUD Kota Hospital; the SIMRS performance is also still not perfect.

**Limitation**

The Unit Cost which is not yet made in government hospitals made the researcher was not able to ascertain the difference occurred in BPJS claim management. On the IT infrastructure, further research has not been conducted yet, because of the limited time and because of the IT infrastructure used in government hospitals nowadays as well. SIMRS application developer is the service provider of Surabaya obtained through auction in Tangerang Municipality government.

**Sugestion For Further Research**

For further research, in order to investigate whether after clinical pathway, unit cost, human resource training made and SIMRS performance improvements can help minimize the difference in BPJS claim management in government hospitals which will affect the hospital income. Also for further research, whether by coaching the verifier team to maximize claim management in public hospitals can also avoid fraud and under coding that might occur; still for further research, whether imposing rewards and punishments that suit personnel regulations on the Civil Servant, as the number of contract workers in government hospitals is more than the number of civil servants can improve the performance of employees in the hospital environment and the employees who work in BPJS claim management particularly.

In addition to further research, whether by composing casemix team, the process flow of claim management aiming at the speed and accuracy of BPJS claim management in government hospitals can be achieved; Improving SIMRS performance in order to accommodate all the activities in a computer based hospital. Besides, how much information is needed about how long the downtime allowed when SIMRS is running? What percentage of Service Level Agreement permitted? Is there Annual Technical Support from the service provider to ensure SIMRS runs as expected?

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Kesehatan bahwa Pola Pembiayaan Kesehatan Peserta Jamkesmas di RS Menggunakan Sistem Casemic INA-DRG.

