International Journal of Engineering, Science & InformationTechnology (IJESTY)
Volume 1, No. 3 (2021) pp. 82-86
eISSN: 2775-2674
Website: http://ijesty.org/index.php/ijesty
DOI: https://doi.org/10.52088/ijesty.v1i2.114
Research Paper, Short Communication, Review, Technical Paper

Analysis of Differences in Tariff for Health Service Based on Sustability of Diagnosis on Admision and Summary Discharge Form with INA-CBGs Verification

Oktamianiza[1]*, Deni Maisa Putra[1], Yulfa Yulia[1], Agni Fahira[1], Afridon[2]

[1]Department of Medical Record and Health Information, STIKES Dharma Landbouw, Padang, Indonesia
[2]Department of Hospital Administration, STIKES Dharma Landbouw, Padang, Indonesia
**Corresponding author E-mail: oktamianiza@gmail.com*

Manuscript received 15 April 2021; revised 1 May 2021; accepted 15 June 2021. Date of publication 3 July 2021

Abstract

The implementation of the National Health Insurance starting in January 2014 made a change in the payment system from the Retrospective Paymant System to the Prospective Payment System with INA-CBG's rates. The difference in INA-CBG's rates and hospital rates is a fundamental problem so that hospitals must make efforts to achieve quality and cost control. the purpose of this research was to determine the Analysis of Differences in Tariff for Health Service Based on sustability of Diagnosis on the admision and discharge summary form (RM1) with INA-CBGs Verification at Hospital Dr. Reksodiwiryo Padang. The results of the study found that the accuracy of disease diagnosis and patient medical treatment was on the RM1 form (21.7%), on the INA-CBGs verification (56.5%). Differences in disease diagnosis and patient medical treatment on RM1 form with INA-CBGs verification (63.0%), and differences in health service fees based on accuracy of patient diagnosis and medical treatment on RM1 form with INA-CBGs verification (63.0%) . There is a significant relationship between the difference in the Tariff of health services with the accuracy of diagnosis on the RM1 form and the INA-CBGs verification which is quite large, due to the discrepancy in writing the diagnosis on RM1 with the INA-CBGs verification.

***Keywords**: Verification INA-CBGs Form, Admision and Discharge Summary, Tariff, Diagnosis.*

1. Introduction

The admision and discharge summary form (RM1) containing enough information to identify the patient to assess the process of information obtained by the patient. This form is used as a source of information to find out what types of services are provided to patients, to code patient diagnoses and medical actions, etc. [1].
The INA CBG's verification form is a form that summarizes overall patient data, from the patient entering to the patient leaving the hospital. This form provides information on patient data and clinical data of patients during treatment at health services. This form is used for coding disease diagnoses and patient medical actions as well as summarizing the results of tariff grouping based on data from RM1 [2].
Determining a patient's diagnosis is an obligation, right and responsibility of a doctor, it cannot be changed, therefore the diagnosis in the medical record must be filled out completely and clearly according to the directions in the ICD-10 book (International Statical Classification of Disease and Related Health Problems). In addition to focusing on the problem of calculating costs, INA-CBG's also provide national standards on how much to charge for certain diagnoses. This provides certainty as well as transparency to the community as users of health services. With such complete and accurate data, INA-CBG's also serves as a reference for hospitals in assessing the various services that have been provided so that the effectiveness of health services can be controlled and evaluated because the existing system already has standards in terms of the use of various resources.[2].
Diagnostic mismatch will affect report data and information, INA-CBG's tariff determination which is currently used as a payment method for BPJS patients (Social Security Administration Agency). In this case, if the coder incorrectly coded the disease, the amount of claim payment will also be different. Low rates of health services will certainly harm the hospital, on the other hand, high rates of health services seem to make the hospital benefit from the difference in rates to the detriment of BPJS and patients [2].
Research conducted by [3] entitled the accuracy of coding the main diagnoses of the disease in the inpatient medical records of JKN (National Health Insurance) at RSI Siti Rahmah Padang in 2016 it was found that the clarity of writing the main diagnoses in the medical records of JKN inpatients 29.0% was not clear, the completeness of writing the main diagnoses 18, 0% is incomplete, the main diagnostic accuracy is 24.0% incorrect and the main diagnostic coding accuracy is 48.0% incorrect. So that it can be difficult for the coder officer to determine the diagnostic code which in turn can affect the accuracy of the diagnostic coding later. Because the accuracy of coding is very important for hospitals as a process of presenting statistics, reports, indexing, and financing. Meanwhile, based on the results of an initial survey conducted at Hospital. Dr. Reksodiwiryo Padang in 2021, in 20 medical records observed, 40% of medical records contained differences in the diagnosis of RM1 and the reported verification of INA-CBGs.

2. Literature Review

2.1. Classification and Codefication

Coding is the assignment of codes by using letters or numbers or a combination of letters in numbers that represent data components. Activities and actions and diagnoses contained in medical records must be coded and then indexed to facilitate services in presenting information to support planning, management and research functions in the health sector[4].

2.2. Medical Record Document Analysis

According to (Anggraini et al., 2017) in Learning Packages published by IHFRO (Watson, 1986) it is stated that in the coding process, generally the medical record sheets that need to be analyzed at a minimum are: Admission-Discharge Sheets, Resume Sheet (Discharge Summary), Operation Report, PA / Histopathology Report of the taken tissue. Other sheets that may be useful for choosing the right code include:

a. Clinical Pathology Reports, for example to identify bacteria or viruses causing infection, pneumonia or GE.
b. Radiologic reports (x-ray photos) for example to detail the location of the fracture.
c. Progress notes, for example, to ensure the main diagnosis if the information on the cover sheet or resume sheet is still unclear.
d. Prior hospitalization (admission) to check whether the previous medical history is complete.

After the coder obtains sufficient information to determine the diagnosis accurately and with precision, then allocates the appropriate code. The code assignment procedure is determined by the coding device used. In Indonesia, especially for reimbursement purposes, the 2010 version of ICD-10 is used for disease diagnosis codes, while for coding medical procedures, the 2010 version of ICD-9-CM is used [2].

2.3. Medical Record Documents

2.3.1. Admision and Discharge Summary Form

This entry & exit summary sheet is often called a summary or cover sheet, always the front sheet in a medical record file. This sheet contains information about the patient's identity, how to receive it through the way in which it is sent by, and contains a summary of the data when the patient is discharged. This sheet is a source of information for indexing medical records, as well as preparing hospital reports (Depkes RI, 2006).

In the medical record file, the entry & exit summary sheet is placed on the front with the intention of making it easier for the doctor to see it if needed. The entry & exit summary form only explains important information about the patient's identity, how to receive it, and contains the patient's diagnosis (primary and secondary), and the diagnosis of the patient's actions [5].

Besides that, the uses of the entry & exit summary sheet are as follows:[6].

a. Maintain continuity of care in the future by providing a copy to the patient's primary doctor, referring doctor and consultants in need.
b. Provide information to support the activities of the medical staff review committee
c. Provide information to authorized third parties.
d. Provide information to the sender of the patient
e. Fill in the Resume.

2.3.2. INA-CBGs Verification Form

The INA CBG's verification form is a form that summarizes overall patient data, from the patient entering to the patient leaving the hospital. This form provides information on patient data and clinical data of patients during treatment at health services. This form is used to summarize the results of the tariff grouping (BPJS Kesehatan, 2014)

3. Methods

The research was conducted at the medical record section of Hospital Dr. Reksodiwiryo Padang with data collection carried out on May 03 – May 12, 2021. The type of research is quantitative with a cross sectional design. The samples taken were all inpatients from January to March 2021. Data was collected by means of observation using a checklist table with univariate and bivariate data analysis techniques with chi-square test.

4. Results and Discussion

4.1 Result

a. Accuracy of Disease and Medical Diagnosis on RM1 Form

Table 1. Distribution of Frequency Accurate Disease and Medical Diagnosis on RM1Form

Accurate Disease and Medical Diagnosis	*f*	%
Accurate	72	78,3
Not Accurate	20	21,7
Total	92	100,0

There are 21.7% of disease and medical diagnoses on RM1 form are not correct.

b. Accuracy of Disease and Medical Diagnosis on INA-CBGs Verifikasi Form

Table 2. Distribution of Frequency Accurate Disease and Medical Diagnosis on INA-CBGs Verifikasi Form

Accurate Disease and Medical Diagnosis on INA-CBGs Verifikasi Form	*f*	%
Accurate	40	43,5
Not Accurate	52	56,5
Total	92	100,0

There are 56,5% of disease and medical diagnoses on verivikasi INA-CBGs form are not correct

c. Differences in Disease and Medical Diagnosis on RM1 Form and INA-CBGs Verification Form

Tabel 3. Distribution of Frequency Differences in Disease and Medical Diagnosis on RM1 Form and INA-CBGs Verification Form

Differences in Disease and Medical Diagnosis on RM1 Form and INA-CBGs Verification Form	*f*	%
Not Differences	34	37,0
Differences	58	63,0
Total	92	100,0

There are 63.0% differences in disease and medical diagnosis on the RM1 form with the INA-CBGs verification form.

d. Differences of Tariff Health Service Based on Accuracy of Desease Diagnosis at RM1 and Verification of INA-CBGs Form

Tabel 4. Distribution of Frequency Differences of Tariff Health Service Based on Accuracy of Desease Diagnosis at RM1 and Verification of INA-CBGs Form

Differences of Tariff Health Service Based on Accuracy of Desease Diagnosis at RM1 and Verification of INA-CBGs Form	*f*	%
Not Differences	34	37,0
Differences	58	63,0
Total	92	100,0

There are 63.0% differences of Tariff Health Service Based on Accuracy of Desease Diagnosis at RM1 and Verification of INA-CBGs Form

4.2 Discussion

a. Accuracy of Disease and Medical Diagnosis on RM1 Form

Based on the results of the study, it was found that the accuracy of disease diagnoses and patient medical actions at RM1 was obtained as many as 20 (21.7%) diagnoses of diseases and inappropriate medical actions, the results of this study were supported by research conducted by [3] entitled Coding Accuracy the main diagnosis of the disease in the inpatient medical records of JKN (National Health Insurance) at Siti Rahmah Hospital Padang in 2016 found 24% of the main diagnoses were incorrect.

According to (PERMENKES RI No. 269/MENKES/PER/III/2008, 2008), quality medical records can be seen from the accuracy of the contents of medical records such as the suitability of diagnoses on medical record file sheets. Writing a doctor's diagnosis that is difficult to read and inputting an inappropriate diagnosis will affect the information generated due to the inaccuracy of the data presented so that it will have an impact on the quality of information and the accuracy of the patient's disease diagnosis, in addition to having an impact on the hospital in the payment system. The quality of coded data is important for health information management personnel, the accuracy of diagnostic data is very crucial in the field of clinical data management, cost collection, and other matters related to health care and services [6].

From the researcher's analysis, it was found that almost half of the files studied were illegible. The unclear writing of the diagnosis is caused by the doctor's writing which is difficult to read because the writing is continuous and uses several abbreviations which make it difficult to read.

Therefore, the researcher suggests that doctors write the diagnosis clearly on the medical record form, especially on the RM1 form so that it can be read. So that the officer or coder has no difficulty in identifying the diagnosis, determining the diagnosis code on the medical record form, especially on RM1 and does not take much time to implement.

Therefore, most of the patient's diagnosis of the patient's disease on the in-and-out summary form is incomplete because there are no guidelines or regulations regarding the correct medical record filling in in order to be implemented as optimally as optimally, monitoring, and evaluation about the medical record form periodically [7].

b. Accuracy of Disease and Medical Diagnosis on INA-CBGs Verifikasi Form

Based on the results of the study, it was found that the accuracy of disease diagnosis and patient medical actions on the INA-CBGs verification form obtained 52 (56.5%) incorrect diagnoses, this is also supported by research conducted by (Ningtyas et al., 2019) with the title Analysis of the Accuracy of the Main Diagnostic Code of Childbirth Cases Before and After Verification of BPJS Patients at Dr. RSUP. Soeradji Tortonegoro Klaten in 2018, where the results obtained were 50% of the main diagnoses were incorrect.

Form In the implementation of JKN, the INA-CBG system is one of the important instruments in submitting and paying claims for health care payments that have been carried out by FKRTL in collaboration with BPJS Health, so the management and functional parties in each FKRTL need to understand the concept of implementing INA-CBG in the JKN program (Kemenkes RI, 2016).
According to the researcher's analysis, the inaccurate diagnosis occurred in the medical record file. There were 52 (56.5%) incorrect diagnoses from the 92 medical record files studied. This is because the diagnoses contained in the INA-CBGs verification form are not in accordance with the diagnoses on the RM1 form. From the results obtained regarding the inaccuracy of disease diagnosis, the number shows a fairly high number. Low diagnostic accuracy can describe good coding quality in a hospital. . The inaccuracy of the diagnosis in the verification form is usually due to the lack of accuracy of the coder in filling out or inputting and other health workers in writing the diagnosis. Accuracy in writing diagnoses can be obtained by observing important reports in medical record files such as medical resumes, examination results and others.
Therefore, researchers expect the coder officer as a diagnostic code provider and who inputs the diagnosis to the claim verification system to be more thorough in analyzing disease diagnoses and patient actions before determining the code.
Therefore, the writing of the patient's disease diagnosis is not appropriate on the INA-CBGs verification form because it is caused by the writing of diagnoses that have not been referred to ICD-10 and ICD-9-CM, doctors do not write the diagnosis of the disease completely and some doctors only write down the diagnosis [7].

c. Differences in Disease and Medical Diagnosis on RM1 Form and INA-CBGs Verification Form

Based on the results of the study, it was found that the differences in disease diagnoses and patient medical actions on the RM1 form with INA-CBGs verification obtained as many as 58 (63.0%) there were different diagnoses while 34 (37.0%) had the same diagnosis.
Based on research conducted by [8] entitled Hospital Characteristics and Accuracy of Diagnostic Codes Affecting INA-CBGs Claim Results, analysis of the accuracy of diagnosis codes in patient medical records obtained 34 (34%) inaccurate diagnosis codes. The inaccuracy of the diagnosis code was caused by incomplete medical information, especially the results of supporting examinations.
Accuracy is the accuracy, precision and accuracy of the diagnosis of the disease can be identified as the right and wrong diagnosis. The right diagnosis is the right one that is in accordance with ICD-10 while the incorrect diagnosis is the determination of the diagnosis of the disease that is not appropriate and not in accordance with ICD-10. Determination of the diagnosis on the INA-CBGs verification form must select conditions and procedures that must be coded from the available medical records, the coder works based on the guidelines for the diagnosis statement and doctor's actions if any. In addition, coding on the verification form must pay attention to statements related to symptoms, treatment and types of medical actions other things that lead to inaccurate diagnosis statements and procedures to produce additional information about diagnoses and actions written by doctors [6].
According to the researcher's analysis, there were 58 (63.0%) incorrect diagnoses while 34 (37.0%) correct diagnoses from the 92 medical record files studied. The inaccuracy of the diagnosis of the disease was caused by the doctor not paying attention to the writing of the diagnosis, the doctor was in a hurry to treat a patient during treatment, and the diagnosis of the disease was not specifically explained.
Therefore, the researcher recommends doctors as diagnosis enforcers to be able to write precise and specific diagnoses so that they can be identified. For the use of abbreviations in writing diagnoses, there needs to be accuracy from the hospital regarding the agreed rules or standard operating procedures so that the understanding of the coder or medical record officer does not diverse and easy to understand. Writing the right diagnosis will greatly assist the coder in identifying and specifying the code so that it does not take much time in the implementation of coding.

d. Differences of Tariff Health Service Based on Accuracy of Desease Diagnosis at RM1 and Verification of INA-CBGs Form

Based on the results of the study, it was found that the difference in tariff rates for health services based on the accuracy of disease diagnosis and patient medical actions on the RM1 form with INA-CBGs verification obtained as many as 58 (63.0%) there were differences in rates.
Based on research conducted by (Nurhidayati, 2016) entitled Analysis of Differences in Claim Rates for Indonesian Case Base Groups (Ina-Cbgs) Based on Completeness of Diagnostics and Medical Procedures for Patients Inpatient Joint Trisemester I at Yogyakarta City Hospital in 2015 there was a difference of 27.5% from the data real rates compared to INA-CBGs claim rates. There is a negative difference between the INA-CBGs claim rates and the real rates. The total real rates issued by hospitals are higher than the INA-CBGs claim rates.
Based on research conducted by [9] entitled Factors Causing Differences in Real Hospital Rates with INA-CBG's Rates in Pecutaneous Transluminal Coronary Anggioplasty (Ptca) Cases at Dr. RSUP. M. Djamil Padang in 2017, where the results of research at RSUP Dr. M. Djamil Padang, it was found that the overall difference in hospital real rates with INA-CBG's rates for JKN patients and PTCA cases was 50 cases (100%).
From the results of research conducted by [9] on the factors causing the difference in hospital real rates with ina-CBGs rates in the case of Pecutaneous Transluminal Coronary Anggioplasty (PTCA) obtained that a small fraction of 13 files (26.0%) inaccuracy in the diagnosis of JKN patients with PTCA cases on the INA-CBGs erification form.
Based on a study conducted by [10] entitled Analysis of Hospital Rates and INA-CBGs Rates for Cases of Congestive Heart Failure, which resulted in the difference between hospital rates and INA-CBGs rates at hospital X in October - December 2019 led to negative difference is -40.158.430 with an average difference of -573.691 ± 2.825.013. This negative difference can have a detrimental impact on the hospital. Hospital rates are higher than the INA-CBGs rates with a high difference in length of stay > 5 days (102%), and the number of procedures is more than one action (65%).
Law No. 40 of 2004 concerning the National Social Security System (UU SJSN) in chapter 24 paragraph 3 stipulates that the Social Security Administrative Body (BPJS) must develop a health service system, a service quality control system and a payment system for health services to improve efficiency and effectiveness. The payment system for health services has been explicitly regulated in the Presidential Regulation concerning Health Insurance Article 39, namely using the capitation mechanism for first-level health services and the INA-CBGs mechanism for advanced level referral health services [9].
According to the researcher's analysis, the difference in health service cost rates based on the accuracy of disease diagnosis and patient medical actions on the INA-CBGs verification form, namely 58 (63.0%) there is a difference in health care cost rates while 34 (37.0%) there is no difference. the difference in rates was caused by the mismatch of the diagnosis written on RM1 with the INA-CBGs verification form. The inaccuracy of writing the diagnosis on the RM1 form resulted in the writing of the diagnosis on the verification form being incomplete, resulting in differences in the cost of health services.

Therefore, the researcher recommends doctors as diagnosis enforcers to be able to write precise and specific diagnoses on medical record files so that they can be identified.

5. Conclusion

In determining the diagnosis or coding of diseases and medical actions follow the rules and regulations contained in the ICD-10 and ICD-9CM. The diagnosis should be written in writing that can be read by the coding officer, written accurately, clearly and completely by the treating doctor and guided by the coding rules for morbidity and mortality so that the cost of health services that will be claimed or paid by the patient is accurate and correct.

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