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Socialization and Workshop of Coding Based on ICD-10 and ICD-9 Cm Regulations at Mental Hospital Prof Hb Saanin Padang

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ABSTRACT

Coding based on ICD-10 is assigning codes using letters and numbers representing data components to ensure code accuracy. In coding patient medical actions/procedures, coders use ICD-9 CM rules to assign medical action codes to the patient's resume sheet. The application of coding is used to index disease records, input for medical diagnosis reporting systems, facilitate the process of storing and retrieving data related to diagnosis, characteristics of patients and service providers, basic ingredients in grouping DRGs (diagnostic-related groups) for service fee payment billing systems, national and international reporting morbidity and mortality, tabulation of health service data for the evaluation process of medical service planning, analysis of health service financing, as well as for epidemiological and clinical research. Mental Hospital, Prof HB Saanin Padang is a mental hospital under the government of West Sumatra. To improve the quality of medical recorders and avoid losses in insurance financing claims, the service will carry out Community Service (PKM) activities. This service aims to provide socialization and training on coding diagnoses and actions based on ICD-10 and ICD-9 CM regulations. The PKM activity is a development program where the service team carries out outreach regarding regulations for coding diagnoses and actions based on ICD-10 and ICD-9 CM. Then the team will carry out follow-up activities in the form of ICD-10 and ICD-9 CM coding practices with partners. The partner in this community service activity is the Prof HB Saanin Padang Mental Hospital (RSJ). Based on the topics, several activities consist of socialization of regulations ICD 10 and ICD-9 CM and workshop study case based on ICD 10 and ICD-9 CM regulations. This activity has been done on Mei 07, 2024. Results showed there is increasing knowledge about regulation ICD 10 and ICD-9 CM based on pre-test and post-test results.

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INTRODUCTION

Hospitals are complex, expert-intensive, and capital-intensive health service institutions. This complexity arises because hospital services involve various service, education, and research functions, and cover various levels and types of discipline so that hospitals can carry out professional functions in both the medical technical and health administration fields. To maintain and improve quality, hospitals must have measures that guarantee quality improvement at all levels (Rustiyanto, 2010). Improving the quality of hospital services, one of the units that plays a role in improving a good information system is the medical records work unit (UKRM). A medical record is a file that contains information about the patient's identity, anamnese, physical laboratory determinations, diagnosis of all medical services and procedures provided to the patient, and treatment whether inpatient, outpatient, or those receiving emergency services (Ministry of Health, 2006). By Minister of Health Regulation number 269 of 2008 concerning medical records, it is stated that the requirements for medical records for inpatients must at least contain the patient's identity, examination, diagnosis/problem, approval for medical action (if any), action/treatment, and services. that has been given to patients. Medical information will be used in ICD-10 and ICD-9 CM coding.

Coding based on ICD-10 is assigning codes using letters and numbers representing data components to ensure code accuracy. In coding patient medical actions/procedures, coders use ICD-9 CM rules to assign medical action codes to the patient's resume sheet. Coding of medical actions is carried out to provide classification and specific information regarding medical actions which are grouped based on ICD-9 CM (Rahayu et al., 2022). The coding application is used to index the disease recording, input for medical diagnosis reporting systems, facilitate the process of storing and retrieving data related to the diagnosis of patient characteristics and service providers, basic ingredients in grouping DRGs (diagnostic-related groups) for service fee payment billing systems, national and international reporting of morbidity and mortality, tabulation of health service data for evaluation process for medical service planning, analysis of health service financing, as well as for epidemiological and clinical research. Implementation of diagnostic coding must be complete and accurate by ICD-10 directives (WHO, 2004).

Accuracy in coding a disease and action is very important. Many factors influence the accuracy of clinical data coding. In several studies regarding the factors causing the accuracy of clinical data coding in several literature, some of them explain the lack of clarity in the notes made by doctors, clarity & completeness of medical record documentation, use of synonyms and abbreviations, experience, length of work and education of coders, differences between the use of electronic medical records and manual, quality assurance program, indexing errors, coder quality where coders lack attention to ICD principles and key aspects of the coding process, coders only use the diagnosis code tabulation list guide which is often used as a reference in coding instead of the ICD-10 book and/ or ICPC. Coders still often do not use the ICD-10 book in assigning diagnosis codes but only use the smart book or directly search in the INA-CBGs program which is used for the grouping process. Although ICD-10 includes a large number of codes, it does not mean coders have to memorize every applicable ICD-10 code. Coders must use reference books and coding manuals to find new codes (Bowman & Abdelhak, 2001; Eramo, 2012; Ernawati, 2013; Hasan; Ifalahma, 2013; Nuryati, 2015; O'Malley et al., 2005; Quan; Silfen; Surján; van Walraven & Demers, 2001).

The results of research by Gugun Priyadi & Cahyani Dwi Lestari (2017) at Sumber Waras Hospital. The results of research conducted with a sample of 94 surgical case medical records found that 43.6% of the action codes were accurate and 56.4% of the codes were inaccurate (Tarjana, 2021). Results of research by Gugun Priyadi & Fasya Rizka Fauziyyah (2021) conducted at the Majalengka Regional General Hospital with samples of 100 medical records of surgical cases found 30% accurate action codes and 70%

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inaccurate codes. Based on research by Agustin Tri Wahyuni (2022) at Dr. Hospital. Reksodiwiryo Padang, the results of the study showed that doctors' handwriting was not as clear (31.0%), the completeness of diagnostic procedures was incomplete (50.7%), and the accuracy of surgical codes (53.5%) was incorrect (Tahun et al ., 2022).

According to the Republic of Indonesia Minister of Health Decree Number 377/Menkes/SK/III/2007 concerning Professional Standards for Medical Recorders and Health Information, a medical recorder must be able to determine disease codes and actions correctly according to the classification applied in Indonesia (ICD-10) regarding diseases and ICD-10. 9 CM medical actions in health services and management. By improving the coder's attack coding skills, the risk of loss to the hospital as a health service facility will be reduced. Prof HB Saanin Padang Mental Hospital (RSJ) is a mental hospital under the auspices of the province of West Sumatra. This hospital collaborates with several insurance companies to finance patient care, one of which is BPJS insurance. In an effort to improve the quality of medical recorders and avoid losses in insurance financing claims, the service will carry out Community Service (PKM) activities.

Implementing PKM is a mandatory activity for lecturers in implementing one of the three principles of higher education. This activity is a form of Apikes Iris' dedication to the benefit of the medical records field, especially in health service facilities. The PKM activity is a development program where the service team carries out outreach regarding regulations for coding diagnoses and actions based on ICD-10 and ICD-9 CM. Then the team will carry out follow-up activities in the form of ICD-10 and ICD-9 CM coding practices with partners. The partner in this community service activity is the Prof HB Saanin Padang Mental Hospital (RSJ). Based on the topics raised, several activities will be carried out in the form of:

1. Socialization of regulations for the use of ICD-10 and ICD-9 CM
2. Coding training/case studies based on ICD-10 and ICD-9 CM regulations.

This service aims to provide socialization and training on coding diagnoses and actions based on ICD-10 and ICD-9 CM regulations.

PROBLEM SOLUTION

This PKM activity is based on a survey of partners (RSJ) Prof HB Saanin Padang. The survey results show that there are still cases of pending claims occurring at the hospital. The solution we provide is to carry out socialization regarding the urgency of coding based on ICD-10 and ICD-9 CM regulations, after that, we will continue with the practice of coding ICD-10 and ICD-9 CM regulations. The accuracy of the diagnosis code is writing a disease diagnosis code that is by the classification in ICD-10. The code is considered appropriate and accurate if it matches the patient's condition with all the actions that occur, completely according to the classification rules used. If the code has 3 characters it can be assumed that the category is not divided. Often when categories are divided, the number code in the index will give 4 characters. A dash in the 4th position (e.g. O03.-) means that the category has been divided and the 4th character can be found by referring to the tabular list (WHO, 2004). The detailed classification codes for diseases and health-related problems can cause errors in assigning a code. Factors that can cause errors in assigning codes based on the results of research by the Institute of Medicine (Bowman and Abdelhak, 2001) are:

- Errors in reading the diagnosis contained in the medical record file, because the medical record is incomplete
- Errors in determining the main diagnosis made by the doctor
- Error in determining the diagnosis code or action code
- The diagnosis or action code is invalid or does not match the contents of the medical record file

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- Errors in rewriting or entering code into the computer.

The speed and accuracy of coding a diagnosis is very dependent on the implementer who handles the medical record, including the ability of medical personnel to determine the diagnosis and provide a diagnosis code as well as other related health personnel in completing the filling in of the medical record.

IMPLEMENTATION METHOD

This Community Service (PKM) was done on May 7 2024 at Mental Hospital, Prof. HB Saanin Padang.

Work Procedure

In implementing the activity, the steps to be taken are as follows:

FIGURE 1. Implementation

Implementation Method

This Community Service activity is carried out by providing outreach regarding the regulations for coding diagnoses and actions based on ICD-10 and ICD-9 CM regulations to partners. This service activity is a guided PKM where the team will carry out follow-up activities to practice coding ICD-10 and ICD-9 CM regulations. From the topics that have been raised, several activities will be carried out in the form of:

- Socialization of Regulations Coding diagnoses and actions based on ICD-10 and ICD-9 CM regulations.
- Workshop on ICD-10 and ICD-9 CM regulation.

RESULT AND DISCUSSION

Activity Location

This Community Service Activity (PKM) was held on Mei 07 2024 at Mental Hospital Prof HB Saanin, Padang. Activities are carried out directly at the hospital. The targets of this activity are the medical records team, nurse, and hospital case-mix team (Figure 2).

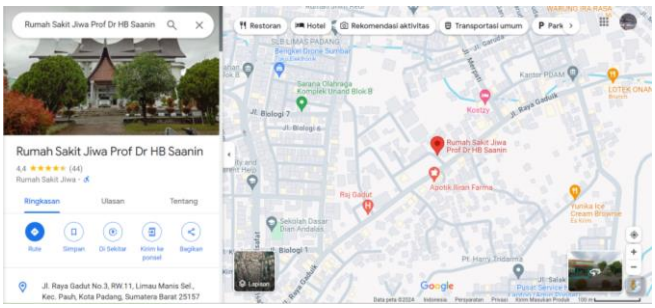

FIGURE 2. Location

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Goal Achievement

Community Service Activities (PKM) were done at Mental Hospital Prof HB Saanin Padang on Mei 7 2024. The activities were carried out by providing socialization regarding the ICD-10 and ICD-9 CM action coding regulations and continued with the workshop. This activity was attended by 14 participants from the medical record, case-mix team, and nurse.

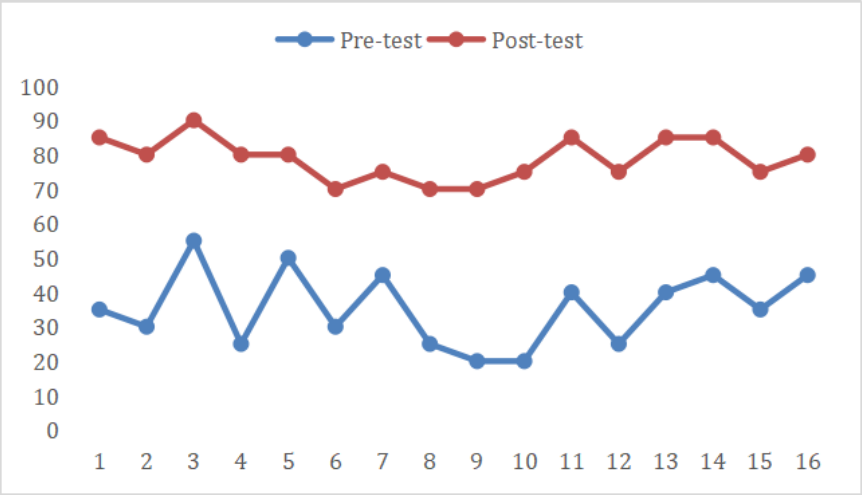

FIGURE 3. Pre-test and post-test results of workshop ICD 10 and ICD-9 CM

Figure 3 shows the results of the pre-test, the average participant score was between 30 – and 50 points. After the workshop, the participant's level of understanding regarding ICD-10 and ICD-9 CM regulations can be seen from post-test scores with intervals of 75 – 90 points. It means, there was an increase in participants' knowledge after participating in workshop activities.

FIGURE 4. Socialization regulation of ICD-10 and ICD-9 CM

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FIGURE 5. Workshop coding ICD-10 and ICD 9 CM

FIGURE 6. Photo with participant

Figure 4-6 shows conditions of PKM activities in socializing ICD-10 and ICD-9CM coding regulations and workshop of coding.

The accuracy of determining diagnosis codes is an important thing that must be considered by medical record officers. Diagnostic data accuracy is critical in the areas of clinical data management, billing, and other matters related to health care and services. This is by research by Wariyanti (2016). If the medical information in the medical record document is incomplete, the resulting diagnosis code will be inaccurate. The accuracy of diagnosis codes and action codes has a significant impact on the quality of statistical

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data and treatment payments in the National Health Insurance (JKN) era. Inaccurate diagnosis codes produce inaccurate data. Incorrect codes will result in incorrect price lists.

Research has been done by Rohman (2011) found that medical information is one of the factors that influence the accuracy of diagnostic codes. The diagnosis code will be included in the relevant medical information (Parkhi et al., 2023). Coding involves assigning codes using letters or numbers, or combinations of letters and numbers that represent data components. Activities, actions, and diagnoses contained in medical records must be coded and then indexed to facilitate the provision of information that supports planning, management, and research functions in the health sector. The goal of diagnostic coding is to facilitate health records organization and collection, storage, retrieval, and analysis (Parkhi et al., 2023). Apart from coding diagnoses, coding operative and non-operative procedures based on ICD-9 CM is also important to understand further. Based on Pramono's research regarding the relationship between coders (doctors and nurses) and the accuracy of diagnosis codes based on ICD-10 (2012), from 385 medical record files at the Gondokusuman II Community Health Center, Yogyakarta City, 174 codes (45.2%) were found to be accurate and 211 codes (54%) were found. 8%) is inaccurate. One of the causes of the inaccuracy of the code is the inappropriate qualifications of the human resources tasked with coding the diagnosis. In addition, inaccuracies in diagnosis codes can also be caused by inaccurate medical terminology used by doctors. Writing abbreviations or terms in writing diagnoses requires uniformity and consistency in the use of medical terminology according to ICD-10 to further increase the accuracy of diagnosis codes (Setiyawan et al., 2023).

The accuracy of the diagnosis code is the accuracy of writing the disease code by the ICD-10 classification and the patient's condition with all the actions that occur. The coder is responsible for the accuracy of the assigned diagnosis code. Therefore, if the diagnosis made by the Doctor in Charge of the Patient (DPJP) is unclear/inaccurate and incomplete before assigning a diagnosis code, it must be communicated first with the DPJP to further improve the information in the medical record, and the coder assigns the code by the rules. which is in ICD-10 according to Hamid in the journal (Heltiani et al., 2023).
Based on research results (Puspaningtyas et al., 2022), things that influence code inaccuracy are as follows:

- The doctor writes the diagnosis using Indonesian. It is known that this language is used daily among medical personnel at the hospital.
- Writing a diagnosis by medical terminology will help the Medical Recorder in determining lead terms (keywords used in coding diagnoses which can be found in ICD-10 Volume 3, alphabetical index section)
- Inaccuracies due to the diagnosis not being coded because the coding officer did not re-check the patient's medical record documents.
- Inaccuracies in diagnosis codes due to errors in code selection can also be due to errors in the 3 character categories and sub-categories or the 4th digit, which indicates that the coding officer was less careful in selecting the lead term and less careful in reading the information contained in the patient's medical record document. (Puspaningtyas et al., 2022)

In research conducted by (Ainung et al., 2023), the determining factors for the quality of disease diagnosis coding are determined by the completeness factor, specifications for writing the diagnosis, and the readability of the doctor's writing, where writing the diagnosis must be communicative and effective to understand.

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CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the pre-test and post-test, there was an increase in understanding regarding ICD-10 and ICD-9 CM coding regulations. As a recommendation, this activity can be continued with a workshop on psychiatric cases based on ICD-10.

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