The Completeness and Accuracy of Hepatoma Coding for Medical Procedure Based on ICD-9 CM at Public Hospital in Padang

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ABSTRACT

Background: Hepatoma or hepatocellular carcinoma (KHS) is a primary malignant tumor of the liver originating from hepatocytes and the 3rd cause of death from cancer in the world. The history of a hepatoma patient can be seen based on the patient's medical record. The filling of medical record is done by doctors, nurses and medical record personnel. However, in medical record filling, incompleteness is often found and cause inaccurate information. Accuracy coding important for financial of hospital.

Methods: Type of research is quantitative descriptive, which is to determine the completeness and accuracy of the medical records for hepatoma cases and procedure code using criteria for document quantitative analysis in a public hospital, Padang. The study design used a retrospective analytical approach. The variables in the study were completeness of discharge summary and accuracy of hepatoma procedure based on ICD-9 CM. The population in this study were inpatient medical record documents for Hepatoma cases at a public hospital, Padang from June to August 2019, which were 45 medical record documents (discharge summary form) of hepatoma inpatients.

Results: From 45 hepatoma patient medical record documents, filling of item name, medical record number, date of admission, indication of the patient being treated, history, physical examination, diagnostic examination, procedures, medications given, medicines used at home, PPBS doctor's signature, DPJP doctor's hand is complete 100%. Highest incompleteness of filling was found at code ICD (47%) and address item (43%). From 45 discharge summary, accuracy procedure code at hepatome case shows 100 % accurate in ultrasonogrfi abdomen and ultrasonografi thorax. While that EKG 98% accurate and 95% rontgen thorax.

Conclusions: In general, item data of discharge summary for hepatoma medical record are completeness; highest incompleteness of filling was found at code ICD (47%) and address item (43%); Accuracy of code procedure more than 90% in each code procedure.

Keywords: Medical Record, Hepatoma, ICD 9, Discharge Summary.

INTRODUCTION

Hepatoma or hepatocellular carcinoma (KHS) is a primary malignant tumor of the liver originating from hepatocytes and the 3rd cause of death from cancer in the world. Approximately 500 new cases of hepatoma per 100,000 population occur each year with a male: female ratio = 2-6: 1. The incidence is highest in Sub-Saharan Africa and Asia, with an age range of 1 to 2 decades earlier the occurrence of hepatoma than in low prevalence areas like Europe and America (Budihusodo 2006; Engstrom 2000; Isselbacher 2005). History of hepatoma sufferers can be seen based on the patient's medical record.

Medical record is a file that contains notes and documents about patient identity, examination, treatment, action, diagnosis and other services that have been provided to patients (Permenkes, 2008). To maintain and improve the quality of services in hospitals,
medical records must be filled out completely and accurately. The medical record must contain a diagnostic document which will be coded on the front sheet of the entry and exit summary, the operation sheet, the action report and the pathological report. Medical records are responsible for the accuracy of the code of a diagnosis determined by the doctor. The quality of coded data is important for medical record professionals and other health information management professionals. Inaccuracies in coding the diagnosis have a major impact on the payment of insurance claims to hospitals and this will lead to a decrease in the quality of hospital services. In addition to code accuracy, the completeness of a medical resume written by a doctor will greatly assist the coder in providing the correct diagnostic code and action/procedure (Permenkes, 2014).

However, in recording medical record documents, incompleteness in filling out medical record documents is often found, resulting in inaccurate information. Such as incomplete document filling by medical record officers on patient identities and patient discharge forms. There are two types of analysis for the completeness of medical record documents, namely quantitative analysis and qualitative analysis. Quantitative analysis is used to evaluate the completeness of various types of forms and data / information, while qualitative analysis is used to examine the contents of medical records to look for inconsistencies and omissions that could cause the medical record to be considered incorrect or unnecessary (Hatta, 2013).

The results of the analysis of the completeness of medical record documents can be used as an indicator of the quality of hospital services. Currently, research on the analysis of the accuracy of the procedure code has not much in the city of Padang and considering its impact on insurance payments and as one of the benchmarks for accreditation, the researchers conducted research on the accuracy of the procedure.

METHODS

Type of research is quantitative descriptive, which is to determine the completeness and accuracy of the medical records for hepatoma cases and procedure code using criteria for document quantitative analysis in a public hospital, Padang. The study design used a retrospective analytical approach, namely the analysis of the completeness of the medical record documents used when the patient returned home or the documents returned to the assembling department. The variables in the study were completeness of discharge summary and accuracy of hepatoma procedure based on ICD-9 CM. The population in this study were inpatient medical record documents for Hepatoma cases at a public hospital, Padang from June to August 2019, which were 45 medical record documents (discharge summary form) of hepatoma inpatients.

RESULTS

<table>
<thead>
<tr>
<th>No</th>
<th>Data</th>
<th>Completeness</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Number of Medical record</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Date of admission</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Date of discharge</td>
<td>44</td>
<td>97</td>
</tr>
<tr>
<td>5</td>
<td>Date of birth</td>
<td>35</td>
<td>77</td>
</tr>
<tr>
<td>6</td>
<td>Sex</td>
<td>42</td>
<td>91</td>
</tr>
<tr>
<td>7</td>
<td>Name of Consulent doctor</td>
<td>32</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>Name of doctor</td>
<td>34</td>
<td>74</td>
</tr>
<tr>
<td>9</td>
<td>Address</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>10</td>
<td>Indication of patient treated</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>History</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>
12 Physical examination 45 100
13 Diagnose examination 45 100
14 Diagnosis 42 91
15 ICD code of diagnose 24 53
16 Procedure 45 100
17 Code of procedure 45 100
18 Medicine 45 100
19 Medicine is consumed at home 45 100
20 Discharge status 41 91
21 Future instruction 42 91
22 Authentication signature of patient or family 32 77
23 Authentication signature of PPBS Doctor 45 100
24 Authentication signature of DPJP Doctor 45 100

Tabel 2. Accuracy coding procedure of hepatoma

<table>
<thead>
<tr>
<th>No</th>
<th>Procedure</th>
<th>Code</th>
<th>Accuracy (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USG Abdomen</td>
<td>88.76</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Ro thorax</td>
<td>87.44</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>EKG</td>
<td>89.52</td>
<td>98</td>
</tr>
<tr>
<td>4</td>
<td>USG thorax</td>
<td>88.73</td>
<td>100</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Table 1. Shows the result of analysis filling completeness on the medical record documents of hepatoma inpatient cases at a public hospital in Padang. From 45 hepatoma patient medical record documents, filling of item name, medical record number, date of admission, indication of the patient being treated, history, physical examination, diagnostic examination, procedures, medications given, medicines used at home, PPBS doctor's signature, DPJP doctor's hand is complete 100%. Some items data such as date of discharge, date of birth, gender, name of the consular doctor, name of the sending doctor, address, diagnosis, ICD code, procedure code, discharge status, follow-up instructions, patient signature or family incompleteness. Highest incompleteness of filling was found at code ICD (47%) and address item (43%).

The same research was conducted by Rahayu et al. (2013), results of completeness filling in patient identification (Patient's Name) with the highest percentage of incompleteness found discharges summary form, namely 35.72% as many as 20 medical record documents. It is not in accordance with Huffman4 that the medical record sheet must at least contain the patient's name and the patient's medical record number. Judging from its function, the patient's name must always be on every form to prevent if one of the forms is separated from the medical record document, it will be easier for officers to recombine.

Based on procedure number 33 / PROTAP / IV / 2011, it is stated that writing names aims to avoid confusing medical record documents between one patient and another and writing names must be done correctly. This is in accordance with regular procedure number 71 / PROTAP / IV / 2011 concerning identification of medical record documents which state that the name and number of the patient's medical record must be included on the medical record sheet available at outpatient and inpatient installations.
Filling in the medical record number on each sheet of the medical record form for hepatoma patients aims to prevent if one of the forms is separated from the medical record document, the officer will have no difficulty in recombining the separated forms on the patient's medical record document. According to Hatta (2010), if there is no signature of the person in charge, the medical record document does not have the validity of the records from health workers or other personnel involved in providing services to patients so that information cannot be legally accounted for. This research is 77% of patient or family signature complete. It is mean 13 % is not complete. If name of patient did not filled, it is difficult for officer to determine who is responsible for services provided to patients (Depkes, 2006).

Procedure code describe on table 2. The procedure consist of ultrasonoggrafi abdomen, rontgen thorax, EKG and ultrasonograpfi thorax. From 45 discharge summary, accuracy procedure code at hepatome case shows 100 % accurate in ultrasonoggrafı abdomen and ultrasonografi thorax. While that EKG 98% accurate and 95 % rontgen thorax. According to Hatta 10 Standards and coding ethics developed by AHIMA include several standards that must be met by professional coders, including:

1. Coders must follow the current classification system by selecting the appropriate diagnostic coding and action.
2. Accurate, complete and consistent to produce quality data.
3. The coder should be marked with a clear and consistent coded report on the doctor's documentation in the patient's medical record.
4. A professional coder should consult a doctor for classification and completeness of filling in diagnostic and action data.
5. Professional coders do not change the code on the payment bill.
6. Professional coders must develop coding policies at their institutions.
7. Professional coders must regularly improve their coding skills.
8. Professional coders are always trying to provide the most suitable code for payments.

CONCLUSION
In general, item data of discharge summary for Hepatoma medical record are completeness. Highest incompleteness of filling was found at code ICD (47%) and address item (43%) Accuracy of code procedure more than 90% in each medical procedure code.

REFERENCES