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Analysis of Medical Breast Cancer Completeness Under Chemotherapy Resume at Dharmais National Cancer Center

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The background of this study is a return of INACBG's claim rate files inpatient at the National Cancer Centre Dharmais Hospital was still high, where the highest return was due to the confirmation of medical coding and resume. The potential to cause losses for the hospital as a result of delayed claim payments. This study aimed to analyse the completeness of the medical resume which includes the accuracy of the components of the diagnosis, procedure and coding of the INA-CBG's inpatient claim rate at the National Cancer Centre Dharmais Hospital. In this study, we proposed a qualitative approach was used with in-depth interview techniques and a review of the medical resumes of breast cancer patients who received chemotherapy during June-July 2020. From the results, we obtain that the highest incompleteness in filling out medical resumes was related to filling in the indication for admission to care with a percentage of 68, 33%, physical examination 33.33%, and supporting examination 6.67% of the total 60 cases studied. The incompatibility rate of writing a secondary diagnosis was 30% and the procedure/action was 28.33%. Writing the main diagnosis between the medical record and medical resume was known to be in accordance. The main diagnosis coding inaccuracy was still found, with a percentage of 13.33%. The result of the inaccuracy of the main diagnosis coding was a secondary diagnosis mismatch and a procedure / action incompatibility, which resulted in a claim difference of IDR 133,763,800. Therefore, the commitment of the management of the Dharmais Cancer Hospital, namely the team involved in the final coding which was the hospital's internal team should be further strengthened in order to improve the quality of the claim file from the aspects of completeness and accuracy of diagnosis, procedure and coding so that the accurate INA-CBG claim value can be obtained.

Keywords: Diagnosis, Procedure, Coding, Claim Value, Dharmais

1. INTRODUCTION

Since the implementation of the National Health Insurance (JKN) program came into effect in 2014, the Government then formed the Healthcare and Social Security Agency (BPJS) to administer the JKN program. The government's objective in implementing the JKN program is to meet proper health needs where every person who has paid contributions / premiums, their health care needs will be paid by the government. In addition, the JKN program is also a form of realizing the 5th principle of Pancasila, namely Social Justice for All Indonesians [1]. The pattern of health financing plays an important role considering that since the implementation of JKN, there has been a change in the pattern of hospital financing from a retrospective to a prospective way. The government through Government Regulation Number 111 of 2013 concerning Amendment to Government Regulation Number 12 of 2013 concerning National Health Insurance, has established a payment pattern for advanced level referral health facilities (hospitals) based on the Indonesian Case Based Groups (INA-CBG's) method [2]. Dharmais Cancer Hospital (RSKD) as the National Cancer Center in Indonesia, in this case, also participates in organizing the JKN program for the care of cancer patients and cancer suspects. Cancer services at Dharmais Cancer Hospital are carried out comprehensively using 3 cancer treatment modalities, namely surgery, chemotherapy and radiation. Apart from providing special cancer services, RSKD also provides non-cancer services to support cancer services [3]. For patients who require hospitalization, services begin when the patient receives treatment and is allowed to go home by the Doctor in Charge of Patients or chief physician (DPJP). During the treatment period, DPJP must complete patient medical record documents and information during the treatment process to improve data accuracy [4]. When a patient completes an episode of

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medication, the patient's entire medical records must be written onto the medical resume sheet / form along with supporting examinations. A completely filled medical resume will make it easier for hospitals to submit claims to *BPJS* Health Care.

2. METHODOLOGY

A. Submission and Return of INA-CBG's Inpatient Claim

The previous study shows of preliminary results observations at the Patient Assurance Control Installation, it was found that the average delivery of inpatient files every month was 1,000 files (see Table I).

Table I. Submission and Return of INA-CBG's Inpatient Claim Files for September - December 2019 Period

Month of Service	Number of Inpatient Files Sent	INA-CBG's rate (IDR)	Number of Return Files	INA-CBG's rate (IDR)
September	1.020	15.544.997.000	110	2.065.192.100
October	1.160	17.437.085.400	108	2.308.741.600
November	1.062	18.314.894.300	101	2.134.562.200
December	1.002	15.715.749.537	105	2.054.545.100
Total	**4.244**	**67.012.726.237**	**424**	**8.563.041.000**

From the table above, it can be seen that of the 4,244 inpatient claim files sent to *BPJS Kesehatan*, there were 9.99% of file returns or as many as 424 files [5]. This means that there is a delay in the payment of hospitalization claims as much as IDR. 8,563,041,000 of the claims of IDR. 67,012,726,237 submitted during that period (see Table II).

Table II. Cause of Return of INA-CBG's Claim File for Hospitalization

Cause of Return	Total	Percentage	INACBG's rate (IDR)
Confirm medical resume coding	394	90.59	7.753.081.000,24
Inaccurate file confirmation	18	6.25	536.272.510,20
Emergency confirmation more than 6 hours	6	3,19	273.687.490,01
Total	**418**	**100**	**8.563.041.000**

From the data above, it can be seen about the return of the claim file due to several reasons, such as confirmation of medical resume coding, confirmation of inappropriate files, and confirmation of emergency services that are longer than 6 hours. The most dominating reasons related to returning claim files were confirmation of medical resumes and coding with a percentage of 90.59%. This could imply that completeness of medical resumes and accuracy of coding were the major reasons for the reduction in hospital income [6].

B. Data and Location

The object in this study were all INA-CBG.s claim files of patients returning from hospitalization for the period June - July 2020. The sample selection in the study was carried out by using a purposive method. Purposive sampling is often called judgment sampling, which is sample selection based on the objectives and research variables that can provide answers based on the principles of suitability, representation and adequacy [7, 8]. The data used in this study consisted of two types, namely primary and secondary Data. Here, we use structured in-depth interviews with research informants, using interview guidelines and recording devices while reviewing medical record files and medical resumes in accordance with the conceptual framework. Furthermore, research informants in this study were selected based on a purposive method where the researcher determines which informants are willing to provide information in accordance with the research objectives based on knowledge and experience [9]. In the first stage, we collect data on breast cancer patients who underwent chemotherapy and returned from hospitalization in the period June - July 2020. This data collection started from June 1 to July 30, 2020. The focus of the study was the medical resume file and results. The coding was done by the room coder while in the second stage, we conducted in-depth interviews with the research informants. Prior to the interview, the researcher first explained the aims and objectives of the research where the informants were then asked for their consent or willingness to participate in this research by signing the informed consent. In-depth interviews were conducted using interview guidelines and recording devices. The results of the interview were then abstracted into a transcript of the interview results. By using outline data analysis in 3 stages, we use data codification stage was that the researcher gives a name to the study [10]. The way to do this is by transcribing the recorded interviews and review the documents in the checklist. Furthermore, the data presentation stage presents the research findings in the form of categories or groupings in the form of a matrix or diagram. In addition, the last stage we draw conclusions from the data findings. After the conclusion is drawn, the researcher checks / verifies the accuracy of the interpretation results to ensure that there are no errors in the results of the interviews or secondary data analysis that have been carried out.

C. Data Validation

Two kinds of data triangulation were carried out to ensure data validity. The first is to do source triangulation, which is to collect the same data from different sources. Meanwhile the second triangulation is method triangulation, which is done by collecting data with different methods. namely by reviewing secondary data and conducting in-depth interviews [11, 12, 13]. Here, the conceptual framework is made with the research objectives to be achieved, namely by using a system approach to examine the factors contained in the input, process and output (see Figure 1).

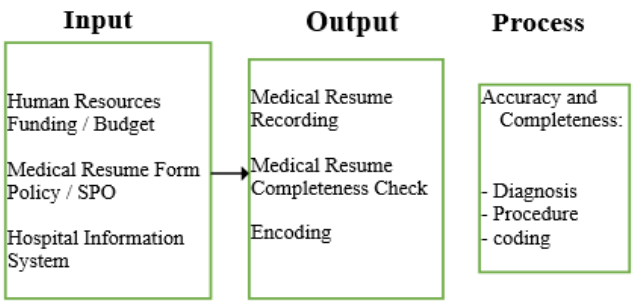

Figure 1. Conceptual framework

From the picture above, it can be seen that the input area consists of human resource variables, medical resume forms, policies / Standard Operating Procedures (SPO) and the hospital information system used. Meanwhile, in the process area, there are variables for recording and checking the completeness of medical records and coding processes to produce output, namely the accuracy and completeness of diagnosis, procedures and coding [14, 15].

3. RESULTS AND DISCUSSION

In order to achieve the result, we analyze the most cancers recorded at Dharmais Cancer Hospital in 2019 (see Figure 2).

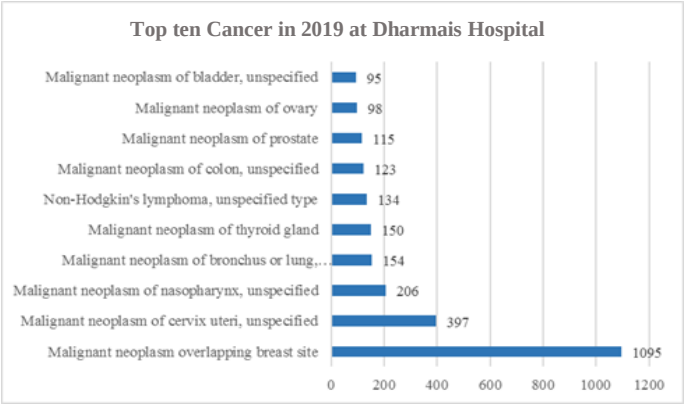

Figure 2. Top ten Cancer in 2019 at Dharmais Hospital

Here, Human Resources (HR) has an effect on the completeness and accuracy of diagnoses, procedures, and coding. This influence can be seen from the aspects of education, knowledge, training, behavior and workload. HR data information was obtained that the coder officers were graduates of Diploma Medical Records and degree of Medical Records with work periods ranging from 6 and 26 years. Meanwhile, there are 8 internal hospital verifiers serving in the SAMSAT (One-stop Administration Services Office) PPJ (Installation of Patient Assurance Control) Room, consisting of 2 general practitioners and 6 people with a Bachelor of Economics education background with a working period of more than 10 years. Furthermore, the patient's medical history in the medical records carried out by the doctor is complete, but there are still many unreadable writings. This certainly makes it difficult for the coder, the attended physicians and the verifier in determining the code for diagnosis and procedures. This is the same for verifiers who also have difficulty verifying. Apart from illegible writing, the use of non-standard abbreviations or terms, especially for diagnoses and procedures, also created difficulties in coding. Here, observation data from the Installation of Patient Assurance Control (PPJ) showed that the average number of Social Insurance Administration Organization (JKN) inpatients at Dharmais Cancer Hospital is around 1000 patients per month, where the average claim file returns is 11.49%. The most common reason for returning this file is confirmation of the completeness of the medical resume. Therefore, the coder must review and revised the claim file. The average number of new hospitalization claim files per day is about 50 files that must be verified by the coding by 1 final coder. Thus, with an average file return of around 100 files per month, this is considered as excessive workload. The number of internal verifiers for inpatient file verification consists of 3 people with an average number of inpatient claim files that must be verified is around 100 files per day. From the results of interviews with informants, information was obtained that the Installation of Patient Assurance Control did not have / hold a special allocation of funds to support the completeness of filling out medical resumes. If there is a need, the Claims Coordinator will submit it through the Head of the Patient Assurance Control Installation (PPJ) to management.

A. Standard Operating Procedure (SPO)

From the results of document review, it is known that the hospital has a policy in the form of an SPO (Standard Operating Procedure), such as SPO verification of claim files, SPO Medical Resume, SPO for Coding of Medical Diagnosis and Actions, SPO Monitoring of Completeness of Medical Record Contents, SPO Monitoring of Coding of Diagnoses and Internal Medical Measures. In addition, from the results of the interview, it was found that the room coder had never received any socialization regarding the SPO regarding coding actions / procedures. This is different from the verifier who has received socialization about the file verification SPO.

B. Facilities and infrastructure

Based on the results of the interviews obtained, it is known that the informants, including the DPJP, considered that the medical resume form at Dharmais Cancer Hospital was sufficient to represent the information needs regarding the patient's medical history. This means that the sequence is correct, starting from the entry diagnosis, the main complaint, the exit diagnosis, physical examination, supporting examinations and disease management. However, based on information obtained from coders, medical verifiers and administrative verifiers, this medical resume form is deemed incomplete for the purposes of billing claims to BPJS Health Care. However, it will be

easier if the electronic medical resume can be run, so that coders and verifiers no longer need to read doctors' writings that are often considered unclear. According to informants, commitment from the DPJP to fill out a complete medical resume is more necessary. The availability of computers to support the work of the final verifier and coder is considered adequate. However, this is not in line with the room coder's experiences. From the interview results, it was found that there was only 1 computer and 1 printer in the nurse station. When the coder uses a computer to code disease, print supporting examination sheets and patient service billing, at the same time the nurse also uses the computer to check the results of supporting examinations where the doctor on duty uses the computer to order drugs to the pharmacy and the data officer performs service entry inpatient.

C. Hospital Information System (SIMRS)

The Dharmais Cancer Hospital has built an independent SIMRS called SIMPEL and has been effectively operational since June 2016. From the results of the interview, it was found that both the verifier and the coder were using SIMRS to support work. As mentioned above, verifier officers also use SIMRS to access service billing and patient visit history. The doctor in charge of the room uses the SIMRS to access the results of the supporting examination. Meanwhile, coders in the room and in the SAMSAT room mainly used SIMRS for coding and printing grouper sheets. In addition, SIMRS is also used by coders to access service billing, the results of supporting examinations such as radiology, clinical pathology and anatomical pathology. The obstacle found by the coder regarding SIMRS was the SIMRS application with the SEP (Participant Eligibility Letter) application from the BPJS which was not yet bridging, making it difficult for coders to do the coding according to the regulation of *Permenkes* Number 28 of 2014 concerning Guidelines for the Implementation of the JKN Program. Another obstacle that was found was that the IP address provided was not entirely able to accommodate the amount of service provided. Another obstacle is that the SIMRS currently does not know which claim file has been paid. On the other hand, according to the DPJP, the SIMRS facility was felt to be of no benefit when filling out a medical resume.

D. Medical Resume Recording

In general, the DPJP already knows their duties and responsibilities. When the patient is allowed to go home, the DPJP must immediately fill out a medical resume form. However, filling out this resume is only limited to quantity where the DPJP only fills in the main points such as diagnosis and main therapy. The rest of the information is completed by the doctor on duty who is also the case manager at the same time. The obstacle faced in recording this medical resume is that if a patient goes home at his own request (APS), there are some DPJP who are not willing to fill out their medical resume form. Another obstacle is if the DPJP approval confirmation for the patient to go home is done by telephone. This is because the DPJP no longer visits these patients so delays in filling out their medical resumes often happens. Re-checking the medical resume that has been filled in by the DPJP should be done to get a good quality medical resume. This re-checking can be done by the case manager. Furthermore, the medical verifier in this case only checking the completeness of the medical resume, the suitability of the diagnosis and procedures by checking the printed service billing or checking the SIMRS. In terms of the suitability of filling out medical resumes with the ICD, it is known that some DPJPs have filled in according to the ICD, but some have not. Doctors are also not required to write ICD codes. The most important information obtained from interviews with coders and verifiers is that the doctor's writing can be read, the diagnosis of the action or procedure is written in detail and is in accordance with the supporting examination. Furthermore, the coding process is carried out using diagnostic data and procedures written by the doctor on the medical resume. However, it is not uncommon for coders, especially room coders, to reopen medical records if there are things that are not clear on the medical resume. Code assignment refers to ICD 10 version 2010 code for diagnosis and ICD 9 for action. In the coding process, there were still several diagnoses that could not be coded because of missing or inappropriate therapy. Based on the results of the interview, it is known that in the Ministry of Health Circular, it is stated that if there is an appropriate diagnosis and therapy, the claim is worth to be reimbursed.

E. Output variables

The completeness and accuracy of the 60 samples of medical resumes and medical records was recorded using checklists. The sample is a case of breast cancer that received chemotherapy treatment in hospital. Completeness of filling out a medical resume starting from the patient's identity, indication of admission, physical examination, supporting examinations, primary diagnosis, secondary diagnosis, treatment and actions taken can be seen in the Table III.

Table III. Completeness Overview of Medical Resume Information

Information	Complete		Incomplete		Total	
	Total Number	%	Total Number	%	Total Number	%
Patient identity (name, Number of Medical Record, date of birth / age, gender, date of entry, date of exit, main DPJP, Ward)	59	98,33	1	1,67	60	100
Indication of admission	19	31,67	41	68,33	60	100
Physical examination	40	66,67	20	33,33	60	100
Supporting examination	56	93,33	4	6,67	60	100
Primary Diagnosis	60	100	0	0	60	100
Secondary Diagnosis	60	100	0	0	60	100
Treatment and action which is implemented	60	100	0	0	60	100

Table III shows that there is one medical resume where the patient's identity is not completely filled in. Furthermore, it is also known that there are 41 medical resumes in the indication section for admission to care, the information is incomplete, 20 medical resumes in the physical examination section are also incomplete and there are 4 medical resumes with incomplete supporting examinations. The rest, all components on the resume are filled. This finding is supported by the results of in-depth interviews which state that filling out the medical resume is still incomplete, so that the filling is assisted by a doctor who is also the case manager and coder.

F. Conformity of Primary Diagnosis, Secondary Diagnosis and Procedure

The results of a review of medical resumes and medical records regarding the suitability of primary diagnoses, secondary diagnoses and procedures is showed in Table IV.

Table IV. Conformity in Primary Diagnosis, Secondary Diagnosis and Procedure Between Medical Resume and Medical Records

Information	Corresponding		Not in accordance		Total	
	Total Number	%	Total Number	%	Total Number	%
Primary Diagnosis	60	100	0	0	60	100
Secondary Diagnosis	42	70	18	30	60	100
Procedure / Action	43	71,67	17	28,33	60	100

Table IV shows the main diagnosis between medical resume and medical record is appropriate. The incompatibility of writing a secondary diagnosis between medical resume and medical record reached 30%. In addition, it is also known that the suitability of writing actions/procedures between medical resumes and medical records is 28.33% which is due to inconsistencies in the writing of secondary diagnoses which contributed to this. In addition, the inaccurate coding for primary diagnosis, secondary diagnosis or procedure will affect the final grouper results produced by the INA-CBG application. These changes may have a positive or negative impact on the claim (see Table V).

Table V. Accuracy of Main, Secondary Diagnostic Coding and Procedures

Information	Accurate		Inaccurate		Total	
	Total Number	%	Total Number	%	Total Number	%
Primary Diagnosis	52	86,67	8	13,33	60	100
Secondary Diagnosis	60	100	0	0	60	100
Procedure or Action	60	100	0	0	60	100

Here, analysis result related to the final coder shows there were 13.33% inaccuracies in the main diagnosis coding, while secondary diagnosis and procedures were in accordance with the coding rules. The main diagnosis inaccuracy is caused by several things, such as the inaccurate determination of the main diagnosis where one of them is setting the coding rules for neoplasms. In addition, the absence of therapy period in one episode of treatment on the medical resume was also a cause of inaccuracy in coding. An illustration of the inaccuracy of the main diagnostic coding can be seen in Table VI.

Table VI. Major Diagnostic Coding Inaccuracy

Medical Record Number	Procedure / Action	
	Medical records	Medical Resume
1	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
2	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
3	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
4	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
5	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
6	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
7	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm
8	c50.8 Malignant Neoplasm, overlapping lesion of breast	z51.1. Chemotherapy session for neoplasm

The main diagnosis written by the DPJP on medical resumes and medical records is cancer / neoplasm. In *Permenkes* Number 76 of 2016 it has been determined that the main diagnosis is determined at the end of the episode of treatment and if there is more than one, it is chosen that uses the most resources. It was stated that the patient was treated only for chemotherapy so that the code used was Z51.1 as the primary diagnosis and neoplasm as a secondary diagnosis. However, in fact this has not been understood by the coders. From the results of observations

made by researchers, it is known that the medical resume form does not include the treatment period for one procedure even though it is possible for cancer patients to get more than one therapy.

G. The amount of INA-CBG's rate

The number of claims caused by the inaccuracy of the main diagnosis coding, the mismatch of secondary diagnosis and the inaccuracy of procedures or actions can be seen in the Table VII. The secondary diagnoses and encoding procedures / actions are as follows:

Table VII Encoding Secondary Diagnoses in E-Claims

No	Secondary Diagnosis / Procedure / Action	Code of ICD 10 / ICD 9 CM	Can Be Coded If:
1.	Anemia	D63.0	< 8
2.	Hypo albumin	E88.0	< 3
3.	Cancer pain	R52.9	
4.	Leukopenia	D70	Leukocytes is less than 3
5.	Cancer wound care	93.57	
6.	Hypokalemia		< 3,5 mEq/L

The difference in claims arising from the inaccuracy of the main diagnosis coding, secondary diagnosis and the incompatibility of procedures / actions is shown in table VIII.

Table VIII Difference in INA-CBG's rates

Information	Case Number		Rates (IDR)		
	Total Number	%	Medical records (Final Code)	Medical Resume (Room Coders)	Difference (IDR)
INA-CBG's rates are higher (negative difference)	13	21,67	267.764.700	134.000.900	133.763.800
INA-CBG's rates are the same	47	78,33	414.161.490	414.161.490	-
INA-CBG's rates are lower	-	-	-	-	-
Total	**60**		**681.926.190**	**548.162.390**	**133.763.800**

Based on the results of the INA-CBG rate analysis using the E-Claim version 5.2 application, it was found that the higher claim results generated by the final coder compared to the room coder were 21.67% with INA-CBG rates of IDR. 133,763,800. Meanwhile, the same thing between the final coder and the room coder was 78.33% with an INA-CBG rate of IDR. 414,161,490, and no lower INA-CBG rate was found. From the information obtained from informants, the claim value submitted to BPJS Health Care was IDR.548,162,390. please describe how to compare each room coder using E-claim apps.

Based on the research results, it is known that the information related to knowledge of all informants including the DPJP, they all understand the importance of the role of medical resumes in the JKN era. The informants argued that a complete medical resume starting from primary diagnosis, secondary diagnosis, including therapy or medication given to patients is the basis for generating INA-CBG rates which will be a source of hospital revenue. This is in line with the opinion of the DPJP which states that filling out a complete medical resume is an obligation after providing services to patients. Likewise, with complete medical resume knowledge, where the management, in this case the claims coordinator, verifier and coder, is of the opinion that a complete resume is not only viewed from the aspect of quantity or it is sufficient to just fill it in, but must also pay attention to the quality aspects of the medical resume itself, such as the suitability of the diagnosis and therapy given. Meanwhile, related to DPJP, researchers analyzed that filling out medical resumes was more about the aspect of quantity, namely filling in important points in the medical resume form. Misinterpretation due to illegible writing and improper abbreviations will cause errors in determining the ICD code and slow down the coder's operation. This also happened at the Dharmais Cancer Hospital where the room coder who found difficulties in interpreting the contents of the medical resume confirmed it to the attending physician, not to the DPJP. Regarding the training, Dharmais Cancer Hospital has socialized filling out a complete medical resume at the time of reviewing clinical pathways along with coding, but apparently not all doctors can participate in the socialization. In terms of verifying claim files, the number of medical verifiers is felt to be insufficient considering the quality of medical resumes produced is still not optimal. Likewise, there are only 3 internal verifier officers who are not proportional to the number of inpatient claim files that must be verified every day. The workload of the room coder, which is technically a medical recorder, is still doing medical record work such as assembling so that it doesn't focus on coding work alone. The final coder is only 1 person in charge of checking the conformity of the coding results produced by the room coder, that is, if a mismatch is found, the final coder will make corrections. This also contributes to the accuracy of the diagnostic code and procedure to be taken. To support the checking process of completeness of filling out medical records and medical resumes, Dharmais Cancer Hospital has implemented the SPO. However, the implementation is still not running optimally because the room coder does not focus only on coding and has never received any socialization about coding, especially coding procedures (ICD 9 CM). The existence of SIMRS in Dharmais Cancer Hospital has been integrated. In this case the coders simply do the coding in the SIMPEL application and the code will automatically be integrated with the INA-CBG E-Claim application version 5.2 from the Ministry of Health. In addition, SIMRS has accommodated the need for data from the results of supporting examinations, such as radiology, laboratory, anatomical pathology and can also be accessed to view details of actions that have been received by patients.

Recording medical resume is done directly by the doctor in charge of the patient because the Dharmais Cancer Hospital has no resident. The DPJP has fully understood the obligation to fill out medical resumes. Medical resume is a summary of outgoing patients which is a resume of the patient's medical history from entry until the patients get a permit to go home. Filling in medical resumes is only limited to the quantity aspect, where the

DPJP mostly only fills in the information in the diagnosis and therapy column. Meanwhile, other information will be re-checked and completed by the doctor in charge of the room who is also the case manager at the same time. The obstacle faced by the doctor in charge of the room / case manager in filling out the medical resume is if the patient receives joint care or is a patient from the cancer work team where the doctor in charge of the room / case manager must be extra in examining medical records before helping to complete the medical resume. After the doctor in charge / case manager has finished examining and completing the contents of the medical resume, the next step is to adjust it to the contents of the medical record. The next stage is the room coder will provide a code of diagnosis and procedures / actions according to the ICD. The ICD currently in use is the ICD version 2010. The disease coding process is carried out using the SIMRS Dharmais Cancer Hospital which is integrated with the E-Claim version 5.2 application from the Ministry of Health. This is the same as the electronic book for ICD codes that have SIMRS installed. One obstacle that was found by the room coder, medical verifier and final coder was the illegibility of the doctor's writing and the use of non-standard abbreviations. This has the potential to cause coding errors that will result in the final grouping results, namely the INA-CBG rate that will be claimed to *BPJS Kesehatan*. Still finding diagnoses that did not receive therapy resulted in the coder doing omit code or erasing the code. The results of the research on 60 samples of medical resumes in class 1 care were 61.67%, class 2 was 21.67% and class 3 was 16.66%. Since the JKN era, the occupancy rate for class 1 beds is more in demand than for VIP class and class 2 and class 3. The results showed that the indication for incomplete hospitalization was 68.33%, physical examination was 33.33% and supporting examination was 6.67%. There is only 1 patient identity which is not completely filled in. Meanwhile, for primary diagnosis, secondary diagnosis, procedures / actions and treatment, the information in it is complete. Writing the main diagnosis between the medical record and medical resume is in accordance. Meanwhile, it was found that there was a inaccuracy in the writing of secondary diagnoses and procedures between medical records and medical resumes, which were 30% and 28.33%, respectively. This inaccuracy occurred because of the DPJP's inaccuracy in filling out medical resumes. Even though filling out the medical resume was assisted by the doctor in charge, in reality, inconsistencies in writing a secondary diagnosis still occurred. The results of the study also found that there was an inaccuracy of coding determination in the main diagnosis of 13.33%. These results are different with the secondary diagnoses and procedures, where the coding in both is in accordance. The inaccuracy of the coding carried out by the room coder causes differences in INA-CBG grouping results which have an impact on differences in INA-CBS rates. The secondary diagnosis mismatch of 30% resulted in a procedure discrepancy of 28.33%. This research also contributes to information related to the amount of INA-CBG's rates which the claim will be submitted to BPJS Health Care. The limitation of this study is on the sampling of the study, where the medical resume of breast cancer patients who underwent chemotherapy did not include patients who received surgery and / or radiotherapy. This is because in the Clinical Practice Guide (PPK) for breast cancer, there is no mention of how many days of chemotherapy patient treatment is, so the researchers took all data on breast cancer patients who received chemotherapy during June - July 2020 regardless of length of hospitalization days. In addition, researchers did not crosscheck with *BPJS Kesehatan* as the payer for the findings in this study. Apart from the things described above, researchers have attempted to ask the hospital's final coders to assess the accuracy of the coding generated by the room coders.

4. CONCLUSIONS

The Analysis of Medical Breast Cancer Completeness Under Chemotherapy Resume at Dharmais National Cancer Center was successful studied. Here, the management, verifiers, and coders are generally equipped with good knowledge of the importance of medical resumes used for JKN claims. The complete knowledge of medical resumes according to the DPJP is more about the aspect of quantity, namely completing the medical resume column, but for coders and verifiers a complete medical resume is more viewed in terms of quantity and quality, namely where the medical resume is filled in completely with the appropriate diagnosis and action. The completeness of the medical resume, both in terms of quantity and quality, is what will determine the number of INA-CBG rates which will be claimed to *BPJS Kesehatan*. In this case, there are still differences in views between the DPJP and the management of the Dharmais Cancer Hospital. There are still many illegible medical resumes writing where non-standard abbreviations are used which are the behavior of doctors in filling out medical resumes.

In the case of training, the DPJP has received training on disease coding. However, not all DPJPs have participated in the training so that inconsistencies in writing diagnoses often occur. In this case, the coder had received training on medical records, but training opportunities were uneven. Meanwhile, the verifier has never received training on verification at all. The workload for the room coder, final coder, verifier, doctor guarding the room and DPJP is still felt to be excessive. The availability of medical record forms according to the DPJP is sufficient and represents the need for information regarding the patient's medical history. This is different from the need from the claiming side where the medical resume still needs to be adjusted for the needs of the claim. On the other hand, an electronic medical resume form is not yet available. Computer needs for the final coder and verifier in the SAMSAT room are sufficient, but for

inpatient rooms the need for computers is still insufficient because there is only 1 computer that is used simultaneously between the coder, the doctor on duty and the room data entry officer.

Furthermore, the medical resume is recorded directly by the doctor as the person in charge of the patient. Even so, in fact there are still inconsistencies in the contents of medical records with medical resumes. In this case the process of completing a medical resume is carried out by the doctor in charge of the room who is also the case manager. The medical resume examination carried out by the room doctor / case manager is not optimal because it still prioritizes service to patients. The medical verification in the SAMSAT room is also not optimal because it checks medical resumes only by matching them in the service billing. Meanwhile, the coding carried out was quite good, namely based on the information in the medical resume and medical records where the SIMRS facility was used. The coding refers to ICD 10 for diagnosis and ICD 9 CM for procedure coding. The coding rules carried out in this case are in accordance with Minister of Health Regulation Number 76 of 2016 and Circular of the Minister of Health.

The highest amount of incompleteness in filling out medical resume forms was in terms of filling in the indication for admission with a percentage of 68.33%, physical examination 33.33%, and supporting examinations 6.67%. These findings are based on the calculation of the total 60 cases studied. The inconsistency rate for writing secondary diagnoses and procedures was 30% and 28.33%, respectively. On the other hand, the writing of the main diagnosis between medical record and medical resume was in accordance. From the results of coding carried out by the final coder, it was found that the main diagnosis coding was 13.33% inaccurate, while the suitability of the coding for secondary diagnosis and procedures was considered in accordance. Inaccuracy of coding in primary diagnosis, as well as mismatch of secondary diagnoses and procedures can affect the final INA-CBG rate grouping results and cause the difference in claims of IDR 142,763,800 or 21.67% of the claims submitted to *BPJS Kesehatan*. Here, ongoing training is required for all DPJP, especially in relation to writing diagnoses and procedures according to the ICD coding rules associated with the Clinical Practice Guide (PPK) for cancer so that the INA-CBG rate can be simulated immediately. Equal training opportunities for all coders so that equality of knowledge and perception can be achieved. File verification training also needs to be conducted for the verifier so that the minimum competence comparable to the verification from *BPJS Kesehatan* can be achieved. Forming a person in charge for coding for each Functional Medical Staff Group, for example the head of the KSMF or one of the members who can be the liaison for the coders. Create standardized abbreviations and symbols that can be used uniformly in all hospital service units. Review the number of coders and job descriptions in the inpatient room. Adding a medical verifier and final coder with good qualifications, so that claim files, especially medical resumes with good quality related to content and coding, can be sent immediately to *BPJS Kesehatan*. Separating the function of the case manager with the doctor guarding the room with the aim that the role of the case manager is even more optimal as a patient service manager, namely as a facilitator of patient care needs, working by optimizing services that focus on patients and the reimbursement process, which in this case is the process of submitting claims to *BPJS Kesehatan*. Make the SAMSAT room is closer to the Medical Record Field to facilitate the mobilization of medical records needed when medical verification is carried out. When conducting a medical verifier, it should be done by opening the medical record and examining the overall suitability of the patient's medical resume, considering that the function of the doctor on duty is not yet optimal in this case. Develop a medical resume form according to claiming needs without reducing the function of the medical resume as a summary / history of the return patient. Develop electronic medical resume for inpatient which is integrated with ICD 10 and ICD9CM. Form a coding audit team to audit coding accuracy.

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