

Effect of Completeness of inpatient Medical Record Files in the Electronic Medical Record Transition Period on the Quality of Jkn Claim Services in Type a Hospitals

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Abstract

Background The completeness of the inpatient medical record file during the Electronic Medical Record transition period can affect the quality of JKN claim services in the Hospital. **Research Objectives:** From several phenomena of problems, there is a need for special attention to be used as a basis for policy making in improving the quality of service JKN claims hospitalization because it can result in costs accrued by hospitals, **Research Methodology:** Quantitative with descriptive approaches, data collection by way of interviews, observations, and literature studies. **Research results:** Identified completeness of medical records of outpatient medical records of patients out of life by 46% with incompleteness of 54% while for the completeness of the medical record files of patients out of death by 52% with incompleteness of 48%, with the incompleteness resulting in losses that will be received by the hospital as much as Rp. 3,129,152,281 of the total tariff that has been issued by the hospital, which is Rp. 4,320,529,101 due to the claimable tariff of Rp.1,191,439,820 **Conclusion:** Hospitals must take further policies to overcome these losses such as stopping the use of electronic medical record systems in hospitals if the system can hinder the processing of medical records.

Keywords: Completeness of Medical Record Files, Electronic Medical Records, JKN Claims

1. Introduction

With the increasing growth of society in Indonesia causing the government to strive to meet the needs of every individual, one of which is health. One of the health services provided by the government is a hospital that is expected to be able to provide quality health services for the community by applying electronic medical records and the implementation of the National Health Insurance (JKN) program using a payment system based on Indonesian Case Base Groups (INA-CBG's) tariffs. Currently, the use of electronic medical records (EMR) can provide great benefits for health services such as basic and referral service facilities (hospitals). One of the benefits of using electronic medical records is that it increases the availability of electronic records in hospitals. It is also beneficial for patients because it increases efficiency in the health care process (Wilcox, 2010). In addition, for administrative personnel, the use of electronic medical records can facilitate the retrieval of patient information. (Jeffrey L. Schnipper, 2008)

The phenomenon that is occurring in Hospital is the transition period from Manual Medical Records to Electronic Medical Records (EMR) in the form of EMR Applications. Electronic Medical Records (EMR) has 14 manual medical record forms that have been transferred to the EMR Application, this EMR Application has not been able to run optimally because it is still in the development stage but has been utilized without the official standards and procedures, therefore JKN claims service officers will experience difficulties in analyzing the completeness, suitability of diagnosis, and management given in the

patient's medical record file, which greatly affects the quality of JKN claims. Health Workers have documented the results of patient examinations on the EMR Application but the results of documentation cannot be seen again by other officers because it has not been helped by the process of displaying filled data to be printed, while the BPJS Kesehatan Verifier Team regulates that every completeness of requirements and supporting files is sent in the form of hard-files.

From some of the phenomena mentioned above, special attention is needed so that it can be used as a basis for policy making in improving the quality of JKN hospitalization claim services because it can result in costs accrued by hospitals, processing of reports on inpatient medical record and quality of JKN inpatient claim services. Such incompleteness can trigger some symptoms in terms of hampering the work of JKN inpatient claim service officers due to the discovery of medical record files that are not worthy of claims caused by incompleteness of the form containing records of administration with the diagnosis listed on the resume home and can cause delays in the claiming process due to the return of the medical record file to the doctor in charge of the patient to complete the medical record file. If the medical record file is not completed by the doctor in charge of the patient, then the coder team will enter the code solely in accordance with the management form contained in the manual medical record file, but with limited coding resulting in a smaller claim rate because not all diagnoses can be claimed, it can result in a loss of costs received by the Hospital and

affect the quality of the claims.

Literature Review and Research Framework

Theoretical Review

According to (Ministry of Health, Law No. 40 of 2009 concerning Hospitals, 2009), hospitals are health service institutions that provide individual health services in a complete manner that provide inpatient, outpatient, and emergency services. Hospitals in providing health services, are also obliged to provide medical record services as described in Article 19 Paragraph 1 of Law No. 44 of 2009 concerning Hospitals.

Medical records as described in Article 1 of the Regulation of the Ministry of Health Number 269/Menkes/Per/III/2008 concerning Medical Records, expressed as a file containing records and documents, regarding the identity of patients, examinations, treatments, actions and other services that have been provided to patients (Ministry of Health, 2008).

There are two types of medical records, namely conventional medical records and electronic medical records. According to (Hatta, 2017), electronic medical records are computerized activities of the contents of health medical records and related electronization processes to produce systems specifically designed to support users with various facilities for the completeness and accuracy of data. According to inpatient hospitalization, it is the process of patient care by health professionals due to certain diseases, where patients are installed in a room in the hospital which includes observation, diagnosis, treatment, nursing and medical rehabilitation (Chariswanti, 2013).

JKN Hospitalization is a way to pay National Health Insurance (JKN) both Recipients of Contribution Assistance (PBI) and non-PBI such as wage earners (PPU), Non-Wage Earners (PBPU) and Non-Workers (BP) of patients who get services such as observation, treatment, diagnosis, treatment, rehabilitation and/or other health services by occupying a bed.

According to Law Number 24 of 2011 concerning the Social Security Organizing Agency, BPJS is a legal entity established by the BPJS Law to organize social security programs (BPJS Kesehatan, 2011). One that has been agreed to be carried out by BPJS Kesehatan is the establishment of health service rates on FKTP and FKTRL. According to the Regulation of the Health Social Security Organizing Agency Nomor 7 of 2018, claim is a request for payment of health service costs by Health Facilities to BPJS Kesehatan. BPJS Kesehatan pays health service guarantee benefits that collaborate with BPJS Kesehatan which includes payment of health service guarantee benefits at FKTP and FKTRL (BPJS Kesehatan, 2018). Entry Claims INA-CBGs is the activity of entering variable data into the INACBG Electronic Claims application.

Advanced Referral Level Health Facilities (FKTRL) submit claims collectively to BPJS Kesehatan periodically and completely every month. BPJS Kesehatan conducts a process of

verifying claim files since the file is declared complete as evidenced by the news of the completeness of the claim file (BPJS Kesehatan, 2014). The general administrative completeness of FKTRL includes:

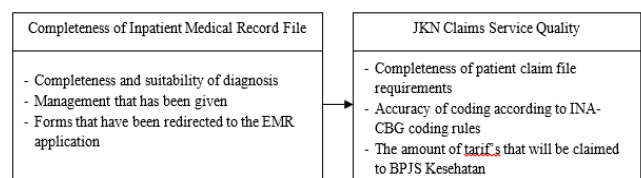
- Duplicate claim submission form 3
- Softcopy of application output
- The original receipt is stamped enough
- Proof of service that has been signed by participants / family members
- Other required completeness, including:
 - Service recapitulation
 - Supporting files of each patient, consisting of:
 - SEP (Patient Eligibility Letter)
 - Inpatient warrant
 - Medical resume signed by Doctor
 - Proof of other services signed by Doctor, if needed, for example:
 - Operation report
 - Therapy protocols and special drug administration regimens
 - Hospital bill details
 - Other supporting files needed

BPJS Kesehatan makes claim payments based on the results of verification and in Indonesian Case Based Groups (INA-CBGs). The rules of coding INA-CBGs are using icd-10 comorbidity code rules, official standards of ICD-10 coding rules and ICD-9-CM Revisions of 2010, Regulation of The Ministry of Health Number 26 of 2021 concerning INA-CBG Guidelines in the Implementation of JKN and News of The Joint Agreement on the Settlement of Dispute Claims between the Head of PPJK Kemenkes and Deputy Directors for BPJS Health Referral JPK.(Ministry of Health, 2021)

The quality of claims according to the BPJS Health Facilities Claims Administration Guidelines and according to the Regulation of the Ministry of Health Number 26 of 2021 states that the quality of JKN claim services can be declared quality if the requirements and supporting files are complete, claims are sent on time, and coding in accordance with existing rules.

2. Research Framework

Variable X: Completeness of Inpatient Medical Record File



Variable Y: Quality Service Claim JKN

Hypothesis

H0: There is an influence on the completeness of the inpatient medical record file in the electronic medical record transition period on the quality of JKN claim services. There is a significant influence of the completeness of medical records files on the quality of JKN claims services because unqualified claims will cause losses to hospitals due to smaller claims rates, decreased coding accuracy

rates, and impact on coder officers who will be considered less competent in JKN claims and have an impact on the processing of other hospitalized medical records such as assembling indexing coding, morbidity, data updates to the filling process because the medical record file is left unreported due to late work.

H1: There is no effect on the completeness of the inpatient medical record file on general surgical patients in the transition period of electronic medical record to the quality of JKN claim services.

3. Research Method

Research Object, Population and Sample

Research Object of Medical Record Installation in Type a Hospital

The population in this study is all medical records files of JKN patients based on data on the number of patients out alive and died based on Functional Service Unit (UPF) Period 01 January 2022 to 31 January 2022 which amounted to 439 medical records files.

The sampling technique in this study uses simple random sampling, the calculation of samples in this study using the formula Slovin is indicated on the formula (Sugiyono P. D., 2019).

$$n = \frac{N}{1 + N(e)^2}$$

Information:

n : Number of samples required

N : Population amount

E : sampling error, 10% = 0.1

Slovin formula.

$$n = \frac{N}{1 + N(e)^2} = \frac{439}{1 + 439(0,1)^2} = \frac{439}{1 + 439(0,01)} = \frac{439}{1 + 4,39} = \frac{439}{5,39} = 81,4$$

Based on the results of the sample calculation above, the research sample amounted to 81 files of medical records of hospitalizations of JKN general surgical patients in the

period January 2022 with 56 files of medical records of hospitalizations of general surgical patients out of life and 25 files of medical records of hospitalization patients came out dead.

Variable Operation

Independent variables, namely the completeness of medical record files, are something that affects the quality of JKN claim services, then the dependent variable is the quality of JKN claim services because these variables are affected or become a result of the completeness of medical record files.

Data Collection Technique

Structured observation is a systematically designed observation of what will be observed, when and where it is located (Sugiyono, 2019).

Structured interviewing is a data collection technique, when the researcher or data collector has known with certainty about what information will be obtained (Sugiyono, 2019).

Literature studies are an important thing where after a researcher determines the topic of research, the next step is to conduct theoretical studies and references related to the research conducted (Sugiyono, 2019).

Data Analysis Technique

Data analysis techniques use descriptive methods and quantitative analysis that aims to get a complete picture of the situation in the field by reviewing and analyzing the file of inpatient medical records, comparing with relevant theories and then conclusions are drawn.

4. Result and Discussion

Company and / or Respondent Profile

Type A Hospital.

Research Result & Analysis

Table 4.2.1 Percentage Table of Completeness of Medical Record Files in General Surgical Patients Out of Life in Type A Hospitals

Number	Data	Completeness of Medical Record File				Sum (N)
		Exist	%	None	%	
1	Sign-in and Out Summary	51	91%	5	9%	56
2	Home Summary/Medical Resume	43	77%	13	23%	56
3	General Consent	48	86%	8	14%	56
4	Inpatient Cover Letter	51	91%	5	9%	56
5	Medical Initial Assessment	4	7%	52	93%	56
6	Nursing Assessment	5	9%	51	91%	56
7	Early Assessment of Nutrition	11	20%	45	80%	56
8	Integrated Patient Development Record	14	25%	42	75%	56
9	Nursing Records	10	18%	46	82%	56
10	Nutrition Care Record	20	36%	36	64%	56
11	Consultation Sheet	33	59%	23	41%	56
12	DPJP	44	79%	12	21%	56
13	Education	52	93%	4	7%	56
14	Lab Results	18	32%	38	68%	56
15	Radiology	18	32%	38	68%	56
16	Anatomical Pathology	3	5%	53	95%	56
17	Electrocardiogram	13	23%	43	77%	56
18	Patient's Certificate Of Discharge Upon Request	4	7%	52	93%	56
19	Letter of Approval of Action	41	73%	15	27%	56
20	Operations Report	27	48%	29	52%	56
21	Presurgical Assessment	36	64%	20	36%	56
	Sum	26	46%	30	54%	56

Based on the table above, the data shows on the completeness and incompleteness of the medical records of general surgical patients in the EMR transition period in the period of January 2022, namely identification was found with a completeness

of 46% of the 56 samples of medical records of hospitalized general surgical patients who came out alive and 54% were identified as incomplete from 56 samples of medical record files hospitalization of general surgical patients who come out alive.

Table 4.2.2 Tabel Percentage Completeness of Medical Record Files in Out-of-Out General Surgical Patients Died in Type A Hospitals

Number	Data	Completeness of Medical Record File				Sum (N)
		Exist	%	None	%	
1.	Sign-in and Out Summary	24	96 %	1	4 %	25
2.	Home Summary/Outgoing Resume	13	52 %	12	48 %	25
3.	General Consent	22	88 %	3	12 %	25
4.	Inpatient Cover Letter	23	92 %	2	8 %	25
5.	Medical Initial Assessment	1	4 %	24	96 %	25
6.	Nursing Assessment	3	12 %	22	88 %	25
7.	Early assessment of nutrition	5	20 %	20	80 %	25
8.	Integrated Patient Development Record (CPPT)	11	44 %	14	56 %	25
9.	Nursing Records	5	20 %	20	80 %	25
10.	Nutrition Care Record	7	28 %	18	72 %	25
11.	Consultation Sheet	14	56 %	11	44 %	25
12.	Doctor's Letter in Charge of The Patient	16	64 %	9	36 %	25
13.	Education	25	100%	0	0 %	25
14.	Laboratory Results	10	40 %	15	60 %	25
16.	Radiology Results	10	40 %	15	60 %	25
17.	Results of Anatomical Pathology	4	16 %	21	84 %	25
18.	Electrocardiogram Results	3	12 %	22	88 %	25
19.	Death Certificate	24	96 %	1	4 %	25
20.	Patient's Certificate Of Home At His Own Request	24	96 %	1	4 %	25
21.	Letter of Approval of Medical Measures	18	72 %	7	18 %	25
22.	Operations Report	9	36 %	16	64 %	25
23.	Presurgical Assessment	16	64 %	9	36 %	25
Sum		13	52 %	12	48 %	100%

Based on the table above the data shows on the completeness and incompleteness of the medical records of general surgical patients in the EMR transition period in the period of January 2022, namely identification was found completeness of 52% of the 25 samples of medical records of hospitalized general surgical patients who came out dead and 48% were identified as incomplete from 25 samples of medical record files hospitalization of general surgical patients who came out dead.

Table 4.2.3 Table of Hospital Rates and Claim Rates based on The Results of The Main Diagnose Grouper, Additional Diagnoses and Actions/Procedures/Operations on the INA-CBGs E-Claim Application with Completeness of Medical Records of General Surgical Patients in Hospitals with Type A.

	Hospital Rates	INA-CBGs Claim Rates
Total	Rp. 4,320,592,101	Rp. 1,191,439,820
Total Loss	Rp. 3,129,152,281	

Based on the results of the calculation of the Main diagnostic grouper, Additional Diagnoses and Actions / Procedures / Operations on the Application Of E-Claim INA-CBGs with completeness of the Medical Record File of General Surgical Patients in Hospitals with Type A, from 81 files of medical records of general surgical patients found a total hospital rate of Rp. 4,320,529,101 with a total

claimable rate of Rp.1,191,439,820 so that the hospital will receive a loss of patient financing rate of Rp. 3,129,152,281

5. Conclusion

Conclusion & Suggestion

Based on the results of research on the effect of the completeness of the inpatient medical record file in the Electronic Medical Record transition period on the quality of JKN claim services in Type A Hospitals, the completeness of the record file was identified. Medical inpatient patients out with life by 46% with incompleteness of 54% while for the completeness of medical records of patients out dead of 52% with incompleteness by 48%, with the incompleteness will result in losses that will be received by the hospital is Rp. 3,129,152,281 of the total tariffs that has been issued by the hospital, that is Rp. 4,320,529,101 due to the claimable rate of Rp.1,191,439,820. The total loss will greatly affect the quality of JKN claims at the hospital, the hospital will be considered incompetent in making JKN claims therefore the hospital must take further policies to overcome these losses such as dismissing the use of the Electronic Medical Record system in the hospital. If the system hinders the processing of medical records, it is better to realize the transition of a new system like this requires the need for trials ranging from users to the

features used, then it is necessary to create standard operational procedures for system use of electronic medical records and hospital directors need to pay attention to the readiness of medical record officers in the hospital.

6. Acknowledgment

In the process of compiling this international journal, the author got a lot of direction, guidance, and motivation from various parties for that the author wants to express gratitude and love to:

Dra. Hj. Tiny Rahayu, M.Si., M.MKes, as the Director of the Bandung Academy of Medical Recorders and Medical Informatics (APIKES) who continues to provide direction and guidance and motivation of its students well so as to create students who benefit the world of work, nation, and country.

Heri Saepudin, SAP., M. MKes, as a Supervisor who with patience and perseverance provides encouragement, attention, guidance, direction, and advice in this research.

Head of Medical Record Installation at Type A Hospital who has provided direction and information that is very helpful to the author in the process of preparing journal

[Reviewers in this study](#)

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