ANALYSIS OF MANAGEMENT ELEMENTS AND MEDICAL RECORD PROCESSING SYSTEM AT BHAYANGKARA HOSPITAL PEKANBARU

Nur'aina Basir^{1*}, Budi Hartono¹, Aldiga Rienarti Abidin¹, Endang Purnawati Rahayu¹, Abdurrahman Hamid¹ ¹Master of Public Health Study Program STIKes Hang Tuah Pekanbaru, Indonesia

Correspondence Address: Nur'aina Basir

Email: Ina_niezt@rocketmail.com

ABSTRACT

Introduction: Processing of medical records in hospitals is to support the achievement of administrative order in order to achieve the goals of the hospital, namely improving the quality of health services in hospitals. The results of preliminary observations in processing medical record files at Bhayangkara Hospital were that there were several obstacles including the not yet done assembling, indexing and analyzing medical records and delays in returning medical record files. The aim this study was to determine the elements of man, money, methods, materials, machines in the medical record processing system at Bhayangkara Hospital to improve the quality of medical record services at the hospital. **Methods:** Qualitative Research and informants: This study amounted to eight people. The number of human resources is insufficient and have never attended training. Standard operating procedures have never been socialized and existing policies need improvement. **Result:** Coding activities are often constrained by doctors' writing and completeness of diagnoses and medical actions. Retrieval activities are often constrained by medical record files that are still in the inpatient room and in the case mix room. **Conclusion:** Overall from the research results, the implementation of medical record processing is not appropriate and must be regulated according to existing guidelines in order to produce medical records that are accurate, readily available, usable, easy to trace back and have complete information so as to create quality information and it is recommended to use electronic medical records.

Keywords: Medical Record Processing, Management Elements, Minimum Service Standards

INTRODUCTION

Health is a state, whether physically, mentally, spiritually or socially, which enables everyone to live productively socially and economically. A health worker is any person who devotes himself to the health sector and has knowledge and / or skills through education in the health sector which, for certain types, requires the authority to carry out health efforts (President of the Republic of Indonesia, 2009).

The National Health System (SKN) is a form and method of implementing health development that combines the various efforts of the Indonesian nation in one step to ensure the achievement of health development goals (Department of Health, 2009).

Hospitals are organized on the basis of Pancasila and are based on human values, ethics and professionalism, benefits, justice, equal rights and anti-discrimination, equity, protection and patient safety, and have social functions. Every patient has the right to obtain information about the rules and regulations that apply in the hospital; obtain information about patient rights and obligations; receive services that are humane, fair, honest, and without discrimination; obtain quality health services in accordance with professional standards and standard operating procedures; and obtain effective and efficient services so that patients avoid physical and material harm (President of the Republic of Indonesia, 2009a).

The results are based on the author's observations with several Type C Hospitals

©2022 IJPH. Open access under CC BY NC–SA. License doi: 10.20473/ijph.vl17i3.2022.462-476 Received 7 December 2020, received in revised form 18 April 2021, Accepted 20 April 2021, Published online: December 2022.Publisher by Universitas Airlangga

Cite this as: Basir, N., Hartono, B., Abidin, A.R., Rahayu, E.P., & Hamid, A. (2022). Analysis of Management Elements and Medical Record Processing System at Bhayangkara Hospital Pekanbaru. The Indonesian Journal of Public Health, 17(3), 462-476. https://doi.org/10.20473/ijph.v17i3.2022.462-476

in Pekanbaru City regarding medical record processing that has been implemented, both the availability of human resources, the medical record information system used, and the medical record storage room. Based on these observations, the writer is interested in conducting research at the Bhayangkara Hospital TK III Pekanbaru, Riau Police.

Bhayangkara Hospital ΤK Ш PekanbaruPolda Riau is one of the Type C hospitals in Pekanbaru City. Based on the results of observations and interviews for Medical Record Processing at Bhayangkara Hospital TK III Pekanbaru, it has not been optimal. Data processing and completeness of outpatient and inpatient status for new patients use the Hospital Management Information System (SIM RS) which started in September 2019 using the Kanza Hospital SIM. From the initial survey conducted by the author based on observations and interviews with education and training officers, registration officers, filing officers, hospital statistics and reporting officers, it was found that in processing medical record files at Bhayangkara Hospital TK III Pekanbaru, Riau Police, there were several obstacles including not doing assembling, indexing. and analysis of medical records due to the absence of a human resource responsible for these activities Recent medical record file processing activities include coding by case mix officers, hospital reporting statistics, hospital correspondence, storing medical records (filling), and taking medical records.

METHODS

This research is a descriptive study with a qualitative method approach to obtain clear information about the causes of the nonoptimal processing of medical record files through in-depth interviews with individuals to obtain a complete and in-depth description of a condition through input, process and output components, and describe a situation objectively, namely describing the processing of medical records at the Bhayangkara Hospital TK III Pekanbaru, Riau Police.

The location of this research was carried out at the Medical Records Unit of the Bhayangkara Hospital TK III Pekanbaru, Riau Police. This research was conducted in June 2020. The selection of subjects in this study used a purposive (non-probability) method, namely the subjects were selected according to the principle of suitability and adequacy.Nomor:0231/KEPK/STIKes-HTP/V/2020

No.	Main Informant	Number	Informant Code
1.	Head of Medical Records Unit	1 person	IU1
2.	Registration Officer	2 person	IU2 dan IU3
3.	Filing Officer	1 person	IU4
4.	Case Mix clerk	1 person	IU5
No.	Supporting Informants	Number	Informant Code
5.	Head of Bhayangkara Hospital	1 person	IP1
6.	Outpatient Doctor	1 person	IP2
7.	Inpatient Doctor	1 person	IP3
Total Number of Research Informants		8 persons	

 Table 1. Characteristics of Research Informants

RESULTS

The informants in this study were eight people consisting of the Head of the Hospital, the Head of the Medical Records Unit, outpatient doctors, inpatient doctors, registration officers, filing officers, and case mix officers. From the results of the observation, it was found that there was no medical record officer who was responsible for the assembling processing activities, and retrieval and storage was carried out by the same officer and the officer also carried out the task of registering patients. For standard operating procedures, each task is available. Materials such as medical record forms, medical record folders, and informed consent are available in sufficient numbers; medical cards are only available for general patients, while register and tracer books are not yet available. There are currently two computers located at Registration and filing cabinets; archive racks, INA-CBGS applications, and SIMRS applications are also available, for rotary filing there are only six screens and this number is still lacking for storing medical record files, while the card drawer and tickler files are not yet available.

Based on the results of research on the human element, it was found that the availability of human resources in the medical record unit of Bhayangkara Hospital TK III Pekanbaru was 12 people, with details of one Head of the Medical Record Unit with an educational background of S1 Profession as a doctor, eight medical record officers with a D3 Record background. Medically, there were two medical record officers with a Bachelor of Nursing background and one medical record officer with a high school education background. To date, all medical record officers at Bhayangkara Hospital TK III Pekanbaru, Riau Police have never attended any training in the field of medical record processing.

In the money element, it is found that the availability of funds for operations in the medical record unit is based on funds from the government and the Indonesian Police, where each unit submits what RAB will be needed. Based on the results of interviews, there are still unrealized submissions pending approval from the Indonesian Police, namely proposals for expansion of the medical record unit room and purchase of rotary filing. In the method element, it was found that the standard operating procedures for processing medical records at Bhayangkara Hospital were already written but the implementation was not in accordance with the existing SPO because medical record officers had never seen the SPO and had never been socialized. Meanwhile, there is already a policy at Bhayangkara Hospital but there needs to be improvement in monitoring an and evaluation of the implementation of existing policies according to the SPO and management system. In the material element, it was found that the processing of medical records at Bhayangkara Hospital was still inadequate, including not using tracer and register books for recording in and out of medical record files. Materials that are already available include medical record forms, informed consent, patient medical record maps, differentiated by general patients (general payments, health bpjs and other insurance) and POLRI membership patients.

In machine elements, it was found that the processing of medical records at Bhayangkara Hospital was still inadequate, including the lack of computers and printers in the registration room, while in the filing room there was a lack of medical record racks to store patient medical record files so there were still many medical record files that were located on the floor in cardboard boxes. - cardboard and lighting is not enough, hot, and uncomfortable. Where the storage racks in the medical record unit are inadequate, this can be seen from the average height of more than 2.5 meters so that officers sometimes need stairs and the distance between the racks is approximately only 40 cm, so it is very narrow.

Assembling activities have not yet been carried out at Bhayangkara Hospital because there is no officer who is responsible for assembling activities. The study also obtained more than one patient identification form in a medical record file, this shows that when searching for files, many files are updated because old files are difficult to find.

Coding activities have been running at Bhayangkara Hospital and there are several obstacles ranging from unclear doctor's writings and incompatibility of diagnoses with ICD-X codes. Officers coded using the ICD-X software reference for primary and secondary diagnostic codes or used a summary coding list and did not communicate to the doctor if the written diagnosis was unclear. The accuracy of the coding is still lacking because it does not include a code for disease complications and medical measures given to patients.

Filing activities have been running at Bhayangkara Hospital but have not been optimal and there are several obstacles starting from the storage room, and the shelf where the medical record files are placed. Filing activities are responsible for storing and retrieving all information data that have been successfully obtained for future purposes. In the process of working, there might be obstacles. In the filing section, the obstacles faced in the implementation process are still frequently missing files, meaning that there are misplaced medical

.

records and documents that have not been placed in a storage shelf.

Retrieval activities have been running at Bhayangkara Hospital but have not been optimal and there are several obstacles ranging from medical record files that are not found or medical record files that are still in the case mix and inpatient rooms. The results of field observations showed that the integration of medical record documents encountered obstacles where, at a time when there were many patients, the officers became busier and the workload increased because they handled both outpatient and inpatient units. The patient admission place must also be on full duty 24 hours with the change of shifts to three starting from the morning at 08.00 - 14.00, afternoon at 14.00 - 20.00 and evening at 20.00 - 08.00. The morning shift officer is more busy with an increased workload, while the afternoon and evening shift officers are concurrently with other departments so that, if the patient is hospitalized for a long time and comes in during the afternoon or evening hours, usually the old patient's medical record document will be sought by the officer the next day, not directly at that moment.

Processing of Medical Records at Bhayangkara Hospital TK III Pekanbaru Riau Police did not comply with the Minimum Service Standards at the Hospital. The minimum service standard for retrieval is <15 minutes, while what happened at Bhayangakara Hospital for taking medical records it was 15-30 minutes. Storage activities should be no later than 24 hours after the patient finishes treatment and goes home, while what happens at Bhayangkara Hospital for storage can be more than three days according to the return of medical record files from the Case Mix Room, ER or inpatient care.

DISCUSSION

Human Elements in Processing Medical Records.

Based on the results of research on human elements, it was found that the availability of human resources in the medical record unit of Bhayangkara Hospital TK III Pekanbaru was 12 people, where the existing human resources were not sufficient and still worked concurrently.

From the findings obtained through interviews and observations, this study is in line with the research conducted by Provost and Fawcett (2013) which states that decreased performance is influenced by a lack of employee knowledge which causes employees not to know the information needed to do work (Provost and Fawcett, 2013).

According to the Minister of Health Decree No.377 / Menkes / SK / III / 2007, a medical record employee or medical recorder must have competence. These competencies include: 1. Classification and Codification of Diseases and Problems Related to Health and Medical Measures. In this case, the medical recorder is able to determine disease and action codes appropriately in accordance with the classification applied in Indonesia (ICD-10). 2. Legal and Professional Ethical Aspects. Medical recorders are capable of performing tasks in providing high quality services medical record and health information with due observance of applicable laws and professional ethics. 3. Management of Medical Records and Health Information. Medical recorders are able to manage medical records and health information to meet the needs of medical services. administration. and health information needs as materials for decisionmaking in the health sector. 4. Maintaining Quality Medical Records. Medical recorders are able to plan, implement, evaluate and assess the quality of medical records. 5. Health Statistics. Medical recorders are able

health statistics generate to use to information and forecasts (forecasting). 6. Management of Health Information Management Unit / Medical Records. Medical recorders are able to manage work planning, units related to organizing, structuring and controlling health information management work units (MIK / records health medical in service installations. 7. Professional Partnerships. Medical recorders are able to collaborate inter and intra professions related to health services (Ministry of Health of the Republic of Indonesia, 2007).

The medical record officer is a major aspect in circulating the medical records of a hospital. Medical record officers have big duties and responsibilities in maintaining the integrity of a medical record. Medical records officers are expected to really know the ins and outs of medical records in a broad and indepth manner. Based on the number of employees, it is sufficient for the needs, while, in terms of quality and skills, there is still a need for additional workforce with a medical record education background so that they are able to work in accordance with their expertise or improve the development of insights and skills by involving existing employees in education and training related to medical record management.

Researchers argue that, in the medical implementation of record management, it needs to be supported by training because medical record training is important for medical record officers in order to add insight and staff performance to be even better and in accordance with the SPO set by Bhayangakara Hospital TK III regarding medical Pekanbaru record processing. The filing officer said that he had never attended special training for filing and the coding officer said that he had never attended special training for coding.

This is in line with the research conducted by Hanggraeni (2014) which states that training is the process of training workers to become experts to help them do their current work optimally (Hanggraeni, 2014).

Elements of Money in Processing Medical Records.

Based on the results of interviews, there are still unrealized submissions pending approval from the Indonesian Police, namely proposals for expansion of the medical record unit room and purchase of rotary filing.

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Aryanto and Fransiska (2012) which states that the budget planning process is based on a fixed hospital program and has been carried out quite effectively. The resulting output is in the form of documents recapitulated by the planning and development division (Aryanto and Fransiska, 2012).

According to good planning theory, it separate planning does not and implementation such as budgeting for the maintenance of equipment used. Budgeting must be balanced, that is, the work plan is prepared based on needs and refers to the standards set by the Minister of Health. This is in line with Harold's statement, namely one of the problems that need to be controlled in planning is uncoordinated planning among plan makers about goals and about critical planning premises, which affects the planning field (Newig and Koontz, 2014).

Researchers argue that the availability of funds in hospital operations is very important in supporting the continuity of the hospital where the available funds are based on the submission of the head of the hospital to the Indonesian Police. It is better if the hospital also collaborates with other private insurers so that they can increase hospital income and need a budget for the implementation of electronic medical records (EMR).

Elements of Method in Processing Medical Records.

Based on the results of observations and interviews for SPO, existing policies have not been implemented according to SPO.

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Ulfa (2018) which states that the elements of methods in processing medical records must exist because the system is structured to facilitate, tidy up, and organize work. Standard Operating Procedure is a system designed to facilitate, tidy up and order our work. This system contains a sequence of processes for doing work from beginning to end (Ulfa, 2018).

This is in line with the theory based on the Regulation of the Minister of Health of the Republic of Indonesia Number 512 / Menkes / PER / IV / 2007 concerning License to Practice and Implementation of Medical Practice Chapter I article 1 paragraph 10. Standard operational procedure sis a set of standardized instructions / steps to complete a medical practice and certain routine work processes, in which SOP provide the right and best steps based on mutual consensus to carry out various activities and service functions made by health service facilities professional based on standards. Implementation of procedures is often difficult, covering three things: (1) The existence of procedures often requires a long debate, so that the procedure is never completed; (2) Implementation needs to be really running, not just written, and (3) Monitoring and evaluation must be continuously carried out so that the procedure actually runs better, not just being there.

The researcher argues that, in the preparation of SOPs in medical record processing, it is necessary to involve the people in charge in every medical record processing so that the existing SOPs can be better understood and socialized to the related unit. Based on the results of the study, it was found that there is already a policy at Bhayangkara Hospital but there needs to be improvement in monitoring and evaluation of the implementation of existing policies according to the SPO and management system.

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Giyana (2012) regarding the analysis of the inpatient medical record management system at Semarang Hospital, which states that written policies and procedures must be available according to the management of the medical record unit and become a reference for medical record staff on duty, which has been regulated according to the Decree of the Director of Semarang City Hospital Number: 445 / 044.10 / 2009 concerning the Use of the Manual Book for Medical Record Management at Semarang City Hospital. According to standard V (Giyana, 2012).

According to the theory from Soeprapto cited in Rakhmawati and Rustivanto (2016), a good and correct medical record management system will support the maintenance of good medical records. Evaluation is a systematic way to learn based on experience and use the services learned to improve ongoing activities and promote better planning with careful selection for future activities (Rustiyanto, 2010). Researchers argue that, in making a policy at the hospital, it is necessary to have a meeting to form a team in hospital policy-making involving each head of the room, the person in charge of processing medical records, by which the existing policies can run properly.

Material Elements in Medical Record Processing

The material in processing medical records at Bhayangkara Hospital is still

inadequate, including not using tracer and register books for recording entry and exit of medical record files.

Based on the findings through interviews and observations, this research is in line with the research (Asmono and Dwi, 2014) which states the causes and impacts of not using a tracer in the storage section of the Medical Record Files of Dr. Yap Yogyakarta Eye Hospital with qualitative research used to find the following factors. The cause of not using a tracer is hasty HR, the facilities in the storage section are full and the regular retrieval and storage procedures related to the use of the tracer are not carried out, which results in misfiles and medical record files that are difficult to trace (Asmono and Dwi, 2014).

The paper material for medical record folders is in accordance with the applicable provisions made of yellow buffalo paper, is not easily torn and has a color code for storage. This material was deemed good enough by the medical record officer informant and in accordance with the provisions of the Ministry of Health,.(Ministry of Health of the Republic of Indonesia, 2006).

Researchers argue that, in medical record processing materials, it is necessary to use tracer and book the in and out of medical record files so that it can make it easier to restore medical records and trace medical record files that have not been returned.

Machine Elements in Medical Record Processing

Machines in processing medical records at Bhayangkara Hospital are still inadequate, including the lack of computers and printers in the registration room, while in the filing room there is a lack of medical record racks to store patient medical record files so there are still many medical record files that are placed on the floor in boxes and with less lighting, heat, and less ease.

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Hubaybah (2018) which states that good storage equipment, good lighting, room temperature regulation, room maintenance, and attention to the safety factor of officers for a medical record storage room really maintain and encourage helps work enthusiasm and employee productivity. Good lighting or lights, avoid the officers' vision fatigue. It is necessary to pay attention to the regulation of room temperature, humidity, dust prevention and fire hazard prevention (Hubaybah, 2018).

Similarly, Ritonga et al. (2018) state that the size of the shelves must be arranged in such a way that archive participants do not need to climb when looking for archives. File shelf space height should be 35-36 cm, shelf width 38-40 cm, and shelf length depending on the existing office space. Try not to make the height of the shelf beyond the reach of human hands, so that to search for files, officers do not need to be supported / climb because the height of the archives is not accessible to human hands (Ritonga et al., 2018).

Researchers argue that, in the processing of medical records, it is necessary to have facilities and infrastructure that support the processing of medical records where there is a need for computers to be used in patient registration, inputting visits, reporting to hospitals and printing of patient eligibility letters, supported by a printer in the registration room. Meanwhile, medical record racks must be in accordance with the standards set by WHO so that the existence of these standards can make it easier for medical record officers to retrieve patient medical record files. Researchers also think that the hospital should start thinking about using electronic medical records.

This is in accordance with the research carried out by Maha Wirajaya and

Made Umi Kartika Dewi (2020) that the storage of traditional medical record files is generally in the form of folders containing papers that record patient health data. Storage like this requires a large space, when the file is needed for medical purposes it is rather slow to obtain because it takes time to look for it. Conversely, if all these files can be computerized, it will facilitate the process of searching, retrieving and processing data. The process can be carried out quickly and accurately, so that medical actions that require a patient's medical history can be carried out quickly.

Assembling Activities in Medical Record Processing.

Assembling activities have not yet been carried out at Bhayangkara Hospital because there is no officer who is responsible for this.

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Giyana (2012) which states that the process of managing medical records starts from the assembling section. Assembling is a part of the medical record unit that functions as a researcher for completing the contents and assembling of a patient's medical record documents before being stored and after receiving health services (Giyana, 2012)

According to the theory, assembling activities include checking the completeness of filling in medical record files and forms that must be in the medical record file (Budi and Citra, 2011).

Researchers argue that assembling activities really need to be carried out in processing medical records where this is one thing that should not be ignored. The assembly at Bhayangakara Hospital itself has not been carried out, causing many files and medical record documents to be incomplete. According to the existing SPO, each patient's medical record document after receiving

service must be assembled, following hear, see and check the completeness of filling in the medical record and returning it on time according to the minimum service standards have been determined that bv the Bhayangkara Hospital which is contained in the SPO, namely <24 hours. Delays in returning and inaccuracy of medical record have an impact on documents the management of the patient's medical record system and the quality of service. For this reason, the researcher suggests that the application of electronic medical records in the assembling section can be a solution to make it easier to track the filling and completeness of medical record documents.

Coding Activities in Medical Record Processing.

Coding activities at Bhayangkara Hospital contained several obstacles, starting unclear writings from doctor's and incompatibility of diagnoses with ICD-X codes. Officers coded using the ICD-X software reference for primary and secondary diagnostic codes or used a summary coding list and did not communicate to the doctor if the written diagnosis was unclear. The accuracy of the coding is still lacking because it does not include a code for disease complications and medical measures given to patients. .

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Pujihastuti, Sudra and Sugiarsi (2014) which states that the Relationship of Completeness of Information with the Accuracy of Diagnosis and Action Codes on inpatient medical record documents with the chisquare test shows that there is a significant relationship of completeness of information in medical record documents with the accuracy of disease diagnosis codes in medical inpatient record documents (Pujihastuti et al., 2014).

According to the theory of medical personnel, a coder is responsible for the accuracy of the code of a diagnosis that has been determined. Therefore, for things that are less clear and incomplete, before the code is set, they must first communicate with the doctor who made the diagnosis. Activities and actions, as well as diagnoses in medical records must be coded to support health planning, management, and research functions (Ministry of Health of the Republic of Indonesia, 2006).

Another thing that was obtained from the results of in-depth interviews with informants revealed that incompleteness and delays in returning medical record documents had an effect on the length of the coding process.

Based on the findings from the results of interviews and observations, the research conducted by Kresnowati, (2013) states that the Jamkesmas Claims Administration Analysis of RSUD R.A.A Soewondo with this type of qualitative research shows that there are coding problems with repairing medical record files that take a long time (Kresnowati, 2013).

The coding process requires accuracy and accuracy of the contents of medical record documents, in this case diagnosis and medical action, so that the quality of the results is good, meaning that the coding process takes a long time.

This is in line with Pepo and Yulia's (2015) research on the completeness of medical resume diagnosis on the accuracy of clinical coding of obstetrics cases at Atma Jaya Hospital Jakarta with a quantitative research design showing that the completeness of writing diagnoses on medical resumes affects the accuracy of clinical coding of patients with obstetric cases (Pepo and Yulia, 2015).

Direct observation was made at the table of the coding section of many piles of unprocessed medical record documents. The

obstacles experienced were the delay in returning medical record documents, the doctor's writing was difficult to read and the existence of non-standard abbreviations.

This is in accordance with Pri et al.'s (2014) research on the Analysis of Medical Record Management at the Grahasia Mental Hospital, Yogyakarta, which shows that the difficulty in the coding process is that the doctor's writing is difficult to read and the existence of non-standard abbreviations.

This is in line with Rudy and Calvin's (2014) research on the Accuracy Level of Inpatient Morbidity Coding to Support Accuracy of Reporting in the Medical Records Section of CahayaKawaluyan Hospital with quantitative research suggesting the factors causing the lack of coding accuracy, namely difficult to read doctor's writing (14.1%) and incomplete supporting information(10.8%) and the use of uncommon abbreviations (Sam et al., 2013).

The researcher argues that the delay in coding is due to the manual operation of the Bhayangkara Hospital TK III Pekanbaru at the Riau Police. This is in accordance with the field observations of the medical record coding combined with unit the administration, education and training of the head of the medical record unit, while the medical records department, especially coding, did not exist. Researchers suggest using an electronic medical record in the coding section where this can help work while maintaining the quality of the information made in the coding section.

This is in accordance with Hakam and Alis Setiyadi (2014) who state that the quality of an information can be seen from the dimensions that the information has. The quality of information consists of three things, namely relevant, which means that according to information needs, on time meaning that information must arrive quickly to the recipient and must not be late, and accurate meaning that it describes information clearly and is not engineered (Hakam and Alis Setiyadi, 2014).

Filing Activities in Medical Record Processing.

Filing activities are not yet optimal and there are several obstacles starting from the storage room, the shelf where the medical record files are placed. Filing activities are responsible for storing and retrieving all information data that have been successfully obtained for future purposes. In the process of working there may be obstacles. In the filing section, the obstacles faced in the implementation process are still frequently missing files, meaning that there are misplaced medical records and documents that have not been placed in a storage shelf.

Based on the findings from the results of interviews and observations, this study is in line with the research conducted by Nuraini, (2015) at the Tangerang "X" Hospital, which states that filing activities are less than optimal due to inadequate storage space and officers from other departments are free to enter and exit to borrow and return medical record files to storage racks (Nuraini, 2015).

This is in line with Astuti and Anunggra's (2013) research that filing is the process of systematically arranging and storing materials, so that these materials can be found easily and quickly whenever needed. Filing at the "X" Hospital based on observations still encountered obstacles so that sometimes finding documents was difficult and long (Astuti and Anunggra, 2013).

In the implementation of storing medical record files, it is necessary to have adequate facilities for the medical record files themselves and for the staff executing medical record file storage. Storage of medical record files can be arranged alphabetically and by number making it

easier to search. Patient medical record files require storage equipment in the form of storage racks. The selection of storage racks must be done by taking into account the storage location, medical record numbering system, the length of time to store medical records and the type and price of storage equipment, while for equipment between one shelf and another, there is a need for distance to make it easier for officers to carry out their duties. The numbering system used in the medical record unit is the unit numbering system, where patients are given one number the first time they register and patients are given the same number for subsequent registration. In the unit numbering system, all patient medical records are stored in one folder. If the patient has more than one number, then these numbers will be put together (Nuraini, 2015).

Researchers argue that inadequate storage space and shelves as well as the inconvenience of power to work due to limited space are issues. Lack of personnel and lack of knowledge about medical records, and the absence of an integrated computer made older officers look for medical record documents and enter medical record documents that did not match the medical record number and there were two medical record numbers for one patient, which made it possible to have two medical record documents. The results of direct observation found that the storage space was narrow and the storage racks were insufficient so that many medical record documents were piled on the floor and put in boxes. It feels like working in a storage room is not comfortable, there is limited space for movement, and the air conditioner is not cold.

Researchers suggest using an electronic medical record because it can save storage space for medical records because each medical record has been stored in an EMR application and makes it easier for all doctors to access patient medical records.

Using EMR does not require many medical record storage racks; this is in accordance with the research conducted by Kurniadi and Pratiwi (2017) where the integrity of patient care using EMR is assured (Kurniadi and Pratiwi, 2017).

Retrieval Activities on Medical Record Processing.

The retrieval activity at Bhayangkara Hospital was not optimal and there were several obstacles, starting from the medical record file that was not found or the medical record file which was still in the case mix and inpatient room.

Based on the findings from the results of interviews and observations, this research is in line with the research conducted by Fitri (2018) which states that the factors causing delays in outpatient medical record document services from the Filling Section of PantiWilasaCitarum Hospital Semarang are human factors including the number of visits are not proportional to the number of officers available so that the high workload which affects the incidence of misfiles on average for each file rack is 173 documents / rack from each existing file rack (Fitri, 2018).

According to reward theory, it is needed to motivate a person, including employees, to improve their performance. Lack of motivation plus the lack of awards give results in lower performance in completing medical record documents (Ady and Wijono, 2013).

Researchers argue that there needs to be a reward or appreciation to nurses / midwives who work in Inpatient Care to immediately complete the medical record documents after the patient returns so that the return of medical records in the Medical Records Unit can be in accordance with the Minimum Service Standards, namely the files are returned to the Medical Records Unit 1x24 hours. So that, when the patient comes back for treatment or re-controls, the medical record file is already in the Medical Records Unit.

Minimum Service Standards in Medical Record Processing.

The minimum service standard for retrieval is <15 minutes, while what happened at Bhayangakara Hospital was that taking medical records was 15-30 minutes.

From the findings obtained through interviews and observations, this research is in line with the research conducted which states that the impact of non-compliance with medical record processing is not in accordance with Minimum Service Standards, causing delays in processing hospital report data and inpatient medical record documents not stored on a document storage rack making it difficult to find documents, while for patients it will affect the next treatment process. This will affect the information reported to hospital leaders to be not timely and inaccurate (Tanjung and Sukrianto, 2017).

According to the Minimum Service Standard Theory for Medical Record SPM in KEPMENKES Number 129 / Menkes / SK / II / 2008 concerning Minimum Hospital Service Standards in the medical record service section there are minimum service standards such as completeness of filling in medical records 24 hours after completion of service and describing the responsibility of doctors in completing medical record information. A complete medical record is a medical record that has been filled in completely by the doctor within <24 hours after completion of outpatient services or after an inpatient is decided to go home, which includes the patient's identity, history, care plan, implementation of care, follow-up and resume.

Completeness of the informed consent after obtaining clear information illustrates the doctor's responsibility to provide it to the patient and to get the patient's consent for the medical action taken. Informed consent is the consent given by the patient / patient's family on the basis of an explanation of the medical action to be performed on the patient.

Time to provide medical record documents for outpatient services shows the speed of outpatient registration services. Outpatient medical record documents are medical record documents of new patients or old patients used in outpatient services. Time to provide medical record documents starts from the patient registering until the medical record is provided / found by the officer.

Regarding time to provide medical record documents for inpatient services, the speed of inpatient medical record service is illustrated. Inpatient medical record documents are medical record documents of new patients or old patients used in inpatient services. The time to provide medical record documents for inpatient services is the time when the patient is decided to be hospitalized by the doctor until inpatient medical records are available in the patient ward.

CONCLUSION

From the results, medical record processing in the assembling section has not been running. The constraints faced were limited human resources so that the assembling activity had not been implemented at all. Processing of medical records in the coding section takes a long time, adjusting for the delay in returning medical record documents to the filing section. This process is often hampered by hard-to-read doctor's writings and the use of non-standard abbreviations that affect the coding process so that the resulting data are inaccurate. Processing of medical records in the filing section has not been going well because of inadequate storage racks for medical records, and there are still many medical record files that are located in

boxes. Processing of medical records in the retrieval section has not gone well and has not met the minimum service standards for taking medical records. This process is constrained because there are still patient medical files that have not been returned to the medical record unit. Standard operational procedures and policies from Bhayangkara Hospital TK III Pekanbaru already exist, but medical record officers are still working not accordance with existing standard in operating procedures. The availability of computers (two units) of printers (1) is still insufficient because the existing computers are used alternately for inputting the INACBGG application, printing Patient Eligibility Letters, reporting visits, and the SIMRS application. Meanwhile, the number of medical record racks is still insufficient and the storage space is full and crowded, plus there is lack of lighting and air conditioning.

Maximizing the performance of existing medical record officers where the patient's medical record files have not been treated for 3-5 years can be done by periodically scanning the medical record files and destroying the medical records. This can also be useful in reducing the pile of medical record files that do not yet have a storage shelf.

Additional tasks can be given, such as carrying out assembling with the consequence of having additional tasks adjusted to overtime wages for medical record officers.

It is necessary to hold meetings at least twice a year so that communication occurs between doctors, hospital leaders, and medical record officers to discuss incomplete medical records. As well as providing sanctions to healthcare providers who do not complete medical records.

The process of coding activities can be improved by completing medical action codes based on ICD X and continuous coordination with doctors to clarify the writing on the medical record file. As well as socialization, monitoring and evaluation to medical record officers regarding the existing standard operating procedures and medical record officers must work in accordance with the existing.

There needs to be an additional storage rack for medical record files, computers and smartphones. As well as organizing the relocation of the medical record room to another, wider room so that the supporting facilities, such as record racks, can be fulfilled in the number as needed, and the medical record storage room can be designed to make it easier for officers in their activities to retrieve medical record files.

The long-term suggestion is the use of electronic medical records (EMR) because this saves the use of storage space, improves the efficiency of taking medical record files, and reduces the incidence of missing files.

REFERENCES

- Ady, F. and Wijono, D. (2013) 'Pengaruh Motivasi Kerja terhadap Kinerja Karyawan', Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship. doi: 10.30588/jmp.v2i2.278.
- Aryanto, R. and Fransiska, M. (2012) 'The Role of Government Assistance to Generate Competitive Leadership, Commitment, Motivation, Innovation, Environment and its Impact on the Performance of TenunCual Union Industry Cluster in Bangka Belitung Province', *Procedia* - Social and Behavioral Sciences. doi: 10.1016/j.sbspro.2012.11.106.
- Asmono and Dwi, M. (2014) 'Faktor-Faktor Penyebab dan Dampak Tidak Menggunakan Tracer di Bagian Penyimpanan Berkas Rekam Medis Rumah Sakit Dr Yap Yogyakarta',

Tracer Rekam Medis.

- Astuti, R. and Anunggra, D. I. (2013) 'Faktor-Faktor penyebab Terjadinya Missfile di Bagian Filing Rumah Sakit Umum Daerah Banyumas Tahun 2013', *Penelitian Ilmiah. Juni.*
- Budi and Citra, S. (2011) Manajemen Unit Kerja Rekam Medis, Quantum Sinergis Media.
- Department of Health (2009) 'Undang-Undang Nomor 36 Tahun 2009', Undang- undang Nomor 36 Tahun 2009.
- Fitri, R. R. (2018) Analisis Faktor Penyebab Kejadian Missfile Bagian Filing di Puskesmas Kencong Kabupaten Jember Tahun 2017, Politeknik Negeri Jember.
- Giyana, F. (2012) 'Analisis Sistem Pengelolaan Rekam Medis Rawat Inap Rumah Sakit Umum Daerah Kota Semarang', Jurnal Kesehatan Masyarakat Universitas Diponegoro, 1(2), p. 18739.
- Hakam, F. and Alis Setiyadi, N. (2014)
 'Pengembangan Sistim Pencatatan dan Pelaporan data di Klinik Muhammadiyah Medical Center', *Jurnal Kesehatan Masyarakat Andalas.* doi: 10.24893/jkma.8.2.67-71.2014.
- Hanggraeni, D. (2014) 'Manajemen Risiko Perusahaan (Enterprise Risk Management) dan Good Corporate Governance', *Penerbit Universitas Indonesia*.
- Hubaybah (2018) 'Analisis Manajemen Pengelolaan Sistem Rekam Medik Pada Puskesmas Paal X kota Jambi', *Jurnal Kesmas Jambi (jkmj)*, 2(2), pp. 1–7.
- Kurniadi, A. and Pratiwi, R. (2017) 'Patient Clinical Data Integration in Integrated Electronic Medical Record System for Health Care

Facilities in Indonesia', *Jurnal Kesehatan Masyarakat*, 13(2), pp. 239–246. doi: 10.15294/kemas.v13i2.8103.

- Lily Kresnowati, D. E. (2013) 'Analisis Faktor-Faktor Yang Mempengaruhi Akurasi Koding Diagnosis Dan Prosedur Medis Pada Dokumen Rekam Medis Di Rumah Sakit Kota Semarang', Laporan Akhir Penelitian Dosen Pemula Administrasi Rumah Sakit.
- Maha Wirajaya, M. K. and Made Umi Kartika Dewi, N. (2020) 'Analisis Kesiapan Rumah Sakit Dharma Kerti Tabanan Menerapkan Rekam Medis Elektronik', Jurnal Kesehatan Vokasional, 5(1), p. 1. doi: 10.22146/jkesvo.53017.
- Ministry of Health of the Republic of Indonesia (2006) 'Pedoman Penyelenggaraan dan Prosedur Rekam Medis Rumah Sakit di Indonesia', Deirektorat Jendral Bina Pelayanan Medik.
- Ministry of Health of the Republic of Indonesia (2007)'Keputusan Kesehatan Republik Menteri Indonesia Nomor 377/ Menkes/ SK/ III/ 2007 Tentang Standar Profesi Perekam Medis dan Informatika Kesehatan', Keputusan Menteri Kesehatan Republik Indonesia Nomor 377/ Menkes/ SK/ III/ 2007 Tentang Standar Profesi Perekam Medis dan Informatika Kesehatan.
- Newig, J. and Koontz, T. M. (2014) 'Multilevel governance, policy implementation and participation: The EU's mandated participatory planning approach to implementing environmental policy', *Journal of European Public Policy*. doi: 10.1080/13501763.2013.834070.
- Nuraini, N. (2015) 'Analisis Sistem Penyelenggaraan Rekam Medis di

Instalasi Rekam Medis RS "X" Tangerang Periode April-Mei 2015', 1, pp. 147–158.

- Pepo et al. (2015) 'Kelengkapan penulisan diagnosa pada Resume Medis Terhadap Ketepatan Pengkodean Klinis Kasus Kebidanan', Jurnal Manajemen Informasi Kesehatan Indonesia. doi: 10.33560/.v3i2.88.
- President of the Republic of Indonesia (2009) 'UU RI momor 44 tahun 2009 tentang rumah sakit', *Jakarta*. doi: 10.1017/CBO9781107415324.004.
- President of the Republic of Indonesia (2009) 'UU RI No 36 Tentang Kesehatan', *UU RI No 36 2009*.
- Pri et al. (2014) 'Grhasia Yogyakarta', pp. 22–30.
- Provost, F. and Fawcett, T. (2013) 'Data Science and its Relationship to Big Data and Data-Driven Decision Making', *Big Data*. doi: 10.1089/big.2013.1508.
- Pujihastuti *et al.* (2014) 'Hubungan kelengkapan Informasi dengan Keakuratan Kode Diadnosis dan Tindakan pada Dokumen Rekam Medis Rawat Inap', *Jurnal Manajemen Informasi Kesehatan Indonesia.* doi: 10.33560/.v2i2.25.
- Rakhmawati, F. and Rustiyanto, E. (2016) 'Analisis Kebutuhan Petugas Rekam Medis Berdasarkan Beban Kerja di Instalasi Rekam Medis RS Aisyiah Muntilan', Jurnal Kesehatan Vokasional. doi: 10.22146/jkesvo.27446.
- Ritonga *et al.* (2018) 'Analisa Kebutuhan Rak Penyimpanan Berkas Rekam Medis Rawat Jalan Di Rumah Sakit Umum Madani Medan', *Jurnal Ilmiah Rekam Medis dan Informasi Kesehatan.*
- Rudy J, M. and Calvin, L. (2014) 'Tingkat Akurasi Kodefikasi Morbiditas Rawat Inap Guna Menunjang

Akurasi Pelaporan di Bagian Rekam Medis Rumah Sakit Cahya Kawaluyan', in *Jurnal Kesehatan 'Caring and Enthusiasm' No. 1 Vol.* 2 April 2014 - ISSN: 977-2338-7823-01.

- Rustiyanto, E. (2010) 'Statistik Rumah Sakit Untuk Pengambilan Keputusan', *Yogyakarta: Graha Ilmu*.
- Sam, R. et al. (2013) 'PENDAHULUAN Rekam medis menurut Permenkes no . 269 / MENKES / PER / III / 2008 merupakan berkas yang berisikan catatan dan dokumen tentang identitas pasien , kelengkapan (assembling), pengkodean penyakit dan tindakan medis (coding), serta tabulasi (i', pp. 15–35.
- Tanjung, I. and Sukrianto, D. (2017) 'Perancangan Sistem Informasi Rekam Medis Terpadu Dalam Upaya Meningkatkan Pelayanan Rumah Sakit Jiwa Tampan Prov. Riau', Jurnal Intra-Tech.
- Ulfa, H. M. (2018) 'Analisis Unsur Manajemen dalam Pengolahan Rekam Medis di Rumah Sakit TNI AU Lanud Roesmin Nurjadin', KESMARS: Jurnal Kesehatan Masyarakat, Manajemen dan Administrasi Rumah Sakit. doi: 10.31539/kesmars.v1i1.146.