Original Research Article

Analysis of the time of provision of outpatient medical record documents at Bhayangkara Hospital in Padang 2019

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ABSTRACT

Background: The hospital is a health service institution that plays a role in efforts to improve the degree of public health. One of the important roles in a hospital is the medical recorder installation. One of the minimum service standards for medical records at a hospital is the length of time to provide medical records for outpatient services, which is less than 10 minutes. The purpose of this study was to determine the length of time and to analyze the factors causing the length of time for the provision of medical records for inpatients at Bhayangkara Hospital in 2019.

Methods: This research is a combination of research with a sequential explanatory design conducted at the Bhayangkara Hospital in Padang in November 2018 to June 2019. In quantitative research, the sampling technique was by means of the accidental sampling technique and descriptive analysis. While the qualitative research techniques for determining informants were used by purposive sampling and analysis by using content analysis techniques.

Results: Quantitative research results, obtained an average time for providing medical records for outpatients is 9 minutes 6 seconds. The qualitative research results obtained that the input of the implementation of the medical record service system is not optimal and the process of implementing the medical record is also not well implemented.

Conclusions: The time for providing outpatient medical records is fast according to the minimum hospital medical record service standard, but the implementation is not in accordance with standard operating procedures.

Keywords: Hospitals, Minimum service standards, Outpatients

INTRODUCTION

The hospital is one of the public health service facilities that has a very important role in improving the degree of public health. In order for a hospital to carry out its functions properly, the hospital is required to provide quality services in accordance with established standards. One that plays an important role in a hospital is part of the installation of a medical recorder or medical record. Based on Permenkes No. 269 / Menkes / Per / III / 2008 concerning Medical Records states that all health service facilities are required to hold medical records, including hospitals. The role of the medical record service is very important because it is written evidence of the health services the patient receives. Indicators of good quality medical records are completeness of contents, accurate, timely and fulfillment of aspects of legal requirements. The influencing factors consist of input, process, and output factors. Input factors consist of human factors, facilities and infrastructure factors, financing factors, and method factors. The process factor concerns all recording activities and the evaluation process of recording results. The output factor (output) is the result of input and process. The expected output is the average length of waiting time for outpatient medical record services along with the influencing factors.
According to the Ministry of Health of the Republic of Indonesia (2008) regarding hospital Minimum Service Standards (SPM), one of the SPM medical records at a hospital is, among others, the time required to provide medical records for outpatient services in less than 10 minutes. Outpatient medical record services start from the place of patient registration to obtain medical record documents that will be used to obtain health services. The place for out-patient registration has a function or role in the service of patients and their families, so that the quality of hospital services can be assessed by the services received by patients at the registration site.\(^3\)

Until now, Bhayangkara Hospital in Padang had never conducted a quality assessment based on SPM medical records at the hospital, especially the length of time the medical records were provided for outpatients. Based on Wahono's research (2011), it was found that there was a strong relationship between waiting time and patient family satisfaction (p<0.05) in the Outpatient Installation of the Mental Hospital of West Kalimantan Province. Families of patients with fast waiting times have a greater level of satisfaction. Long service waiting time, will reduce the level of patient family satisfaction.\(^4\)

Therefore, based on the aforementioned problems, the authors are interested in analyzing the length of time the medical records document provided for outpatients in Padang Bhayangkara Hospital in 2019. This is useful in order to improve the quality of services for hospitals.

The purpose of this study was to determine the average supply of outpatient medical record documents at Padang Bhayangkara Hospital along with the factors that influence it. The benefits of the research are as input for the hospital in determining improvement steps in the management of a good outpatient medical record in accordance with the hospital's medical record standard operating procedures.

**METHODS**

This research is a combination of quantitative and qualitative research (mixed methods research) with a sequential explanatory design in which data collection and quantitative data analysis is carried out in the first stage, then followed by the collection and analysis of qualitative data in the second stage. This is useful to strengthen the results of quantitative research conducted in the first stage.\(^5\) This research was conducted at the Bhayangkara Hospital in Padang in November 2018 to June 2019.

In quantitative research, the sampling technique is by means of the accidental sampling technique and the analysis used is descriptive. While the qualitative research techniques for determining informants were used by purposive sampling and analysis by using content analysis techniques. The number of samples was determined using a large categorical descriptive sample formula.\(^6\) The proportion of the length of time the standard outpatient service was measured (<10 minutes) seen in the previous study, 36% \(=0.36\).\(^7\) To anticipate the drop out, the number of samples above is added by 10% to 98 people. The data collection method used in this study was the observation method. The analysis used in this research is descriptive.

This qualitative approach is carried out because the researcher wants to explore phenomena that cannot be quantified that are descriptive such as the characteristics of the staff/man, material, methods, and the process of carrying out activities.\(^8\) The technique of determining the informants used in this study is purposive sampling. The instrument used in this study was self-research. Furthermore, it will be added using in-depth interview guides and check list tables. Methods of data collection through observation, document review, and in-depth interviews. Analysis techniques conducted using data analysis techniques proposed by Miles and Huberman (1992) include three concurrent activities, namely: data reduction, data presentation, drawing conclusions or verification.\(^9\)

Data analysis will be used with content analysis techniques to maintain the validity of the data used triangulation, namely: triangulation of sources, observations (observations) and review of documentation.\(^10\)

**RESULTS**

**Quantitative research results**

The study was to find out the distribution of the results of calculations for the time of providing medical records for outpatients as many as 98 people in Bhayangkara Hospital can be seen in Table 1.

| Variable            | Mean (seconds) | Minimum (seconds) | Maximum (seconds) |
|---------------------|----------------|-------------------|-------------------|
| Data entry time     | 319            | 120               | 510               |
| Document search time| 227            | 0                 | 1320              |
| Total document provision time | 546            | 120               | 1800              |

Based on Table 1 above it can be seen that the average time for providing medical records for outpatients at Bhayangkara Hospital of 98 people is 546 seconds or 9 minutes 6 seconds, with the fastest time for 120 seconds or 2 minutes while the most available time long served for 1800 seconds or 30 minutes.
**Qualitative research results input**

**Population**

The total number of medical records officers at Bhayangkara Hospital is 13 people. The number of medical records officers in the medical record service section for outpatients, inpatients, emergency room, and storage areas is 7 people, and the casemix service section is 6 people.

From the results of the triangulation of Man for the organization of the medical record service system at Padang Bhayangkara Hospital that the number of medical records is still insufficient, in terms of the quality of personnel is still lacking because there is still a high school education background and not from D-III Medical Records. The management of the medical record installation has a high school education background, with a tenure of more than 10 years. Medical record training activities have been carried out in hospitals and outside hospitals. The implementation of training activities is sent in turn.

Reward and punishment system at Bhayangkara Hospital already exists, but medical record officers never get reward and punishment. Reward and punishment systems should also be given to medical records officers so that they can improve the motivation and performance of medical record officers.

**Table 2: Results of material observation at the medical records installation Bhayangkara Hospital at Padang in 2019.**

| Material resources                          | Status |
|--------------------------------------------|--------|
| **Material**                               |        |
| Tickets at the patient reception counter   | No     |
| The register book                          | No     |
| Medical records are given a map or cover   | Yes    |
| Patient main index card (KIUP)             | No     |
| A sign to speed up the work of storing and determining medical records | No |
| Request book (expedition book) for borrowers of medical records | Yes |
| A folder or cover color code is available to prevent mistakenly save and make it easier to find the wrong folder | No |
| There are exit signs for medical records that are not in place | No |
| **Equipment**                              |        |
| Office stationery (ATK)                    | Yes    |
| Computer for data entry                    | Yes    |
| Handbook for implementing medical records (BPPRM) | Yes |
| Fixed procedure (protap)                   | Yes    |
| Work space complete with work desk         | Yes    |
| The static document rack                   | No     |
| Telephone                                  | Yes    |
| **Amenities**                              |        |
| The patient registration room is adjacent to the active medical record storage room | Yes |
| The data management room is close to the patient reception room | Yes |
| The floor is waterproof and free of flooding | Yes |
| Walls permanent and clean                  | Yes    |
| Enough ventilation                         | No     |
| The distance between the two shelves for traffic is at least 90 cm | Yes |
| The in-active medical record storage room is separate from the medical record workspace | Yes |
| The medical records room is large enough for medical records officers to carry out their duties | No |
| The medical record room is adjacent to a supporting installation | Yes |
| Lighting of good storage                   | Yes    |
| The temperature of the room where the work is refreshing such as air conditioning, fans etc. | No |

**Material**

From the results of the interview it can be concluded that the material already supports outpatient medical record services. Based on the results of observation that there are still materials, equipment and facilities that are not provided. The results of these observations can be seen in Table 2.

From the results of the above table it can be seen that there are still materials and equipment that are not yet available. For facilities, this medical record room is very narrow and not enough ventilation. The temperature of
the room where work such as air conditioning, fans, and others are not available.

Methods

Based on document review and observation that the SOP for organizing a medical record service system is available at the hospital medical record installation section. From the results of the triangulation of methods about the Method that the method in administering the medical record service system of Bhayangkara Hospital is carried out manually and computerized. Based on interviews, document review and observations of SOPs for the organization of medical records are available at the medical records installation in the medical records chief's office.

Process (patient acceptance, storage and archiving)

Based on observations, obstacles encountered during the process of providing medical records for outpatients include patients forgetting to bring BPJS referrals and treatment cards, referral time limits are sometimes past time, there are BPJS patients whose cards are no longer active. All medical record files are not separate between active and non-active medical records. Not all medical record files are available in the active storage room. So that patients do not wait long when the medical record is not found, an integrated patient outpatient form is made and sent directly to the destination polyclinic by the officer. Annihilation was only done once. The archiving process used is good.

Output

The outputs in this study include the average time for providing medical records for outpatients is 9 minutes 6 seconds.

DISCUSSION

Discussion of research outputs

The time for providing outpatient medical records includes the time from the patient registering until the medical record is provided/found by the officer. The results of the study obtained the longest time when searching for this medical record is 22 minutes, with an average of 3 minutes 7 seconds. Based on the results of research Sulistiyowirini et al that one of the factors that influence the long waiting time of patients is a medical record document that is not found in the filing rack.11

Based on the results of the study, the average time to provide medical records for outpatient services at the Bhayangkara Hospital in 2019 was 9 minutes 6 seconds. This service time has reached SPM medical record at the hospital because the minimum service standard is the provision of medical record documents for outpatient services which is 10 minutes. However, the implementation of outpatient medical record services does not comply with standard operating procedures.

Discussion of input research results

Population

Man that is human workforce, both leadership and operational or executive workforce.12 According to the Republic of Indonesia Ministerial Regulation Number 55 of 2013 concerning the Implementation of Medical Record Work in article three it is explained that a medical record employee must have a minimum educational qualification Diploma 3 (D3) Record Medical and Health Information with the title of Associate Expert.13 According to the Indonesian Ministry of Health No. 377/Menkes/SK/III/2007, medical recorders must have competence. One of the competencies of medical recorders must be able to manage medical records and health information to meet the needs of medical services, administration, and health information needs as material for decision making in the health sector.14

Based on the quality and quantity of the number of medical records personnel is still insufficient. In terms of quality of personnel is still lacking because there are still high school education backgrounds and not D-III medical records. In terms of quantity, the amount of energy needed to plan the addition of energy. The staffing of medical records at Bhayangkara Hospital is not in accordance with Permenpan on Medical Recorders in 2013.

Based on the education background of the officers, this is the same as Simajuntak's study regarding a review of factors that influence the waiting time for medical record services in outpatient registration at RSUD. Dr. R. M. Djoelham Binjai that from observations there are still officers whose education is high school/high school graduates, and more graduates are not in accordance with their positions in the medical record service so that the result in patient waiting time is longer.15

Regarding training, according to Budiyanti and Damayanti's (2015) research on training needs assessments at the individual level of medical record officers at Surabaya Undaan Hospital that the training needs of medical record officers are needed because of their level of knowledge regarding managing medical records and skills in doing technical or non-technical work technical is still included in the category less.16

Training activities on medical records have been held at hospitals, although not all are included. The existence of training can improve the quality of human resources. In addition, the reward and punishment system at Bhayangkara Hospital already exists, but the medical records officer never gets reward and punishment. Reward and punishment systems should also be given to...
improve the motivation and performance of medical records officers.

Material

The implementation of medical record activities needs to be supported by the existence of material resources which include materials, equipment, and facilities. Based on the results of Andria and Sugianti's research (2015), it was found that the late supply of patient medical record documents was due to material factors including lack of shelf capacity, the system alignment is not sequential, and there is no tracer. In accordance with Simajuntak's research (2016) that the outpatient medical record material resources in Dr. R. M. Djoelham Binjai which includes materials, equipment and facilities that greatly affect the waiting time for medical record services in outpatient registration, namely materials and facilities. From the results of the study it can also be seen that the material in the Bhayangkara Hospital medical record installation still does not support the smooth process of medical record activities, even though the budget already exists for the procurement of shelves for storing medical records, but has not been realized. For materials that are not yet available such as KIUP, clues to speed up the work of storing and determining medical records, the availability of color coded maps or covers to prevent mistaken storage and make it easier to find the wrong folder, and exit signs for medical records that are not in place are not yet available. KIUP is the main key for every patient, so absolutely must be made, both outpatients and patients to be treated. Likewise with the signs to speed up the work of storing and determining medical records as well as signs out/outguide for medical records that are not in the place. Equipment is still lacking as the number of shelves where medical records are kept is limited. As a result, the juxtaposition system of medical record numbers is irregular, making it difficult for officers to find their medical record documents. For facilities, this medical record room is narrow and there is no air conditioning. This can affect the comfort of medical records officers at work. Officers cannot be free to work. For a narrow room, there needs to be additional space so that the officer becomes comfortable. In addition, air conditioning is also needed for air conditioning because ventilation in the storage space is minimal.

Methods

The intended method is the type of medical record used and the availability of standard operating procedure (SOP) for medical records. The SOP contains the work steps undertaken in the medical record service. In the practice of managing medical records manually, data collection is done through paper format and stored in a folder (folder). The practice of medical records in the modern era is to collect, store and analyze data/information through interactive electronic health records (RKE). From the research results it is known that the method in administering the medical record service system of the Bhayangkara Hospital in Padang was carried out in two ways namely manual and computerized. The SOP system for medical record services is available but not distributed to each unit. The purpose of the SOP is to serve as a reference in carrying out tasks, avoiding mistakes and confusion in carrying out tasks, ensuring efficient implementation of work according to the correct rules, clarifying lines of responsibility and as legal protection for both employees and health service institutions. However, socialization and the implementation of this SOP is still lacking. Efforts must be made is the need for meetings or meetings to evaluate the SOP in order to improve the quality of medical records. This is also supported by the results of the study of Devi, et al that the effect of SOP socialization has a significant effect on the number of late medical records and does not significantly influence the day of delay in inpatient medical records.

Discussion of research process results (patient acceptance, storage, and archiving)

Patient acceptance

From the results of observations and interviews at Bhayangkara Hospital that the process of receiving outpatients is not in accordance with the SOP. The problem with patient admission is that there is no search and retrieval of all medical records from old patients who registered. Every time a patient register, the officer must search and retrieve the patient's medical record file. Once found, officers immediately deliver the patient's medical record file to the intended polyclinic.

The search and retrieval of medical records is not carried out if the medical record number is still stored in a storage room located at the back of the hospital. To speed up time, the file given to the clinic doctor is enough to provide a form about Integrated Polyclinic Notes. The form is filled out by the doctor when the patient is examined. This form will later be collected at the registration place. If the patient's medical record file has been found, then the form is entered into the patient's medical record.

The medical record according to Huffman is a compilation/collection of facts of the patient's life history, including old and present illnesses, and their treatment, written by health professionals who take care of the patient. From the understanding of the medical record it can be concluded that a medical record file has a broader meaning than just a normal note, because in the note already contains all information regarding a patient that will be used as a basis for determining further action to the patient. However, searching and taking medical records is not done for all outpatients who register. As a
result, the patient’s previous medical history was unknown to the examining doctor. The impact, can pose a risk of error in determining further action to patients. In accepting patients, the problem arises not only because of officers in providing services such as searching for status/medical records of old documents. But it also arises from the patient himself.

Storage and archiving

Medical records at hospital health service facilities must be kept for at least five years from the date the patient was last treated. Bhayangkara Hospital, Padang, had once been carried out for extermination.

The medical record storage system used by Bhayangkara Hospital Padang uses an alignment system with a digit filling terminal. There are many advantages to using this final number system, but the medical record numbering system at Bhayangkara Hospital has not been fully realized and has not been properly ordered. There are still many medical records that are misplaced as a result of which officers need more time in searching medical records.

The medical record numbering system used by Bhayangkara Hospital uses the giving of a unit numbering system. Numbering the way this unit is better used, because in this way a patient has only one number per visit to the hospital, and his medical records both outpatient and inpatient are collected in one folder (folder).

The medical record storage pattern used by Bhayangkara Hospital uses centralized storage. Forms of medical record file storage at the Bhayangkara Hospital in Padang have been distinguished between storing active and inactive medical records. Inactive medical records are placed in a different room than active medical records. However, the separation of medical records is not in accordance with applicable regulations.

CONCLUSION

The time for providing outpatient medical records is fast according to the minimum hospital medical record service standard is 9 minutes 6 seconds, but the implementation is not in accordance with standard operating procedures.

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