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## OPTIMIZATION OF MEDICAL RECORD SERVICES BASED ON THE PREPARATION OF STANDARD OPERATING PROCEDURES HOSPITAL

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### Abstract

*The impact of improving health status can only be achieved, if the inpatient medical record administration service system is in accordance with the principal elements which must be passed and based on the implementation design which has been developed. This was a qualitative descriptive research with some data collection techniques, such as interviews, observations, and supporting data. The data analysis consisted of 3 stages; they were data reduction, data presentation, and conclusion drawing/verification. Good management of medical record services was not only for being able to provide appropriate services to patient expectations, but also for providing a service information system based on certainty, accuracy and speed. Dr. Hoediyono Airforce Hospital is still using manual systems to record, number and store medical records and having an impact on tracing documents. 2018 Proceeding Healthcare. All rights reserved.*

**Keywords:** Service Optimization, Medical Record, Standard Operating Procedure (SOP)

### INTRODUCTION

Health service is any efforts which are carried out alone or jointly in an organization to maintain and improve health, prevent and cure diseases and restore the health of individuals, families, groups and or the community (Ministry of Health of the Republic of Indonesia, 2009). Service is a dynamic activity in the form of helping, preparing, providing and processing and helping the needs of others (Andria, 2015).

The increasing number of patients will also affect the service speed provided by the hospital. The patient data at Dr. Hoediyono Air Force Hospital has experienced an increase in the past three years; it increased by 0.27% from the total number of 11,217 patients to 14,209 patients in 2015 to 2016, while in 2016 to 2017, it increased by 0.66% from 11,217 patients to 23,635 patients.

The data above shows that every year the patient of Dr. Hoediyono Air Force Hospital has always experienced an increase in the number of patients, so

that improving health services which are more optimal to meet excellent service needs is needed. One of the principle elements in excellent health services is medical services in the form of medical record data (Istirochah, 2016).

According to the Regulation of Health Ministry of the Republic of Indonesia No: 269/Menkes/Per/III/2008 that:

"Medical record is a file which contains written notes made by a doctor regarding actions taken to a patient in the context of health services and documents including patient identity, examination results, treatment which has been given, and other actions and services which have been given to patients."

"The medical records contents are the source of patient information, so that incomplete medical records can have an adverse impact on the health services process to patients which later could give an impact on the service quality. In addition, an analysis of the disease history and medical actions which cannot be carried out properly will have an impact on patient safety."

For this reason, medical record data in hospitals are obliged to contain complete and accurate information because it is needed in the routine recording and reporting process for patient recovery.

The criteria which contain an assessment of the medical record storage system in the Standard Operating Procedure (SOP) are the system existence which guides medical record storage and processing. But in fact in some health services, there are still

missed files in medical record processing (Nindyakinanti and Budi, 2017).

The service Standard Operating Procedure (SOP) is a channel for providing medical record services provided by health workers to retrieve the patient data which has been stored in a medical record installation. The Standard Operating Procedure is provided so that the medical record service process can be recorded and accounted for properly. The Standard Operating Procedure (SPO) of medical records consist of services Standard Operating Procedure (SOP), it is the flow of providing medical record services to retrieve patient data which has been stored in the medical record installation, recording Standard Operating Procedure (SOP) is recording procedures by health workers in providing action records and anyone who has the right to give medical record notes, and storage Standard Operating Procedure (SOP) is the procedure used by the medical records internal installation in storing medical record files (Nugraheni, 2015). Incomplete medical record data can reduce the doctor's analysis on the patient's disease history. The first process in medical records service is the input element which is inputting data based on the availability of patient data and other supporting data (Sanjaya and Oktavia, 2015).

The impact of improving health status can only be achieved, if the inpatient medical record administration service system is in accordance with the principle elements which must be passed and in accordance with the

implementation design which has been developed (Alvandi, 2015). Based on the observations at Dr. Hoediyono Air Force Hospital, the medical record administration service system is still experiencing problems in case of service delays. Although there have been standard operating procedures (SOPs) already which serve as guidelines for providing services in hospitals, the system has not been running smoothly. Related to the inputs in the form of medical record data, it is still difficult for the staffs to trace the patient's medical record data.

Based on the previous background description, the main problem in this research is the slow of medical record administration services system caused by delays in finding the patient's medical record data input by the officers and their impact on the doctor's analysis on the patient's history, so that the desired goals or targets of health services has not been effective and the Standard Operating Procedures have not been able to be implemented optimally.

### **RESEARCH METHOD**

This was a qualitative descriptive research with some data collection techniques, such as interviews, observations, and supporting data. The data analysis used 3 stages; they were data reduction, data presentation, and conclusion drawing/verification.

### **RESEARCH RESULTS**

- 1. Service information system in searching patient medical record data input based on certainty, speed**

### **and accuracy in the service process at Dr. Hoediyono Air Force Hospital**

The implementation of medical record services at Dr. Hoediyono Air Force Hospital has been running well. The Standard Operating Procedures implementation in the hospital has been carried out by all parties involved in the service process. This is supported by the results of the R1 interview:

"It is appropriate, but it is still being increased related to the procedures which must be carried out."

Optimal service is supported by work culture, compliance and adherence of health workers in providing patient services considering that Dr. Hoediyono Air Force Hospital is a military hospital. The work culture is carried out with a focus on discipline in following the hospital rules. The temporary employees in Dr. Hoediyono Air Force Hospital prioritize their performance by focusing on each job carried out every day, whereas the officers who came from the military division still could not reach the maximum in carrying out service duties to the community or patients because there still have responsibilities with military service. The explanation is supported by the results of the R4 interview as follows:

"For the temporary employees, they focused on the job. Other things for paramedics/medical officers who come from the military, in carrying out basic tasks in the hospital are

often disturbed by their official duties."

Good medical record management will support the implementation of efforts to improve public health degrees. Therefore, the health workers are needed to provide services which meet patient expectations. Related to the obedience and compliance of health workers in Dr. Hoediyono Air Force Hospital in providing the medical record services, the most important is complying with hospital rules, adhering to superiors and hospital management. This is according to the interview results described by R2, R3 and R4 as follows:

"Always obey the head of the hospital."

"Comply with the regulations in the hospital."

"All are obedient to the head of the hospital."

Good management of medical record services consists of not only being able to provide appropriate services to patient expectations, but also a service information system based on certainty, accuracy and speed. Dr. Hoediyono Air Force Hospital still uses manual systems to record, number and store medical records. Based on the interview results, there are several obstacles in the speed and accuracy of service. The manual storage system is able to inhibit the documents tracing, and this is considered as a factor in

service delays. The following interview explanation from R2 supports the previous statement:

"There is still little delay. And when the medical records are hard to find, a new status is immediately made."

The limited ability possessed by health workers can also hinder the smoothness of the medical record service information system at Dr. Hoediyono Air Force Hospital. This is in accordance with the following interview results conducted with R3:

"It has not been suitable because of the limited ability & willingness of the Human Resources to manage and develop information systems."

Based on the interview results, it can be concluded that the optimal service in the medical record service information system is supported by the work culture, compliance and adherence of health workers in providing patient services considering that Dr. Hoediyono Air Force Hospital is a military hospital. Good management of medical record services should not only be able to provide appropriate services to patient expectations, but also the service information system based on certainty, accuracy and speed is needed. Dr. Hoediyono Air Force Hospital is still using manual systems in recording, numbering and storing

medical records and having an impact on tracing documents.

## **2. Effectiveness of Standard Operating Procedures at Dr. Hoediyono Air Force Hospital**

The delay in finding the patient's medical record data input by the officers can have an impact on the doctor's analysis process on the patient's history, so that the desired health service goals or targets have not been effective and the Standard Operating Procedures have not been able to be implemented optimally. The Standard Operating Procedure (SOP) of medical records in Dr. Hoediyono Air Force Hospital has not been effective because there are still incomplete parts. This is according to the following interview result with R3:

"It cannot be called effective because there are several SOPs which have not in accordance with accreditation standards."

The completeness of Standard Operating Procedure can be seen based on the 2013 Hospital Accreditation Standards of MKI Working Group or Communication and Information Management. Dr. Hoediyono Air Force Hospital has not met the criteria for service standards because in MKI.8 assessment, there is still one criterion which has not been met. This is in accordance with the following interview result with R1:

"From all MKI.8 assessment elements based on the 2013 Hospital Accreditation Standards of IKM

Working Group, 8 procedures have been completed but there is 1 procedure which has not yet a met the standard, it was medical record at Dr. Hoediyono Air Force Hospital containing the patients condition when they were transferred. "

In addition, because the health workers on duty are not employees who have special expertise in medical record services, it also causes less effective medical record services because there are some health workers who have not really understood about the procedure for handling medical records. The previous explanation supports the interview statement with R4, as follows:

"Not all officers have understood about Standard Operating Procedure of the medical record."

"1. For the member patients and their families often do not carry a patient card, so it is difficult to trace the patient's status. 2. Medical record officers take it from room /poly nurses (not specifically the medical record section."

Based on the interview results, it can be concluded that the Standard Operating Procedure (SOP) of medical records at Dr. Hoediyono Air Force Hospital has not been effective because there are still incomplete parts. The completeness of the Standard Operating Procedure can be seen based on the 2013 Hospital Accreditation Standards of MKI Working Group or

Communication and Information Management. Dr. Hoediyono Air Force Hospital has not met the criteria for service standards because in the assessment of MKI.8, there is still one criterion which has not been met. There are several obstacles from human resources and infrastructure facilities in the hospital.

### DISCUSSION

#### 1. **Service information system in searching patient medical record data input based on certainty, speed and accuracy in the service process at Dr. Hoediyono Air Force Hospital**

A fast and precise service information system is the desire of all consumers both service providers and service recipients. The speed of providing medical record files in the clinic can also be one indicator in measuring satisfaction. The sooner the medical records arrive at the clinic, the faster services can be provided to patients. The medical records distribution standard speed is calculated from the time the patient registers at the registration place until the document is distributed to the poly of clinic. The health services quality can be considered as good if it is supported by a medical record processing system in obtaining medical records which are fast and timely in accordance with the provisions set by the hospital.

Optimal service in the medical record service information system at

Dr. Hoediyono Air Force Hospital is supported by the work culture, compliance and adherence of health workers in providing patient services considering that Dr. Hoediyono Air Force Hospital is a military hospital. Work culture is a group of behavioral patterns which are inherent overall in each individual in an organization. Building a culture also means increasing and maintaining positive sides, and trying to familiarize (habituating process) certain behavioral patterns in order to create a new form which is better based on the obedience of each individual (Habibiarifin, 2018).

The textual work culture can be described based on integrity, professionalism, leadership, example, togetherness, group dynamics, rationalism, emotional intelligence, accuracy and speed (Habibiarifin, 2018). Accuracy and speed mean the certainty of time, quantity, quality and finances needed. The principle which must be used as a guideline is the faster the better. The service principle which must be developed in an institution is excellent service based on speed and accuracy.

Good management of medical record services should not only be able to provide appropriate services to patient expectations, but also a service information system based on certainty, accuracy and speed is needed. Dr. Hoediyono Air Force Hospital still uses manual systems to record, number and store medical

records and has an impact on document tracing. The research conducted by Hutama and Santosa (2016) explained that the medical records process was carried out by doctors manually in each patient's medical record file. The medical record storage system at the hospital has become one between outpatient and inpatient care and has not been fully centralized so it takes a long time to search for files when it is needed.

Medical records organization at Dr. Hoediyono Air Force Hospital has been maximized by the existence of work culture, also the existence of Standard Operating Procedures which are used as work references in managing medical records, and support from management in providing work facilities in the medical record unit of Dr. Hoediyono Air Force Hospital, but, there have been still some obstacles. The effort which can be carried out in improving the medical record services quality is the medical record files numbering at Dr. Hoediyono Air Force Hospital by using TDF (Terminal digit filling), regular file placement makes it easy to access medical records when they are needed. The medical record files storage is centralized to avoid medical records duplication for each patient.

## **2. Effectiveness of Standard Operating Procedures at Dr. Hoediyono Air Force Hospital**

The service Standard Operating Procedure (SOP) is the flow of providing medical record services provided by health workers to retrieve patient data which has been stored in the medical record installation. The Standard Operating Procedure is given so that the medical record service process can be recorded and accounted for properly (Nugraheni, 2015). The Standard Operational Procedure (SPO) of medical records consist of services Standard Operating Procedure (SOP), it is the flow of providing medical record services to retrieve patient data which has been stored in the medical record installation, recording SOP means recording procedures by health workers in providing action records and anyone who has the right to give notes on medical records and storage SOP means the procedures used by the medical records internal installation in storing medical record files by considering the services quality provided.

The health services quality depends on the effectiveness regarding health service norms and clinical guidelines according to the existing standards. One of the examples is to consider the recommended procedures and treatment and use the most appropriate technology (Wijono, 2000). The service accuracy is based on the completeness of the Standard Operating Procedure (SOP) and the

principles which must be used as guidelines, the faster the better.

The existing medical record Standard Operating Procedure (SOP) at Dr. Hoediyono Air Force Hospital has not been effective because there are still incomplete parts. The completeness of Standard Operating Procedure can be seen based on the 2013 Hospital Accreditation Standards of MKI Working Group or Communication and Information Management. Dr. Hoediyono Air Force Hospital has not met the criteria for service standards because in the MKI.8 assessment, there was still one criterion which had not been fulfilled and had an impact on the service quality in the hospital.

According to Tiara *et al.* (2010) in their research, it was explained that the cause of the elements incompleteness of patient's medical record assessment in the Hospital Accreditation Standards due to incomplete medical record filling, evidence/implementation documents, SPO, incomplete policies/Decision Letter, Human resources who have not understood, and lack of management support and training programs.

Another research which is suitable with this research was carried out by Fadlun (2017) with the research results showed that the Standard Operating Procedure (SOP) had not been implemented effectively because there were still delays in medical record services during inpatient examinations by

doctors. The problem lies in the medical staff turnover system which was not on time, especially for patients who came at night. The medical records often cannot be found because the medical officer accompanying the doctor does not know where the medical record is stored by the medical officer on duty beforehand. In addition, the problem of low education and employment status from honorary employees affected the discipline and work behavior of the medical staff on duty so that the optimization of medical record services was needed.

Medical record assessment elements which are based on medical records Standard Operating Procedure (SOP) at Dr. Hoediyono Air Force Hospital still has criteria which have not been fulfilled due to doctor's time constraints, means that the doctors have very limited time so that they do not have time to fill in medical records. Not all personnel understand all assessment elements required by the accreditation standard as evidenced by the absence of education and training programs to provide training for employees both within and outside the hospital. There is still a lack of hospital management support in the patient medical records implementation in compliance with hospital accreditation standards because there have not been grouping according to functions in the hospital related to patient services, efforts to



create a safe, effective, well-managed management organization. For this reason, it is necessary to have consistent functions to be obeyed by each unit/part/installation.

### CONCLUSION

Based on the research and discussion results, it can be concluded that the optimal service in the medical record service information system is supported by the work culture, compliance and adherence of health workers in providing patient services considering that Dr. Hoediyono Air Force Hospital is a military hospital. Good management of medical record services should not only be able to provide appropriate services to patient expectations, but also a service information system based on certainty, accuracy and speed is needed. Dr. Hoediyono Air Force Hospital is still using manual systems in recording, numbering and storing medical records and having an impact on tracing documents.

The Standard Operating Procedure (SOP) of medical records at Dr. Hoediyono Air Force Hospital has not been effective because there are still incomplete parts. The completeness of Standard Operating Procedure can be seen based on the 2013 Hospital Accreditation Standards of MKI Working Group or Communication and Information Management. Dr. Hoediyono Air Force Hospital has not met the

criteria for service standards because in MKI.8 assessment there is still one criterion which has not been met. There are several obstacles from human resources and infrastructure facilities in the hospital

### References

- Alvandi. 2015. Optimizing The Effect Of Electronic Health Records For Healthcare Professionals And Consumers. *The American Journal of Accountable Care*. September 2015.
- Depkes RI. 2009. Sistem Kesehatan Nasional. Jakarta
- Fadlun. 2017. Sistem Pelayanan Administrasi Rekam Medik Rawat Inap Di Rumah Sakit Umum Daerah (RSUD) Poso. *Jurnal Katalogis, Volume 5 Nomor 3, Maret 2017 hlm 12-21*.
- Habibiarifin. 2018. Budaya Organisasi dan Budaya Kerja. dalam <http://habibiarifin.blogspot.com>, diakses tanggal 8 Agustus 2018
- Hutama dan Santosa. 2016. Evaluasi Mutu Rekam Medis di Rumah Sakit PKU 1 Muhammadiyah Yogyakarta : Studi Kasus pada Pasien Sectio caesaria *Jurnal Medicoeticolegal dan*

- Manajemen Rumah Sakit*, 5 (1): 25-34, Januari 2016.
- Istirochah. 2016. Analisis Kepatuhan Dokter Dalam Mengisi Rekam Medis Di Rumah Sakit Umum Daerah Kabupaten Boyolali. Tesis. Universitas Muhammadiyah Surakarta.
- Nindyakinanti dan Budi. 2017. Sistem Penyimpanan dan Pemrosesan Rekam Medis Terkait Standar Akreditasi Kriteria 8.4.3 di Puskesmas Jetis 1 Bantul. *Jkesvo (Jurnal Kesehatan Vokasional)* Vol. 1 No 2 – April 2017 ISSN 2541-0644.
- Nugraheni. 2015. Analisis Pelayanan Rekam Medis di Rumah Sakit X Kediri Jawa Timur. *Jurnal Wiyata*, Vol. 2 No. 2 Tahun 2015.
- Rustiyanto. (2012). *Sistem Informasi Manajemen Rumah Sakit Yang Terintegrasi*. Yogyakarta: Gosyen Publishing. Hal 31.
- Sanjaya dan Oktavia 2015. Optimalisasi Pelayanan Kesehatan Melalui Integrasi Data Rekam Medis Rumah Sakit dan Puskesmas. *Seminar Nasional Teknologi Informasi, Komunikasi dan Industri (SNTIKI) Pekanbaru*, 11 November 2015.
- Van M<sup>o</sup> Dang et.all. 2014. Medical Record-Keeping And Patient Perception Of Hospital Care Quality. *International Journal Of Health Care Quality Assurance*, Volume 27 Issue 6
- Wiyono. (2000). *Manajemen Mutu Pelayanan Kesehatan*. Surabaya: Airlangga University Press. Hal 13-42
- Yulian. 2017. Optimalisasi Pelayanan (Service) Puskesmas Dalam Peningkatan Kualitas Pelayanan Kesehatan Masyarakat Di Kabupaten Kubu Raya Provinsi Kalimantan Barat. *JMM* Vol. 13 No. 2 Oktober 2017.