

Original Research Article

Analysis of the implementation of medical record services in Ibnu Sina Islamic Hospital in 2019

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ABSTRACT

Background: Medical records are important files or documents for each hospital institution. The process of organizing medical records begins when the patient is received at the hospital, followed by the recording of patient medical data by doctors or dentists or other health professionals who provide direct health services to patients. The objective of the study was to find out the implementation of inpatient medical record services at Home Ibnu Sina Hospital, Padang in 2019.

Methods: Qualitative with a system approach of input, process, and output. Research informants was 5 people.

Results: In making a decision and policy, not all parties were included, such as medical personnel, paramedics, and medical records officers, tools and materials that support the implementation of medical records, especially where the storage of active medical records is not yet available.

Conclusions: The implementation of medical records at RSI Ibnu Sina Padang in 2019 has not been carried out thoroughly as seen from the input, process and output. For this reason, the addition of an active medical record repository, the existence of coordination, integration and synchronization in making decisions and policies so that medical personnel, paramedics and medical records officers are included.

Keywords: Analysis, Services, Medical records

INTRODUCTION

Medical records are important files or documents for every hospital institution. The process of organizing medical records begins at the time the patient is received at the hospital, followed by the recording of patient medical data by a doctor or dentist or other health workers who provide direct health services to patients. A complete medical record can reflect the quality of the medical record and the services provided by the hospital.¹

The quality of a good medical record is when it meets the indicators in the completeness of its filling, accuracy,

timely and meets the requirements of legal aspects.² One way to assess the quality of service in a hospital, can be seen how the hospital manages patient files that contain information and records from doctors and nurses regarding the development of a patient's illness, especially an inpatient. Providing medical records in a health service is one indicator of service quality at the institution. For this reason, the format and filling must be made carefully and must be relevant to the patient's situation. All changes are made chronologically with an explanation of the reasons for the change. Medical records that have been created must not be altered, deleted and added.³

Based on previous research conducted at the Islamic Hospital of Ibn Sina Padang by Audia (2016) that there are still problems both from late return of documents >1x 24 hours, and an increase in the incompleteness of medical record documents on 2 Quarter as much as 2.04% as well as problems resulting from the increasing number BPJS patient visits.⁴ Based on the description above, the authors would like to conduct research to see how the development of “analysis of inpatient medical record services organization in Ibnu Sina Islamic Hospital in 2019”. The specific purpose is to find out the availability of inputs (methods, personnel, funds, tools and materials) in organizing medical records at the Ibnu Sina Islamic Hospital in Padang in 2019, to find out the process (patient registration, medical record management, analysis of medical record contents, and reporting of medical records. medical) in organizing medical records at the Ibnu Sina Padang Islamic Hospital in 2019, to find out the results or output in organizing the medical record at the Ibnu Sina Padang Islamic Hospital in 2019.

METHODS

This research was conducted at Islamic Hospital Ibnu Sina Padang, West Sumatera, Indonesia from January to June 2019. This research is a qualitative study to get an overview of the implementation of inpatient medical record services at Ibnu Sina Islamic Hospital Padang. Determination of data sources on interviewees or research informants was done by purposive sampling. The informants who became the source of the data in this researcher were the leaders of the medical records (1 person), the medical record officer (1 person), the doctor (1 person), the nurse (1 person), and the midwife (1 person).

The instrument or data collection tool used in this study was the researcher himself. Then it is added by using interview guides and check lists, assisted by using digital camera or camcorders so that more complete information can be obtained.

Data collection methods are primary data, obtained by in-depth interviews. In-depth interviews were conducted with the leaders of the medical records, the medical records officer, and the RSI doctor Ibnu Sina Padang. Secondary data related to data or documents. The data or documents are inpatient medical record documents, ICD-X book used in the disease diagnosis coding system, Regulations from the Ministry of Health (MOH) regarding the system of organizing medical records, annual report of RSI Ibnu Sina Padang. Data processing is done by data reduction (data reduction), presentation of data (data display), drawing conclusions and verification (conclusion drawing or verification). Data analysis was carried out using content analysis techniques. Researchers used triangulation techniques to maintain the validity of the data by means of triangulation of sources. It was done by interviewing the same thing through different informants, method triangulation was done by

interviewing the same thing through different methods., i.e., with in-depth interviews, and documentation.

RESULTS

Input components

Method

From interviews with informants, they did not know of any rules governing the organization of medical records. As can be seen from the following interview results:

“When I was in college I listened, but forgot” (If-3).

“I used to know about the regulations but after serving functionally they were no longer added to the bustle” (If-4).

So, from interviews with informants it is known that the paramedic knowledge at Ibnu Sina Padang Hospital about medical records is still lacking. The results of the document review, it turns out that the rules for the organization of medical records at the Ibnu Sina Hospital are indeed not stated specifically and clearly.

Power

From the results of in-depth interviews with the Head of the Medical Record who is fully responsible for the organization of the medical record. Consisting of twenty-nine personnel, with educational background of eight DIII Medical Records, and twenty one high school graduates.

In the in-depth interview the chief of the medical records revealed that:

“There are sufficient personnel for medical records, amounting to twenty-nine people. For training, there are officers taking part, as long as they do not disturb office hours” (If-1).

According to the hospital medical records officer stated that:

“For medical records personnel is sufficient”. For training, I have almost participated in all, both those held by PORMIKI and other health institutions” (If-2).

The information obtained can be seen that the medical record personnel at Ibnu Sina Hospital in Padang are sufficient and have received training, especially in the management of medical records.

Fund

From the results of in-depth interviews with the head of medical records, information was obtained that the budget for the management and operation of Ibnu Sina Hospital

was entirely from the hospital. Funds are lowered based on what was made by the leader of the medical record, then submitted to the general section and proceed to the Director, the funds are reduced by the amount determined and guided by the proposals and needs of each section in RSI Ibnu Sina. As revealed in the interview that:

“The hospital budget comes from the hospital, the flow of funds from the medical records section is then submitted to the public department, continued to the Director and then the funds are reduced by a specified amount. If the medical records section, requires facilities or tools or equipment regarding medical records, we report to the general section, the general section proceed to the Director” (If-1).

So, from the results of interviews with informants it is known that the funds intended for organizing medical records are not a problem because every item needed can be fulfilled in a short time.

Tools and materials

The tools and materials owned especially the medical record section have been provided such as buildings, medical record storage racks and other necessary equipment such as books, forms and folders and other supporting tools. In addition to the building, the medical records section also has other facilities such as storage racks, forms, computers and supporting tools for organizing medical records, as revealed by the following medical record management:

“The current obstacle is a storage area for inactive medical records that does not yet exist, but we still pack it in boxes” (If-1).

The information obtained for tools and supporting materials for organizing medical records is good enough, only storage shelves for inactive medical records are not yet available.

Process components

Patient registration

For the recording of the contents of the medical record, especially regarding patient identity, we have recorded it as completely as possible. As revealed by the medical records officer as follows:

“The patient's identity is made in full, such as the patient's address, for example, roads, villages, sub-districts, etc. We ask for complete information because it is very important to facilitate the search if the patient does not carry a medical treatment card” (If-2).

The information obtained can be known for registration in accordance with the procedure.

Arrangement of medical records

For medical records that have returned to the room, especially inpatient medical records are usually carried out reordering or sorting. As revealed by the Chief of the medical record:

“Assembling and coding is done by medical records officers. We are currently conducting the coding in stages including filling in the index book” (If-1).

The medical records officer also revealed that:

“Assembling and coding has been carried out including for disease index, procedure and death. Usually made in a book” (If-2).

The information obtained can be known for the arrangement of medical records both for assembling, coding and indexing has been done.

Analysis of the contents of the medical record

In carrying out the analysis of the medical records that were returned, both quantitative, qualitative and statistical analyzes were carried out well. As revealed by the medical records officer as follows:

“We always return incomplete medical records to the room and we ask officers to complete them immediately. Usually the time given to inpatient staff is no later than three days” (If-2).

The information obtained can be known for the analysis of the contents of the medical record, namely qualitative, quantitative and statistics.

Reporting

For hospital reporting, especially for annual reports made by leaders of medical records, reports such as RL are made in the medical records section. As stated by the chief of the medical record as follows:

“Reports are made by medical records, such as bed occupancy rate (BOR), turnover interval (TI) and bed turnover ratio (BTR) made by each section according to job des. In organizing medical records, we help each other assist in terms of data needed in making reports. Reports are always sent on time to the health office” (If-1).

The medical records officer also explained:

“Regarding hospital reports, especially for filling out and making reports, we do it together, but sending it to the DHO is a medical record” (If-2).

The information obtained can be known in making reports there are no obstacles because the medical record

data is filled in completely, collecting data from each section on time.

Output components

To obtain complete medical record information carried out by using a checklist sheet, obtained a complete medical record of about 88.4% and incomplete 11.6%, incomplete such as the date of entry and exit date, the state of return, the signature of the statement giver, disease now, past illness, disease course, and doctor's instructions. Nurse records, anesthesia records and operating reports are completely recorded. The average annual report of outpatient visits was 328 people, inpatient BOR was 57.17%, length of stay (LOS) were 3 days and IT were 2 days, IGD averaged 95 people per day and OK around 3836 people per year.

To support the implementation of the medical record, in-depth interviews were also conducted with the Doctor. The things that were asked of them were related to the medical records at the Ibnu Sina Hospital in Padang, as follows:

If there are patients who move to a hospital if they do not ask for the results of their medical records to be transferred to another hospital. In this case the doctor provides the following information:

"Giving a referral letter to the patient, from the diagnosis of the disease, the actions that have been taken must be explained there including the reason for the transfer" (If-3).

If there are patients who move to a hospital, the doctor usually gives a referral letter, the referral letter explains about the patient's condition.

What to do if there is a request for release of information by a third party. There are provisions that must be met by these parties as disclosed below:

"According to official procedures or letters through the relevant agencies, usually there must be an agreement from the patient and the hospital" (If-3).

If there is a request for release of information by a third party there must be a statement from the agency, approval from the director and the consent of the patient.

Regarding what a good medical record is, the doctor gives the following picture:

"It must be complete, yes, from the examination of actions including other supporting examinations. The diagnosis is also useful for us by filling out a complete medical record, if there is a legal problem bias can be justified" (If-3).

A good medical record is a medical record in which all patient data, examinations, actions and supporting examinations and diagnoses of patients are recorded.

Regarding the legal basis of medical records, some doctors know and some don't. The doctor revealed the following:

"I don't really know, for example, when a case was taken to court, it turned out that the medical record data was incomplete, and the doctor and nurse examined it, which was clearly evidence or data in court" (If-3).

Regarding the legal basis of medical records, officers do not fully know.

The current form including the items in it is quite complete. As stated below:

"It is enough according to the desired criteria, but if you can add a table of contents in the first part of each form so that it is fast in terms of recording, especially for many new officers who have difficulty finding the form to be filled" (If-3).

The current medical record form meets the criteria.

Actions taken by medical personnel regarding incomplete medical records, returned to the room, he corrected. As stated as follows:

"Well, complete because it's my duty to fill it" (If-3).

Officers are willing to complete incomplete medical records that are returned to the treatment room.

Medical records that are not made in full may have a positive effect on the staff themselves as well as the hospital. For officers, especially medical personnel and paramedics, if there is a legal problem it turns out that the patient's medical record is incomplete, subject to lawsuits, the hospital will have problems including in making reports. The opinion of doctors regarding the impact of medical records if not complete the following:

"The impact is not only for hospitals, for us too. There is one thing that is incomplete written, the impact is also on the patient for example the diagnosis or actions that can be carried out as long as the impact on patients. If the hospital can be sued by patients for these actions" (If-3).

The impact of incomplete medical records is the existence of lawsuits, the impact on patients because it is difficult to continue treatment.

For medical records that have been damaged or torn returned to the medical records room.

Following the doctor's statement:

"If the problem of damage to the medical record is not the responsibility of the doctor, the medical records officer should be able to add a new form and fix it" (If-3).

If there is a damaged medical record, it is usually repaired and replaced with a new one.

Appoint another doctor to complete the patient's medical record, the doctor may not treat it. As stated below:

"You can't, everything done from the interview to the actions taken so far, we know. If submitted to another doctor for example there is an error on the patient who is responsible" (If-3).

It is not allowed to appoint another doctor to complete the patient's medical record because it is not their capacity as a KAOS.

In making decisions or policies regarding medical records, answers vary. They revealed the following:

"Yes, it must have been included, that is the name socialized about the development of medical records" (If-4).

"In fact all decision-making is not included, especially in problems related to medical records" (If-5).

DISCUSSION

Input components

Method

Method is a method used to guide and assist the implementation of medical records. From the results of the study, there are no rules that clearly and completely regulate the implementation of medical records at the Ibnu Sina Hospital, but there have been efforts to implement medical records at the Ibnu Sina Hospital in order to improve hospital quality. This is stated in Permenkes No. 269 / Menkes / Per / III / 2008 concerning medical records in chapter III concerning Procedures for the Implementation of Medical Records in article 5 paragraph 2: "Medical records must be made immediately and completed after the patient receives service". Folk 4: "Every record in the medical record names, times and signatures of doctors, dentists or certain health workers who must provide direct health services must be affixed". Folk 5 and 6: "In the event of an error in recording the medical record, rectification can be made" (paragraph 5). "Correction can only be done by deleting without eliminating the notes that are corrected and affixed by the doctor, dentist or certain health workers concerned" (verse 6).⁵

Circumstances like this should be the basis that the importance of rules governing the administration of medical records required at the Ibnu Sina Hospital. But in reality, the existing rules and procedures are still lacking to be used as a guide in controlling the activities of medical records carried out because of their non-binding nature. Required complete rules specifically for the organization of medical records that can be used as the basis of every medical record at Ibnu Sina Hospital. There needs to be a socialization about the rules that are put in place so that rules that do not exist are not kept away but are also carried out by every hospital. In addition, socialization can provide information for each RSI Ibnu Sina staff so that the rules relating to the agency where they work so they can also make future plans to be submitted to improve the hospital where they work.

So, the method in organizing medical records at Ibnu Sina Hospital is still lacking because there are no specific regulations governing how to administer medical records at Ibnu Sina Hospital. It is hoped that there will be fixed procedures governing how medical records are organized at Ibnu Sina Hospital in Padang.

Power

As a work unit that handles fairly complex document problems, the medical records department must have its own hierarchy consisting of leadership and implementing staff and work ties with related parties such as inpatients, outpatients and other sections. For this reason, all personnel assigned to this section should be equipped with special skills such as being able to use computers, coding diseases and erasing data, so that humans are needed to be able to follow the development of science, be flexible and broad-minded in the future.

Some information obtained from informants both obtained from the leaders of the medical records and medical records officers in terms of coaching and training regarding medical records has been obtained both held by PORMIKI and other agencies. The medical records available are now sufficient.

Fund

From the results of the study obtained information that the funds needed to maintain medical records is sufficient, and all funds come entirely from the hospital. This makes organizing medical records very important.

Tools and materials

The tools and materials available at Ibnu Sina Hospital in Padang to support the implementation of medical record activities are already available such as buildings, storage racks, computers, stationery, forms and other supporting tools.

Information obtained from both the Head of the medical record and the medical record officer of the equipment and materials currently there are still shortages such as where the storage of active medical records is not yet available so that the medical records are only packaged.

Process components

Patient registration

Patient registration is part of the medical record that contains the individual and administrative information of the patient. Data that needs to be written on the patient's identity is the patient's name, address, name and address of the patient's closest relatives or friends, age, date of birth, religion, occupation, work address, employment status, marital status, parent's name, date and time of hospital admission, date and time of hospital discharge, ward where the patient was treated, medical record number, statement of willingness to be treated both medically and operationally signed by the patient and family.

From the study of medical record documents conducted by officers record complete patient identity.

Arrangement of medical records

At the time the medical record received by the medical record officer, the returned medical record should be delivered by the officer of each care unit and recorded in the register of returning medical records from the room. The returned medical record should be complete, making it easier for officers in the medical records sub-section to process it. There are things that must be done by the medical records officer when the medical records return to the medical records room, including.⁶

Assembling

Here the officer rearranges the medical records in accordance with the order and issues unnecessary medical records. For assembling, the medical records are arranged in their order. Medical record incomplete, the medical record must be returned to the ward or to the treating doctor for a maximum of 1-3 days.

Coding

Medical records that have been arranged in order, the next action that must be taken is to code the medical record data in accordance with ICD-10 according to the diagnosis written by the doctor who coded is the main diagnosis, additional diagnosis, complications, surgery, cause of traffic accidents, death and newborn baby.

The accuracy of the code of a diagnosis depends on the implementer handling the medical record i.e. medical personnel in establishing diagnosis, medical record workers as code givers, other health workers.

The medical record officer is responsible for the accuracy of the code of a diagnosis that has been written by medical personnel, if something is unclear before the code is set, communicate it first to the doctor who wrote the patient's diagnosis.

Indexing

In carrying out the index, the medical record officer must make a tabulation in accordance with the code that has been made into the index. Use of index is for making reports and statistics.

The index is needed in data processing and data analysis of medical records carried out by the report function. In addition to the morbidity report but also the preparation of the report set by the Ministry of Health and the report required by the hospital. Reports needed by the Ministry of Health include RL 1 to RL 5, while reports needed by hospitals such as BOR, LOS, TI and BTR in each month's ward care with Barber Johnson graphic appearance, outpatient and inpatient disease sequences, number and other types of reports.

Information obtained from medical records officers activities such as assembling, coding and indexing has been carried out.

Analysis of the contents of the medical record

Regular analysis of medical records must be carried out to manage its contents so that it fulfills its objectives as a means of communicating patient care information, evidence of disease travel and treatment, legal review, reimbursement (reimbursement), peer evaluation and to fill clinical data for administrative, research and educational activities.

The quality of filling is indeed the responsibility of health workers. It is they who carry out filling out the medical record. This is also explained in Permenkes No. 269/Menkes/Per/III/2008 concerning medical records in chapter III concerning procedures for the Implementation of medical records article 5 paragraph 2: (2) "Medical records must be made immediately and completed after the patient receives services".

Paragraph 4: "Every record in the medical record must be given the name, time and signature of a particular doctor, dentist or health worker who provides direct health services".

Paragraphs 5 and 6: "In the event of an error in recording the medical record, correction can be made". (verse 5)

"Correction can only be done by deleting without eliminating the notes that are corrected and affixed by the doctor, dentist or certain health workers concerned" (verse 6).

The medical record that arrives at the medical record section, the officer who receives it must check the medical record file is complete or not, if there is a medical record that does not meet the needs, the accuracy of the relevant health officer to complete it.

Information obtained from in-depth interviews from several medical personnel stated that medical records that had arrived at the medical records room were always returned to the treatment room.

Reporting

Preparation in making reports generally involves data collection, analysis, interpretation and presentation of data in the form of figures. In order to use the results of the report, the report must be relevant and reliable in decision making.⁷

Health care reports provide many benefits to hospital administrators and directors, reports can be used to compare current work with past work as a guide needed in planning for the future. Medical staff can use reports to assess the good performance of the length of stay of patients with certain diseases, hospital resources used by patients and the level of success in treating patients.

Basic reports that are absolutely necessary are the daily census, BOR, LOS, BTR and TI as well as reports RL 1 through RL 5. Health facilities use reports to calculate mortality.

In RSI Ibnu Sina Padang who is responsible for making annual reports is every part in the medical record, as well as reports for the health service such as RL 1 to RL 5 the medical record that makes it, it was obtained by both the hospital director and the medical record leader.

An obstacle in making reports at the Ibnu Sina Hospital is filling in incomplete medical record data which makes it difficult to make RLs and annual reports (BOR, LOS and TI) such as out dates there are some that are not listed in the medical record.

In order to avoid errors in making reports, it is expected that all parties work together both the medical records officer, and the inpatient department so that an accurate report can be obtained and the results can be accounted for.

Component output

Completeness of medical record information where medical records reviewed are around 352 medical records, about 88.6% complete and incomplete 11.4%, this figure is obtained by the number of incomplete medical records compared to the number of patients who discharge or return multiplied by 100%. The standard set by the Ministry of Health states that the standard for completeness of medical record information is around

95% and according to Lumenta et al, chair of the Information and Institutional Cooperation Division of the KARS hospital accreditation strategy for preparing and maintaining quality of hospital accreditation states that incomplete medical records are around $\leq 10\%$.⁸

The incomplete majority is like an out date. Short patient records such as major complaints, current ailments, past illnesses and doctor's signature, anesthesia records such as type of anesthesia, anesthesia doctor's name and signature, nurse's notes and doctor's diary are all recorded in full.

Completeness means that all the necessary forms have been compiled and signed by the service provider, all final diagnoses have been recorded without the use of abbreviations and all typing of the information typed in has been completed and entered into the medical record form.⁹

So that in general it can be seen that the performance of nurses and officers of the medical record section to complete the patient's medical record is quite good, the system / management consisting of training, supervision, guidance and feedback at the Ibnu Sina Padang Hospital is sufficient because some paramedics and medical record officers have attended training, there are no policies issued by the hospital either the hospital director or the medical record leader, there is no socialization so each party works independently.

The 2018 report obtained an average of 328 outpatient visits. Inpatient services obtained BOR 57, 17%, LOS 3 days and TI 2 days in 2018, level

BOR efficiency 60% -85%, LOS 1-6 days and TI 1-3 days. It can be seen that the BOR results are not efficient, and the IT figures are efficient.¹⁰

Judging from the length of time the patient has been treated well, here the service provided by the officer is good enough for the patient because the LOS value is between 1-6 days.

Emergency services are carried out for 24 hours with the implementation of 3 shifts with an average of 95 people per day. Services in the OK installation in 2018 the number of patients operated on 3836 people per year. Indicators of medical record quality are completeness of contents, accurate, timely and determination of aspects of legal requirements.

CONCLUSION

The implementation of medical records at RSI Ibnu Sina Padang in 2019 has not been carried out thoroughly as seen from the input, process and output. For this reason the addition of an active medical record repository, the existence of coordination, integration and synchronization in making decisions and policies so that medical

personnel, paramedics and medical records officers are included.

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REFERENCES

1. Ministry of Health. Holding of Inpatient Medical Records. Available at: www.renocenter.net.bbgspot.com/1991/05/polishing-rekam-medis-rawat-inap-perlu.html. Accessed on 3 October 2019.
2. Wuryanto S. Johnson Barber Chart As One Tool To Measure Hospital Processing Efficiency. Jakarta. 2001.
3. Ministry of Health of the Republic of Indonesia. Strategy Plan 2005 - 2009. 2005. Jakarta.
4. Audia M. Analysis of the Implementation of Inpatient Medical Records at the Islamic Hospital (RSI) Ibnu Sina Padang in 2016: Andalas University; 2016.
5. Republic of Indonesia Health Minister Regulation No. 269. Medical records. 2008.
6. Ministry of Health of the Republic of Indonesia. Guidelines for Implementing Medical Records. Jakarta. 2001.
7. Huffman E. Health Information Management. Translator, Erkadius. Health Information Management I. Sections 1 and 2. Padang. 2004.
8. Lumenta NA, Nefro K. Chair of the Institutional Accreditation Commission for Hospital Information and Cooperation (KARS). Strategy for Preparing and Maintaining Quality of Hospital Accreditation. 2001.
9. Indonesian Medical Council. Medical Record Manual. Jakarta. 2006.
10. Ibnu Sina Hospital in Padang. Profile of RSI Ibn Sina Padang. Padang. 2018.

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