The Incompleteness of Medical Record Documents: Causative Factor and Solution Studied on Private Hospital in Malang City

Tsalits Maulidah Hariez[1], Muhammad Mansur[2], Ekowati Supartinah Kamandika P[3]

[1, 2] Magister Program of Hospital Management Faculty of Medicine - University of Brawijaya Malang, Indonesia,

[3] Private Hospital in Malang City

Abstract: *Quality services at hospitals are not only medical services but also support services. One of the parameters that can be used is data or information from a good and complete medical record. MRD filling in RS X has not reached 100%. The percentage of completeness of MRD filling (Medical Record Document) by DPJP (Responsible Physician Service) is better than nurse, that is equal to 60-75%; and the percentage of completeness of MRD filling by nurse reaches 35-50%. This research, which aims to determine the factors causing incomplete filling of medical record, uses descriptive method. Data were taken during September-October 2017 through document review, field observation, interviews, and questionnaires. Factors that affect the incompleteness of the MRD filling are largely due to the human resources; that are different comprehension and incompleted MRD filling also lack of communication between MR officers with DPJP. Besides, it is also influenced by the process factor that is unavailability of SPO filling MRD, and there are still less systematic and repetitive forms materially. Some alternative solutions are review of medical record installation service guidance such as preparation of required SPO, gradual socialization, and monitoring implementation in the form of assistance in filling MRD by head of room. Alternative solutions are done under the coordination of the head of the RS Installation and some related PPA.*

Keywords: Medical Record Document, Incompleteness, Causative Factor

1. Introduction

Hospital is an essential part of health system which provides complex curative services, emergency, the centre of knowledge and technology transfer, and serves as referral center. To improve customer satisfaction the hospital must improve service quality according to customer expectations which can be done through work quality improvement. Quality of service is a very important thing to keep the existence of a hospital. Services which are have quality not only on medical services but also on support services [1].

One of the parameters to determine the quality of health services in the hospital is data or information from a good and complete medical records. The indicator of a good and complete medical record quality are complete, accurate, timely and compliance with legal aspect requirements [2]. According to the Minister of Health RI Regulation Number 269/MENKES/PER/III/2008, medical record is file which contains records and documents about patient identities, examinations, treatments, other measures and services that have been provided to patients either patients in emergency, outpatient care or inpatient care [3].

The Inpatient Unit is responsible for all clinical services which are provided to the patient until the end of treatment. The Patient's medical record document which has finished the treatment is submitted to Assembling part within no later than 1x24 hours with the purpose of medical record document to be examined [4].

The completeness of medical records is very useful to know the patient's disease history, the examination actions that have been done, and to plan the next action in detail. Diagnosis of disease which established by a doctor, will affect the action on the patient either in treatment or even in action that will be taken. An accurate diagnosis is based on anamnesis, physical examination, investigation written in medical record files. Medical records are used as guidelines or binding legal protections because it contains all records of action, service, therapy, timing of therapy, the signature of the doctor, the signature of the patient , and so on. The main uses of medical records can be viewed from several aspects: administrative aspects, medical aspects, legal aspects, financial aspects, research aspects, educational aspects and documentation aspects [5].

RS X is a private hospital in Malang that has cooperated with BPJS Health. Based on medical report records In July 2017, most of the hospitalized RS X patients are BPJS Health participants (80,27%). The condition causes RS X has to make quality control efforts which one of them with the completeness of filling the Medical Record Document (MRD).

A preliminary study conducted in August 2017 obtained data that the number of completeness MRD filling in May - July 2017 for DPJP is 60-75% and for nurse is 30-50%. The purpose of this research is to make recommendations to improve the completeness of DRM filling of inpatient in RS X.

2. Research Method

This research is an explorative descriptive research to explore the causative factors of the incompleteness of DRM filling and alternative solution effort to increase the number of MRD filling completeness. Data collection has been done through document review, field observation, interview and questionnaire. Data collection was conducted during September-October 2017 at RS X.

The document review was carried out by looking at theMedical Record Installation Service Guide of RS X on 2015 and looking at the incomplete MRD patient back in May - September 2017 and matched with data performed by the Analytical section of Medical Record Installation.

Field observations were carried out by observing the MRD filling process by nurses in the inpatient room, a process complementing MRD by Ka. Room and analysis process of incompleteness of MRD.

Interviews were conducted to explore how MRD filling process has been, the factors behind the incomplete MRD replenishment and improvement of DRM filling completion. The respondents of this interview are DPJP (4 persons), Ka. Medical Record Installation Room, Filing Officer and Medical Recordist Analyst (2 persons), Chair of accreditation, Assistant manager of Nursing, Ka. Room (4 persons), and nurse. The results of the interviews became the material for the distribution of questionnaires as many as 22 questionnaires were distributed. Interviews and questionnaires material are: understanding of PPA about MRD replenishment, reasons for incomplete MRD filling, MRD related input suggestions, analytical process of incomplete MRD by RM section, policy / guidance about MRD replenishment, follow-up on incompleteness of MRD by management.

All data derived from document review, field observation, interviews and questionnaires were collected and analyzed as material to determine the root of the problem. Determining the root of the problem using a fishbone diagram. Determining the priority scale of the root problem using USG method.

3. Result

The completeness of MRD filling at RS X, document review result and monthly report of RS X Medical Record Installation stated that the completeness of MRD doctor (DPJP) and nurse is not 100% as shown in Figure 1.
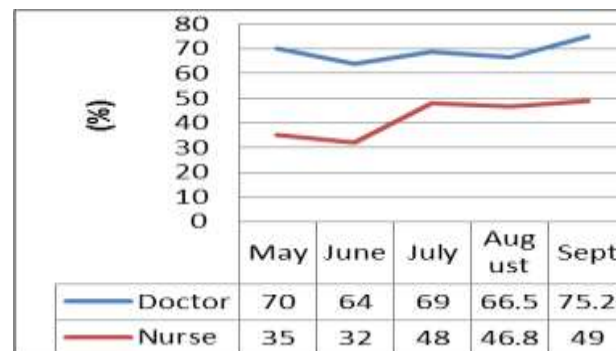
Figure 1: The completeness of MRD Filling Data in May-September 2017

The completeness of MRD filling by DPJP is better than nurse. It needs further investigation of why DPJP is more complete in MRD filling. This may happen because the nurse has more time to cares patients than doctors. There is an allegation that the differences of knowledge and skills are affect the quality of MRD. However, research conducted by Cintya A and Barsasella, 2014 at Harum Sisma Medika Hospital East Jakarta shows that knowledge and skills are not related to the quality of medical record documents.

Different results shown by the Nurhaidah *et al*.[6], who do the research in 2016 and it was revealed that the main responsibility of incompleteness is a doctor that is 1) medical resumes, service plans, present status, integrated patient recordings. Nurhaidah's research can explain the accuracy by showing the points of the form which are not completed by the doctor.

Unfortunately for Cintya's research did not show what form that is become the nurse responsibility is not fully fill. If the incompleteness of MRD Nurhaida's research reach 100%, hence research of Hong et al in a plastic surgery which done in July until December 2013 in Ontario Canada, shows the number of incomplete MRD filling equal to 24,4% [7], the most incompleteness is at aspect of filling current illness history and surgical history. It is not known what the cause of the incompleteness is.

While Nurhaida et al conclude that the incompleteness is related to the absence of policies, guidelines, and SPO. This is logical because they serve as the basis for the implementation of staff below. Other research found that the completeness of the doctor's records was 92. 8%, the physician's instruction sheet reached 96.4%, the NCP of 98.2% [8].

4. Discussion

Determining Root Problems
Complete MRD has an important role in hospital evaluation and may reduce the assessment score of the medical record and the clinical ward of a hospital [9]. The incompleteness according to Nurhaida et al, can be caused by human resources that are doctors and nurses whose lack of discipline in medical recording filling [6]. In contrast to the

findings in this research which concluded that the biggest factor causing the incompleteness of MRD is an inadequate understanding of PPA on MRD. This is as presented in table 1.

Table 1: Causal Factor of incompleteness MRD filling on RS X

No	Fishbone Factor	Results
1	Man	40,91% respondents said that their understanding is different between PPA especially difference understanding about filling form 6 because SPO charging has not been socialized 31,82% respondents said that the understanding of DRM filing is not maximized due to the lack of optimum socialization 36,36% respondents said hasty in filing and tend to delay charging 13, 64% PPA commitment is not maximal because it tends to delegate responsibility to the head of room or doctor room
2	Material	27,27% respondents said the filled form tends to be repetitive and less systematic
3	Process	31,82% respondents said there was no direct feedback to PPA regarding the incapacity of charging DRM because the communication of medical records officer with PPA is less
4	Policy	27,27% respondents said the incomplete replenishment of filing because PPA tends to rely on head of room or doctor room related management policy that the person responsible for completing the DRM is head of room or doctor of room
5	Environ-ment	36,36% respondents tend to pile up work so prone to forget to fill

Causal Factor of the incompleteness of MRD in Table 1 shows that the HR factor (Man) is the most contributing factor in MRD filling in RS X. The understanding of the MRD filling by PPA is still varied and not maximal. Maharani's research on BKPM (Balai Kesehatan Paru Masyarat) Semarang also found that less knowledge (80.0%) as the cause of incompleteness MRD filling [10].

Especially in the RS X of this study, the incompleteness of MRD filing beside caused by human factor, it founds a fact that the SPO of filling was not yet available so that the socialization of MRD filling was not maximal yet. Socialization should include SPO, without SPO, staff will not get clear accountable procedures. In addition to human factors, the problem occurs due to policy.

RS has a policy that the person who is responsible for the MRD filling completenessis physician room and head of the room. The field findings obtained the fact that the nurse delegated responsibility for completing the MRD by relying on a room doctor or room chief.

In accordance with the Permenkes RI No. 269 / Menkes / Per / III / 2008 on Medical Records [3], that those who responsible for MRD are doctors, dentists, nurses, pharmacists, nutritionists and other caregiver professionals who are responsible for such patient care from patient admission to patient out. So, the responsible person for

MRD filling is the person who knows and understands the actual condition of the patient.

After identifying some problems, the next step is to select the priority of the problem by using the priority scale of the problem. Each problem will assess the level of risk and its impact if there is no intervention taken and how much effort is needed if improvements will be made.

Scoring method that will be used is the method of USG (Urgency, Severity, and Growth). Steps for using the USG method by creating a list of problems, making the priority matrix of the problem table with the scoring weights 1-5 based on the likert scale (5 = very large, 4 = large, 3 = medium, 2 = small, 1 = very small).

Table 2: Problem prioritization based on USG method

No	List of Problem	Criteria			Amount	Rank
		U	S	G		
1	Discipline of PPA is less	3	3	3	9	6
2	There is no evaluation of DRM form	4	4	4	12	3
3	There is no SPO charging of DRM	5	4	4	13	2
4	Communication of medical records officer and PPA is less	3	2	2	7	7
5	SPO analysis of DRM completeness not yet available	4	4	3	11	4
6	Understanding how to fill in DRM is less	4	3	3	10	5
7	Evaluation of medical records services guidelines has not been implemented	5	5	5	15	1

Evaluation of RM service guidelines that have not been implemented become the root of the problem with the highest score which includes there is no SPO required, such as SPO of MRD filling and SPO analysis of MRD completeness. Each root of the problem can be set up several alternative solutions to solve each root problem.

Determination of Alternative Solutions
Some alternative solutions for each root of the problem are as follows table 1.

Table 3: Alternative solutions for each root of the problem

No	List of Problem (based on rank)	Alternative Solutions
1	Evaluation of medical records services guidelines has not been implemented	Review and evaluate medical record unit service guides as the latest references and hospital policies
2	There is no SPO charging of DRM	Preparation of SPO charging DRM based on standard and PPA input
3	There is no evaluation of DRM form	Review and evaluate from DRM in terms of number, content of each form and uniformity of form writing
4	SPO analysis of DRM completeness not yet available	Preparation of SPO charging DRM based on standard and PPA input
5	Understanding how to fill in DRM is less	Gradual socialization and assistance by head of Room
6	Discipline of PPA is less	Time management of PPA, workload evaluation and job description of nurse
7	Communication of medical records officer and PPA is	Medical record officers provide feedback to PPA especially DPJP related to the incompleteness that often

No	List of Problem (based on rank)	Alternative Solutions
	less	occurs, either through small personal notes or through meeting, etc

Based on the priority determination of the root problem, it can also be determined alternative solutions that can be done. Review and evaluation of service guidelines are conducted in accordance with the latest references and RS policies.

Guidelines can also be added on the authority of each PPA in MRD filling. Which part is the authority of each PPA, so the filling will be clearly. Guidance should also be supplemented with some required SPO, for example SPO of MRD assembly, SPO of MRD filling, and SPO of MRD completeness analysis. Furthermore, the SPO can be socialized gradually to the entire PPA so the incompleteness causal factor which caused by the understanding of human resources can also be resolved. Socialization does not stop only limited to the information delivery, but also conducted assistance and monitoring from the head of the room related to MRD filling by doctors and nurses.

Monitoring should also be performed by the medical recorder to provide feedback to PPA regarding the incompleteness of MRD filling. The existence of direct feedback to PPA will expected PPA to to know which parts are often not filled completely so that there is no incompleteness that repeated on a particular form. This monitoring is necessary to control the MRD filling process. Research conducted by Mawarnai and Wulandari [11] explains that MRD filling in Inpatient installation of RS Muhammadiyah Lamongan caused by monitoring process which is not maximal yet.

The research conducted by Fantri Pamungkas et al in RSUD Ngudi Waluyo Wlingi [2] shows that causal factor of the incompleteness of MRD filling is mostly from human resource factor (Man). Rahmadani [4] research also explains that the incompleteness factor of MRD filling comes from HR aspect and implementation procedure. Speaking related procedures, including existing guides and SPO.

In addition to HR and procedures related to the understanding of PPA, the availability of SPO, and the communication of RM officers, the MRD filling is also influenced by the material factors in this case is the form to be filled in. The results of the data collection showed that the review of MRD form in RS X has never been implemented so some PPAs feel the form is less systematic and tend to recharge. Research conducted by Gini Wuryandari [12] states that MRD filling is also influenced by MRD form in terms of availability of sufficient and complete form, clarity of medical record formats, and suitability of medical record form sheets.

5. Conclusions and Suggestions

MRD filling in RS X has not reached 100%. The percentage of completeness of MRD filling by DPJP is better than nurses, that is 60-75% and for nurses reach 35-50%. Factors that affecting the incompleteness of the MRD filling largely due to the human resources factor that is different understanding and not maximal in MRD filling and communications less than the maximum between RM officers with DPJP. In addition to HR is also influenced by the process factor that is not the availability of SPO of MRD filling and materially there is still a less systematic and repetitive form.

Several alternative solutions need to be adapted to the effectiveness, efficiency, and RS conditions to resolve the root of the problem. Some alternative solutions are review of medical record installation service guidance such as preparation of SPO required, gradually socialization, and monitoring implementation in the form of assistance in MRD filling by the head of room. Alternative solution is done under ka coordination, RS installation and some related PPA.

One of the highlights of the study was that the analysis of the completeness of MRD filling by nurses was much lower than DPJP. It is necessary to do an observation and further research. Observation can be done by looking at nurses work load factor, nurse performance, and nurse commitment.

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Author Profile

Tsalits Maulidah Hariez, Magister Program of Hospital Management Faculty of Medicine - University of Brawijaya Malang, East Java. Indonesia.