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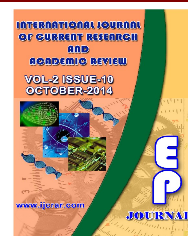

Designing a model for medical documentation as per joint commission international in emergency department of Tabriz Imam Reza hospital

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A B S T R A C T

Medical record documentation is an important legal and professional requirement for all health professionals which ensures holistic patient care presented to him. The aim of this study was evaluation of medical documentation in emergency ward of Emam Reza hospital as per joint commission international. In a cross sectional and descriptive analytical study that performed in emergency department of Tabriz University of medical science, medical documentation in emergency ward of Emam Reza hospital as per joint commission international evaluated. In all records, Details of patient information and report was recorded. Physician stamp was recorded all documents. The physician's signature in 534 cases had been recorded. Special consent was found in 24 patients that including, 3 special consent for TPA and 18 special consent for the surgery. In the documents of 24 patients with special consent in all cases; name and signature of patient, Signature of witness with date, physician's signature with date and surgery/treatment indication was recorded in documents. Date, time and physician's signature in 486 cases and daily physician record's were done in 564 documents. Date, time, nurse's signature and daily physician record's were done in all documents. Chief compliant of patient, pervious history and physical examination were recorded in 36 cases at documents. Medication treatment in 167 cases, discharge status in 557 cases, date or time of further follow-up in 485 cases, prescribing or any recommending at discharge in 453 cases and physician's signature in all cases were recorded in documents.

Introduction

Due to the competitive demands, healthcare organizations face significant challenges for service providing. In an environment which economic incentives, political, legal issues should highly be considered, service providers face with cost controls and the only way to succeed is maintaining the good quality (Aghazadeh, 2005; Joint

Commission International, 1997; Prybuto and Spink, 1997; Ritonja and Hocever, 2001). Therefore, most health care managers and health care policy makers consider standardization, accreditation and evaluation of health care providers as an inevitable affair (Rooney, 1999; Safdari and Meidani, 2007).

However, in the last two decades a wave of external evaluation systems, affected the health care systems. Government, consumer services, health professional associations, managers, insurance companies etc. all are trying to work in order to meet society through accreditation, by improving quality health care services (Scrivens, 1966; Scrivens, 1995; Raeisi *et al.,* 2007).

Accreditation is a process in which a group or organization grants reputation and recognition by assessing the ability of a hospital to provide standard health services. Accreditation is done based on written and approved standards by expert people, through consistent evaluation of organizational processes and performance. Medical centers - hospitals or hospitals are evaluated on a voluntary basis, but formal accreditation by specified organizations may need formal request of approved centers. The validation group evaluates the center or the hospital, using relevant standards. After analyzing the results, the degree of compliance and adherence to the standards is declared to the specified center or hospital (Scrivens, 1966; Scrivens, 1995; Raeisi *et al.,* 2007).

Accreditation is an independent voluntary program that is formed in the United States in the 1917 by the U.S. Joint Commission on Accreditation (JCAHO) health services - for accrediting organizations - hospitals and general health care providers. its international branch, Joint Commission International (JCI), began its work in 1998 with the aim of providing a set of international evaluation standards accreditation at the international level with the development of a set of accreditation standards began in 1998. In 1999, the first edition of the International Standards released in November 1999, the first survey was conducted at the international level (Donahue and Van, 2000).

JCAHO is a nonprofit organization outside of the U.S. healthcare system which acts formally in assessing and improving the quality of health care organizations (Donahue and Van, 2000).
This organization offers standards at the international level by one of its subdirectories as JCI, outside of U.S. borders (Donahue and Van, 2000). These standards is developed based on international census by a group of specialists, these methods is tested in different countries (Raeisi *et al.,* 2007).
Standards JCI have exclusively developed for the evaluation of health services. In this context, the list of accrediting hospitals as well as information about their accreditation and grade is published on the web site of Joint Commission on Accreditation of Health Care Organizations Details of the accreditation process and the results are available only to relevant organizations and other stakeholders (Donahue and Van, 2000).

Accreditation programs based on the standards of the JCI is known as the perfect accreditation program. The program includes an introduction to the important points of evaluation and monitoring systems in the medical world to the process methods (Sadaghiyani, 2004). Joint Commission International Accreditation Standards are unique tools that are designed to measure the quality of patient care (Scrivens, 1995).

In this field the researchers suggest that the JCI and JCAHO standards provide a specific framework and systematic approach for the evaluating the efficient and effective functioning of the organization (which is the basis for quality assurance) these methods can be used as a model of evaluation of health care services (Rooney, 1999; Vincent and Donna, 1999; Donahue and Van Stenberg, 2000).

Preparation of standards in different countries show that the evolution of hospital standards has been changed from a purely structural and normative to standards based on continuous quality improvement and total quality management (Sadaghiyani, 2004). However, in Iran the standards of Ministry of health are used which the relevant researches show these standards are not comprehensive enough (Ahmadi *et al.,* 2007).

Currently, Ministry Of Health evaluates the health provider centers with its self-standards and the grade of hospitals is determined upon these evaluations. However, some grade one and two hospitals lack the quality and efficiency (Ahmadi *et al.,* 2007), perhaps the standards are the main cause of such grading (Sadaghiyani, 2004; Vincent and Donna, 1999; Donahue and Van Stenberg, 2000; Ahmadi *et al.,* 2007).

As we know, hospitals are the pillars of the health care systems in every country and the reform and improvement of health care cannot be sustained without addressing these centers many of assessment processes take place in these centers.

The aim of this study is to design a model of documentation based on JCI model in emergency department of Tabriz University of medical Sciences.

Materials and methods

In a cross sectional descriptive analytic study in the department of emergency medicine in Tabriz university of medical sciences we evaluated the documentation of medical data in emergency medicine, department of Tabriz Imam Reza hospital.

Sample size and sampling methods

We compared the documentation of the medical data of referring patients in Tabriz Imam Reza hospital with the JCI standards as a descriptive- analytic study.

Target population

The files of patients referring to emergency department of Tabriz Imam Reza Hospital from November 2011 to January 2011.

Inclusion criteria

The file of the patients referring to emergency department in the mentioned time period, the admission considered only in emergency department.

Exclusion criteria

Patients who did not complete the treatment process and left the admission incomplete and discharged with personal consent and the patients who referred to other centers or admitted to operation room were excluded from the study.

The study population was determined as 600 patients with random selection. The files were randomized from the files of patients admitted to emergency department in the mentioned time period. These patients include the cases that were admitted to emergency department and were discharged from this service after final diagnosis. The

consistency of the files and documentations were compared with standard checklist.

The collected data were then analyzed using SPSS statistical software the consistency percentage was calculated.

In this cross sectional descriptive analytic study in the emergency medicine department of Tabrzi Imam Reza hospital we evaluated the documentation process of the patients' files and compared them with standards, we provided the improvement and standardization ways based on JCI guidelines.

Ethical considerations

There is no intervention in treatment and care processes of patients, so there was not any ethical consideration in this study, but all the information of this study is kept confidential.

Statistical analysis

All the data of patients was analysed with descriptive tests (frequency± percent standard deviation)

Results and discussion

We evaluated the documentation process of the patients' files and compared them with standards, we provided the improvement and standardization ways based on JCI guidelines.

In our evaluation, we found no coding system, and consent of admission in the files. Patients' details and reports were completely recorded in the files. The physicians stamp was recorded in all cases and the signature of the physician was recorded in 534 cases. Corporate/TPA patients were in 6 files.

In consent forms of patients, the name and therapeutic procedures, sign of patient with date, signature of the physician with the date and the name of witness and its signature was not recorded in the files.

The special consent was found in 24 files which included 3 cases of consent for TPA and 18 cases of surgical consent.

In 24 cases of special consents, and in all of the cases< the full identification of patients (including IP, name and the bed number) was recorded in the files.
In special consent forms of patients, the name and therapeutic procedures, sign of patient with date, signature of the physician with the date and the name of witness and its signature was recorded in the files.

The date, time and the signature of the physician was recorded in 468 cases and the daily records of the physician were found in 564 cases. Date, time and the signature of the nursing was recorded in all files.

Chief complaint, previous history, physical examination in 36 cases , drug administration in 167 cases, situation on discharge in 557 cases, the date and the time of the next follow up in 485 cases, discharge advices in 453 cases and the signature of the physician was recorded in all of the files. The review of medical record forms as per JCI medical documentation criteria is shown in Table 1.

Medical files are valuable tools in providing high quality medical care for patients in prevention of disease and promotion of health. The quality of a medical file exactly depend the contents of the file that is recorded by a documentary. Often times, the quality is determined by being complete and accessible, timely and legibility of

expression (Phillips *et al.,* 2006). The medical record documentation is important legal and professional requirements for all healthcare professionals because this documentation facilitates the data exchange for all the treatment team which is vital for delivering the health cares and the medical files can be used for research, evaluations and the legal aims (Farhan *et al.,* 2005).

Despite the importance of the documentation of medical files the researchers of this issue in Iran shows that the quality of documentation of medical files by physician, nurses and admission staff is not satisfying (Mashoufi *et al.,* 2007; Farzandipour and Asefzadeh, 2005; Rangraz Jeddi *et al.,* 2005). Some factors can play a role in this issue, For example, researchers has been shown that factors such as time-consuming records for some nurses, and the lack of emphasize by physicians can be considered.

The lack of the effect of complete medical records in promotion of personnel and the lack of the reward and punishment system can be considered as effective factors (Kahouei *et al.,* 2007). However, further research showed that the majority of staff (60%), residents and medical students are not aware of the legal aspects of documentation and training are not enough to take advantage of complete records (Askari Majdabadi and Kahooei, 2004). Medical records are legal documents that contain sufficient information to identify the information in justification for diagnosis, treatment, and the results. However, as documentation of medical records by health care providers, physicians, nurses, and other health professionals is assumed as a secondary activity, so, it is possible that documentation may not always be accurate, complete and friendly.

The continuous evaluation of the documentation of medical files should always be done and the data regarding to the patients should be completed for providing a witness of the diseases period and therapeutic procedures for different legal, evaluative, clinical, research and official goals.

Documentation is a process consisting of three phases: data recording, record of the date and the approval of the data. Generally, documents and documentation must have three characteristics: completeness (in terms of quantity), accuracy (not having a mistake) and the adequacy (bright, clear and logical consistency of the data). So the patient's medical records is a collection of facts about the patient's health status, including history, physical examination, and laboratory findings, diagnosis, treatment planning, treatment procedures, assessments, results, treatment, care and discharge planning.

Responsibility of correcting and completing of medical records, primarily is on physicians, the final responsibility for completing medical records during hospitalization are for nursing staff and responsibilities of quantity and quality control of medical records after discharge is for medical documents staff and the committee of medical records, are responsible for medical files after the discharge. In this study the documentations of physicians and nurses had a high consistency with standards. The researches show that in approximately 68% of medical files, there is incompleteness in diagnosis and therapeutic processes (Askari Majdabadi and Kahooei, 2004).

The diagnosis in the clinical files, in cases of medical and epidemiological researches and in prehospital evaluations is highly functional and any defect in this procedures

can cause malfunction. The problem is the lack of complete, accurate and legible medical which can clearly provide the patient's health history (Farzandipour and Asefzadeh, 2005), so that accurate and timely documentation from your doctor seems necessary.

The admission and discharge pages form the first and pages of the medical file and registration process begins by filling these forms. These pages provide useful and accurate information of an era of patient care. This is a small file which contains all the information as a form of acceptance, identity and clinical information that should be completed up to 48 hours after discharge by a physician.

In our study the status of the patient was recorded in 557 cases and the physician's signature was present in all of discharge notes. Most of the researches in this regard, reveals the better quality in medical documentation in other countries comparing them to Iran, it seems that the original cause of such difference can be the effect of this documentation in financial paybacks to health care organizations, their continuous evaluation and the related legal aspects (Phillips *et al.,* 2006; Farhan *et al.,* 2005; Soto *et al.,* 2002). It can be inferred from the results of numerous studies that factors such as knowledge, attitudes, training, guidelines, standards and regulatory levels can be effective in increasing the quality of documentation (Phillips *et al.,* 2006; Farhan *et al.,* 2005; Kahouei *et al.,* 2007).

Considering the importance of proper documentation which makes the medical records as a primary tool for evaluating the medical actions and health care. Hospitals should seek to understand the factors affecting the quality of documentation in order to improve the quality of health care outcomes. In the other hand the people understand the problems associated with an activity are the ones who do the work. As a result the solution can be offered by the same people. Therefore, management must provide their opinions about the appropriate way and sum up the opinions to find the best way; in this case the decision will lead to increased efficiency and productivity (Tavakoli, 2005).

The knowledge and attitude has the best effect on the quality of the documentation. Clarke and colleagues showed that the quality of documentation can be improved by 30% by effectively teaching the nurses and it is showed that there is a strong correlation between continuous educational programs and the improvement in nursing cares (Clarke, 1996).

In this study the documentation of nursing staff was complete in the file which shows the awareness of nursing personnel about the documentation processes. Kahouei *et al.* (2007) in their study stated that there is a significant relationship between knowledge and training.

It is also recommended that the education of documentaries in hospitals of medical universities the process of medical recordings can be improved. Lack of the education of medical staff in completing the medical files and the importance of the holding of conferences regarding to medical recordings, shows its necessity (Farhan *et al.,* 2005). With regard to the issue that one of the most important causes of deficits in medical files is the inadvertence of physicians and surgeons to record of medical data, it is recommended that workshops to be held in documentation for medical students and nurses to deliver the necessary data and clarify the necessity of medical recordings.

Table.1 Review of Medical Record forms as per JCI medical documentation criteria

	Yes	No	NA
Filing of records	-	-	100%
Assembling and Coding of the record	-	-	100%
Admission forms(n = 600)			
Patient details entered	100%	-	0%
Reporting	-	-	100%
Signature of the doctor	89%	11%	-
Corporate/TPA patient marked	1%		-
Admission consent form	0%		-
Consent forms(n = 600)			
Patient name with procedure	-	-	100%
Signature of the patient with date	-	-	100%
Signature of the doctor with date	-	-	100%
Signature of the witness	-	-	100%
Special Consent(n = 24)			
Patient profile (IP no, Name, Bed no)	100%	-	-
Name and signature of the patient	100%	-	-
Signature of the witness with date	100%	-	-
Signature of the performing doctor with datae	100%	-	-
Indication of surgery/procedure	100%	-	-
Doctor's record(n = 600)			
Date, time and Signature	78%	22%	-
Making entries daily	94%	6%	-
Nurse's record(n = 600)			
Making daily entries	100%	-	-
Date, time and signature	100%	-	-
Discharge summary(n = 600)			
Chief complaint, past history, physical examination	6%	-	-
Medication and Treatment given	28%	-	-
Condition at discharge	93%	-	-
Date or time for next follow up	81%	-	-
Discharge medication or any advice on the discharge	75%	-	-
Signature of the doctor	100%	-	-

In our study the completeness of the files and the records by physicians was significantly less than records of nursing staff which shows the need for education in intern's residents and physicans.

In our study, in 93% of patients, the situation of patients was recorded in discharges notes that were similar to mentioned studies.

Under the agreement of medical associations, hospitals, the American Health Information Management and reputable insurance companies Blue Cross and Blue Shield it has been announced that the

medical files of patient should include proper laboratory test, radiographic evaluations and other paramedical data in addition to date, time, this data may be used in situations of necessity for planning and evaluating the patients.

The results of the study of Farzandi Pour who evaluated the observance of medical recordings in Kashan hospitals has also showed that the diagnosis recording was present in 87% of cases, this study has concluded that the high rate of this consistency can be due to the formation of the Supreme Council of University Presidents in the field of medical records and medical records committees as the Council's subsets (Farzadipour and Asefzadeh, 2004).

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