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Original Research Article

Analysis of Health Record Documentation Process as Per the National Standards of Accreditation with Special Emphasis on Tertiary Care Hospital

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ABSTRACT

The study entitled "Analysis of Health Record Documentation Process As Per The National Standards Of Accreditation with special emphasis on Tertiary Care Hospital" aims to review the health records and evaluate them to find the incongruity in the documentation of patient's data by doctors, nurses and other healthcare providers involved in the documentation process. Health records form an imperative part of management of a patient. It is important for the doctor, nurses and medical establishments to properly maintain the records of patient's for two significant reasons. The first reason is that it will help them in the scientific evaluation of patient profile, to analyze the treatment results, and to plan appropriate treatment protocols. The other reason is that it will assist in planning governmental strategies for future medical care. The study was conducted in X Hospital in Delhi. A total of 200 patients files reviewed and primary data collected by checking the patient files at nursing stations, wards and critical areas. A documentation review audit tool was then prepared (as per objective elements mentioned by NABH) taking into consideration the important aspects of documentation in the health records. The files were checked as per the parameters mentioned in the audit tool. To measure the compliance, three options were included i.e. Full compliance, Partial compliance and Non compliance. Then the percentage (%) compliance was calculated for each health record form. Data interpretation and analysis was done and major non-compliances were reported to the doctors, nurses and paramedical staff along with reasons for their non-conformity with the NABH standards. Possible suggestions and recommendations were also reported. This helped in bringing down the percentage of non-compliance.

Keywords: Accreditation, Hospital, Standards, Quality

INTRODUCTION

[1] Hospitals deal with the life and health of their patients. Good medical care relies on well trained doctors and nurses, high quality facilities, equipment and good record keeping. [2] Medical records management pertains to the:- planning, controlling, directing, organizing, training, promoting and other managerial activities related to the creation, maintenance, use and disposition of medical records to achieve adequate and proper documentation of a health care organization's policies and transactions. [3] Medical record documentation is required to record pertinent facts, findings, and observations about an individual's health history including past and present illnesses, examinations, tests, treatments, and outcomes. [4] To effectively carry out these functions, every hospital or health care center must have personnel skilled in

developing and maintaining fully integrated information management, data storage protection and recovery programs. It is one of the prime responsibilities of the medical organizations and centers to take all necessary steps for safeguarding patient information. [1] Good records care also ensures the hospital's administration runs efficiently. Records also give evidence of the hospital's accountability for its procedures and they form a key source of data for medical research, statistical reports and health information systems.

This study focuses on to review the patient file documentation process as per the National Accreditation Board for Hospitals and Healthcare providers. The study includes assessing the quality level of patient file and medical records management. The study is based on the reviewing the patient file documentation process. Managing proper documentation and hospital records addresses the specific issues involved in managing clinical and non-clinical hospital records, indicating where particular approaches are needed to meet the specific requirements of a records service within a hospital environment.

The gap analysis is carried out to identify the level of training for the hospital staff so that the best quality services will be provided to the admitted patients as per the standards of national accreditation board of health. The clinical services rendered by the hospitals reflected through the good medical record management. The quality of services should be the prime focus for the health care facilities. The findings of this audit are discussed with the medical superintendent, director, chief officers, ward administrators and nursing superintendent. The training and education given to the staff at particular interval so that they would be able to follow the documentation process and proper file management.

OBJECTIVES

- To carry out the Gap-Analysis and to compare the compliance rates for surgical versus medical patient files in the patient file documentation process.
- To review the patient files documentation process as per the National Standards of Accreditation.

RESEARCH METHODOLOGY

Study Design: This study includes Prospective study, Concurrent Observational study, Hypothesis testing study

Sample Size: 200 Patient files reviewed

Sampling Method: Convenience Sampling is used in this study.

Type of Data Collected: Primary data collected by checking the patient files at nursing stations, wards and critical areas.

Methods of Data Collection: Audit tool for Patient file documentation requirement, Registers kept at Nursing stations, Patient files from the Wards, Inpatient Care Unit (ICU), Cardiac care unit (CCU), Interviewing the Nurses, Physicians and ward co-coordinators. Primary data collected by interviewing the nursing in-charge, on-duty nurses, resident doctors, Medical Superintendent and various consultants.

Variables: The compliance rate is determined as 10 for full compliance, 5 for partial compliance and 0 for non compliance.

Hypothesis:

H0; There is no difference in mean of total compliance score for patient's files (Surgical vs Medical)

H1; There is difference in mean of total compliance score for patient's files (Surgical vs Medical)

Statistical Analysis: The categorical data was presented as number and percentage (%). Total compliance score was presented as mean ± standard deviation .Student T-test was applied to test the hypothesis for difference in mean of two groups i.e. surgical versus medical patient's file. A p-value less than 0.05 were considered to be significant. All statistical analysis was carried out by using statistical software (SPSS version 20.0).

FINDINGS

Table 1:-The following table shows the compliance on different parameters of patient file documentation comparisons:

Documentation Parameters	Full Compliance	Partial Compliance	Non Compliance
General consent	99%	1%	0%
Informed consent	89.4%	9.1%	1.5%
Blood and blood Products Consent	92.3%	7.7%	0%
HIV Consent	100%	0%	0%
Anesthesia Consent and High –risk procedures	100%	0%	0%
Estimate form	99.3%	0.7%	0%
Patient Admission Request Form	95.4%	4.6%	0%
Prescription cum Triage card	9.6%	90.4%	0%
Assessment findings are documented during admission (Medical)	93.5%	6.5%	0%
Assessment findings are documented within 30 minutes of admission (Nursing)	37%	62.5%	0.5%
Medical assessment documented in 24 hours	99%	0.5%	0.5%
Progress report (Doctor's notes)	86.5%	13.5%	0%
Nursing notes in each shift	34.6%	64.9%	0.5%
Nutritional assessment form and notes	8.3%	66.3%	25.4%
Vital Signs Flow Sheet	33.5%	66.5%	0%
Medical assessment documented prior to surgery	100%	0%	0%
Pre-anesthesia assessment	87.5%	12.5%	0%
Anesthesia Plan	92.1%	7.9%	0%
Pre operative checklist	42%	58%	0%
Surgical Safety Checklist	95%	5%	0%
Post operative chart	64.5%	35.5%	0%
Written Procedural Report with relevant details	100%	0%	0%
Medicine Chart	97%	3%	0%
In-house Transfer Form	17.2%	82.8%	0%
Discharge Summary	69.1%	30.9%	0%

The above compliance shows that full compliance rate is achieved in HIV consent, anaesthesia consent and high risk procedures, medical assessment documented in 24 hours, medical assessment documented prior to surgery parameters and the other parameters have partial compliance or less than 100% compliance are focused for appropriate documentation and training sessions are being organized for staff (including doctors, nurses and paramedical staff) to improve the documentation process.

Table 2:- The following table shows the Compliance Comparisons on different parameters of surgical v/s medical files:

Documentation Parameters	**Compliance**	**Type**	
CONSENT		**Surgical**	**Medical**
General consent	Full Compliance	100%	98%
	Partial Compliance	0%	2%
Informed consent	Full Compliance	96%	90%
	Partial Compliance	4%	8%
	Non Compliance	0%	2%
Blood and blood Products Consent	Full Compliance	100%	97%
	Partial Compliance	0%	3%
HIV Consent	Full Compliance	100%	100%
Anesthesia Consent and High -risk procedures	Full Compliance	100%	100%
Estimate form	Full Compliance	100%	99%
	Partial Compliance	0	1%
Patient Admission Request Form	Full Compliance	95%	96%
	Partial Compliance	5%	4%
Prescription cum Triage card	Full Compliance	0%	41%
	Partial Compliance	100%	59%
Assessment findings are documented during admission (Medical)	Full Compliance	100%	87%
	Partial Compliance	0%	13%
Assessment findings are documented within 30 minutes of admission (Nursing)	Full Compliance	28%	46%
	Partial Compliance	72%	53%
	Non Compliance	0%	1%
Medical assessment documented in 24 hours	Full Compliance	100%	98%
	Partial Compliance	0%	1%
	Non Compliance	0%	1%
Progress report (Doctor's notes)	Full Compliance	86%	87%
	Partial Compliance	14%	13%

Table 2: To be continued….			
Nursing notes in each shift	Full Compliance	32%	37%
	Partial Compliance	68%	62%
	Non Compliance	0%	1%
Nutritional assessment form and notes	Full Compliance	13.8%	3.2%
	Partial Compliance	46%	85.1%
	Non Compliance	40.2%	11.7%
Vital Signs Flow Sheet	Full Compliance	32%	35%
	Partial Compliance	68%	65%
Medical assessment documented prior to surgery	Full Compliance	100%	100%
Pre-anesthesia assessment	Full Compliance	87.5%	-
	Partial Compliance	12.5%	-
Anesthesia Plan	Full Compliance	92.1%	-
	Partial Compliance	7.9%	-
Pre operative checklist	Full Compliance	42%	-
	Partial Compliance	58%	-
Surgical Safety Checklist	Full Compliance	95%	-
	Partial Compliance	5%	-
Post operative chart	Full Compliance	64.5%	-
	Partial Compliance	35.5%	-
Written Procedural Report with relevant details	Full Compliance	100%	100%
Medicine Chart	Full Compliance	100%	94%
	Partial Compliance	0%	6%
In-house Transfer Form	Full Compliance	22.5%	8.3%
	Partial Compliance	77.5%	91.7%
Discharge Summary	Full Compliance	71.4%	61.5%
	Partial Compliance	28.6%	38.5%

RESULT

Table-3: The following table shows the Average compliance score (mean ± sd) of surgical versus medical files.

Surgical	Medical	p-value
8.866±0.87	8.589±0.98	0.03

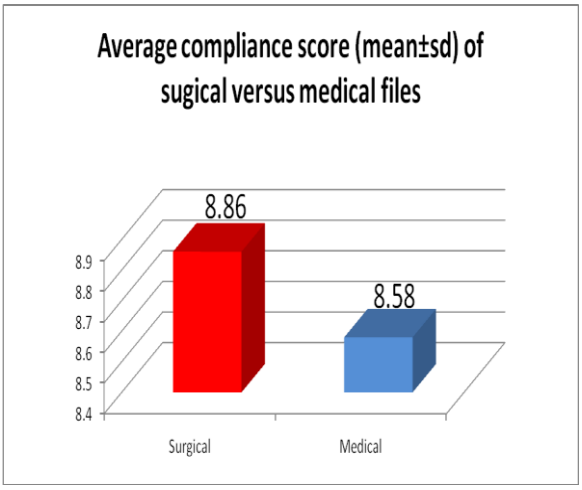

Fig: Graph of Average compliance score of surgical versus medical files.

The compliance rate comparison shows that there is statistical significant difference (p value is 0.03) between two groups (surgical files versus medical files). The plotted graphs show that the surgical files have high full compliance rates in comparison of medical files. Therefore, null hypothesis is rejected and alternative hypothesis is accepted.

DISCUSSION

[6]Health records serve a range of purposes. Their primary purpose is to document the care and services provided to patients. However, health records must also be maintained for evidential purposes. In order to serve as records, health records must be maintained in a manner that complies with applicable regulations, accreditation standards, professional practice and legal standards. These standards may vary based on care setting, legal jurisdiction, and location. Therefore, an organization must ascertain the content required for its legal health record as well as the standards for maintaining the integrity of that content. This applies regardless of the medium used to create and store health records-paper, electronic, or hybrid. This practice brief guides healthcare organizations in creating a legal health record policy for business and disclosure purposes. [7] The National Accreditation Board for Hospitals (NABH) is a constituent board of the Quality Council of India (QCI), set up to establish and operate accreditation programmes for healthcare organizations. The standards for hospitals have been drafted by the Technical Committee of NABH and hospitals are evaluated through

these complete sets of standards for the grant of accreditation. For the hospital to be NABH accredited, it should satisfy the standards laid down by the NABH, which has 10 chapters containing 100 standards and 503 objective elements. The standards in relation to Access, Assessment and Continuity of Care (AAC), Care of Patients (COP), Continuous Quality Improvement (CQI), Responsibilities of Management (ROM), Information Management System (IMS) and Patient Rights and Education (PRE) are used to evaluate medical record documentation (NABH).

[8]Maintaining a complete record is important not only to comply with licensing and accreditation requirements, but also to enable healthcare providers to establish that a patient received adequate care. A healthcare facility's bylaws or policies should require medical staff members to complete patient records within the specified time, and should provide an automatic suspension of clinical privileges for those who fail to comply. [9] Medical Records Department has become an essential department of every hospital. Printed documents developed by hospitals are widely used to achieve regularity and standardization in the recording and presentation of information. A smooth and un- interrupted supply of well-designed forms is a must for efficient medical record keeping.

[10] Standardization of Medical Record Forms is needed in terms of content, colour, size and quality of paper used in the interest of the hospital economy and efficiency. In view of the escalating costs, hospital forms need to be used cost-effectively as any other consumable thing in the hospital. [11] Hospitals consequently are turning to concurrent documentation programs that assess the content of medical records to see how well they assign drugs, severity of illness, and risk of mortality, to teach physician documenters and inpatient nurse reviewers about Medicare reporting and coding requirements, and to examine documentation and coding performance, case-mix index. And as an effect, they are increasing their case-mix index, rate of reimbursement, and drug-weighted ratios.

[12] In low-income countries, medical record management is often lacking. A study conducted in rural hospital in Ethiopia has Pre–post intervention study during 2006–07, using time-motion studies, medical record audits and physician surveys. They sought to evaluate the impact of an inexpensive business process re-engineering project on the accessibility and completeness of patient information and on physician satisfaction. They implemented a hospital-wide patient registration and medical records re-engineering process, which included a simple, custom-made computer database to manage patient information, standardized medical records forms and processes and enhanced human resource management efforts. They measured medical records accessibility and completeness, and physician satisfaction. Medical record accessibility and completeness and physician satisfaction improved significantly ($P < 0.05$) based on pre- and post-intervention comparisons. The success rate of retrieving the proper medical record number for returning patients improved from 14 to 87% ($P < 0.01$); the percentage of complete medical records increased from 6.5 to 45.7% ($P < 0.01$). Physician satisfaction with the medical records system was significantly higher after the intervention ($P = 0.02$). Findings indicate that a well-organized medical record management system can be effective in improving patient information accessibility and completeness in hospitals in low-income countries despite the lack of resources. Longer follow-up is required to assess the sustainability of the hospital developments.

CONCLUSION

[5] The medical record chronologically documents the care of the patient and is an essential element contributing to high quality care. The medical record facilitates:

• The ability of the physician and other health care professionals to assess and plan the patient's immediate treatment, and to monitor his/her health care over time.
• Communication and continuity of care among physicians and other health care professionals involved in the patient's care;
• Accurate and judicious claims review and payment;
• Appropriate consumption review and quality of care evaluations; and
• Collection of data that may be valuable for research and education.

An appropriately documented medical record can reduce many of the inconvenience associated with claims processing and may serve as a legal document to validate the care provided, if necessary.

[4] Storing health care information and protecting that data is an ever increasing challenge for administrators and IT professionals. In addition, the documents should be stored in such a manner so as to be easily retrieved for future use. In recent years, electronic medical-records are rapidly replacing the documents in paper mode. It is note-worthy that the patient data or the medical-record must incorporate: the patient's past medical history, age, gender, source of income, number of family members in individual household, previous surgeries and any possible complications as a result of that particular surgery.

[4] In a typical health care organization, hundreds to thousands of medical and support staff need to access patient data to do their jobs. The significant purpose in this regard would be to effectively enforce access control to hospitals information systems (for ensuring patient privacy), without hampering medical care efficiency and effectiveness. This can be attained by only allowing the participants the medical-record personnel, hospital administrators and clinical staff- to scrutinize the confidential patient files.

The results of this study shows that full compliance rate is achieved in HIV consent, anesthesia consent and high risk procedures, medical assessment documented in 24 hours, medical assessment documented prior to surgery parameters and the other parameters have partial compliance or less than 100% compliance. The surgical files versus medical files compliance rates shows that there is statistical difference between them (p-value is 0.03) graph shows that the surgical files have high full compliance rates in comparison of medical files. The results are focused for appropriate documentation and education and training sessions was provided for staff (including doctors, nurses and paramedical staff) to improve the documentation process. The study implies that the hospital should pay attention to compulsorily documenting the patient health record data in the respective forms of the medical and surgical records, which will improve completeness and accuracy in the health record documentation and will also help to achieve NABH accreditation.

RECOMMENDATIONS

Based on the findings of the study, following suggestions were made:

- In hospitals that create a large quantity of notes for each patient, the best practice may be to insert separators, cards in each file, breaking the file into sub-parts for different types of documents. These dividers will not only provide a clearly defined location for the summary sheet but will also allow other types of document to be filed separately from one another. If affordable, an inert plastic sleeve could be used to protect the vital summary sheet within the file. A basic division may be to separate records relating to in-patient and out-patient episodes.
- The use of well-designed forms saves staff time and helps to ensure that the necessary information is recorded accurately. It also make easier for users of the file to locate the kind of information they are seeking.

- Health care providers were trained regarding completion of patient file documents.
- Incomplete documents were tagged with colored stickers and comments written on that to complete the patient file documents.
- These files were reviewed on the next day to ensure the completion of documents as per the policy of hospital.

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