Audit of Documentation of Inpatient Medical Records

By

Ilma Farooq

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2017-2019

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

Audit of Documentation of Inpatient Medical Records

By

Ilma Farooq

Dissertation submitted in partial fulfillment of award of

MBA Hospital and Health Management

Academic year, 2017-2019

Surya Hospital, Jaipur

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that **Dr. Ilma Farooq**, student of MBA Hospital and Health Management/ Pharmaceutical / Rural Management from The IIHMR University, Jaipur has undergone internship training at **Surya Hospitals, Jaipur** from **10th February to 10th May, 2019**.

The Candidate has successfully carried out the study assigned to her during internship training and her approach to the study has been sincere, scientific and analytical.
The Internship is in fulfillment of the course requirements.

I wish her all success in all his future endeavors.

Col.(Dr.)Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur

16 May 2019.

Dr. Dhirendra Kumar
Professor
The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

Date : 11th May-2019

TO WHOM IT MAY CONCERN

CERTIFICATE OF DISSERTATION COMPLETION

This is to certify that **Dr. Ilma Farooq** student of MBA in Hospital and Health Management, IIHMR Jaipur has successfully completed three months dissertation in Quality Department as allotted under Surya Hospitals, Jaipur from 10.2.2019 to 10.5.2019 .

During the dissertation the student's performance was satisfactory.

We wish her success in all her future endeavors.

Yours Sincerely,

For Surya Mother and Child Care Jaipur Pvt. Ltd.

Mother and Child Care Jaipur Pvt. Ltd. JAIPUR

Dr. Suhasani Jain

Facility Director

SURYA Hospitals

CIN U85110RJ2016PTC049008

Surya Hospitals: B-7, Sawai Ram Singh Road, Tonk Road, Opp. SMS Hospital Gate No.1, C-Scheme, Jaipur - 302001.
info.jaipur@suryahospitals.com www.suryahospitals.com Tel: +91 9772233774/75 | 0141 4333777

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Audit of Documentation of Inpatient Medical Records** and submitted by **Dr. Ilma Farooq** Enrollment No. **IIHMR-U/01/2017-19/0577** under the supervision of **Dr. Dhirendra Kumar** for award of **MBA in Hospital and Health Management** and Hospitals of the University carried out during the period from **10th February, 2019** to **10th May, 2019** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Ilma Farooq

Signature

ACKNOWLEDGEMENT

I sincerely acknowledge my gratitude to Surya Hospitals, Jaipur for giving me the opportunity to pursue my dissertation in their organization, which is one of the Rajasthan's fastest growing tertiary care hospitals.

I convey my deep and sincere thanks to Dr. Muntakim Sayed, Quality Executive and my guide for the project and her valuable guidance and support during my project work. I also thank her for sparing her valuable time in clearing my doubts and queries in spite of her busy schedule.

I am highly obliged to my guide Dr. Dhirendra Kumar (Professor, The IIHMR University) for providing necessary suggestions and guiding me to complete this report.

Last but not the least I would like to thank all those who supported in any way and were a constant source of inspiration for me.

Dr. Ilma Farooq

CONTENTS

ABBREVIATIONS

MRD- Medical Record Documentation

IPD- In Patient Department

ICD- International Classification of Diseases

LDR- Labour Delivery Room

OT- Operation Theatre

NICU- Neonatal Intensive Care Unit

PICU- Pediatric Intensive Care Unit

EMR- Electronic Medical Record

LIST OF TABLES AND FIGURES

Dissertation Topic- Audit of Documentation of Inpatient Medical Records

INTRODUCTION

Medical records are the document that explains all detail about the patient's history, clinical findings, diagnostic test results, pre and postoperative care, patient's progress and medication. If written correctly, notes will support the doctor about the correctness of treatment. (1)

A patient medical record provides two important functions; the first helps to support direct patient care by assisting physician on clinical decision making and provides communication. The second provides a legal record of care given and helps as a source of data to support clinical audit, research, resource allocation, monitoring and evaluation, epidemiology, and service planning .(2)

It acts as a key performance indicator in respect to quality and delivery of healthcare services in the hospital. Improving medical record completeness services is an important step towards improving the quality of healthcare.

A patients medical record should provide accurate information on who the patient is and who provided health care; what, when, why and how services were provided; and the outcome of care and treatment.

The medical record has four major sections

Administrative- which includes demographic and socio economic data such as the name of the patient (identification), sex, date of birth, patient's permanent address and medical record number (MHRC No.)

Legal Data- including a signed consent for treatment by appointed doctors and authorization for the release of information.

Financial Data- relating to the payment of fees for medical services and hospital accommodation

Clinical Data- patient whether admitted to the hospital or treated as an outpatient or an emergency patient.

Objectives of the Medical Record Department

The primary objective of the MRD is to develop good medical records containing sufficient data written in sequence of events to justify the diagnosis, treatment and end result of all patients treated in hospital, keep them under safe custody and make them readily available as and when required for –

For patient it-

- Serves to document the clinical history and activities of patient treatment
- Serves to avoid omission or repetition of diagnostic and therapeutic measures
- Assists in continuity of care even in future illness whether it requires attention in or out of the hospital
- Serves as evidence in medico legal cases

For the Doctor it-

- Assures quality and adequacy of diagnostic and therapeutic measures undertaken
- Serves as an assurance of continuity of medical care
- Evaluates medical practices
- Protection in litigation

For hospital administrator

- To document the type and quantity of work undertaken and accomplished
- To evaluate proficiency of medical staff for administrative and clinical purposes
- To evaluate the services of the hospital in terms of accepted norms and standards
- To serve as an administrative record and performance indicator

For medico legal purposes it

- Acts as a documentary evidence
- To dispose claims of the insurance

REVIEW OF LITERATURE

Sima Ajamiin in 2015 did a research study on improving the medical records department processes by lean management. He defined Medical Records (MRs) as a set of documents that renders the clinical, para-clinical care, and financial information about the patient. Further, MRD is responsible for collecting, and protecting patient information, and for disseminating it to the right people or an organization, in order to promote the quality of patient care. Each MRD in the hospitals includes the following four units, each of which undertakes special functions such as Admission, Archive, Statistics and Coding. (4)

In an interventional study by Nahid Tavakoli, 2015 two major functions of patient medical record are explained. The first one provides and support patient care by clinical decision-making and providing an important means of communication. Another function is it provides a legal record of care given and acts as a source of data to support clinical audit, research, resource allocation, performance monitoring, epidemiology, and service planning.(2)

According to a study on Medical Audit Documentation (2017), Madhav M Singh explains the importance of having a medical record. The medical record not only enables the professional to evaluate a patient's treatment but also ensures continuity of care. Maintaining a record also helps in complying with licensing and accredition requirements. He also focuses on the role that a clinical audit plays for quality improvement through systemic review of care against explicit standards/criteria and the implementation of changes in practice if needed. (3)

PURPOSE OF THE STUDY

The main purpose of the study was to assure compliance and quality in the documentation of the MRD files.

- To check for the level of completeness of files as part of the daily and monthly auditing process of the MRD
- To help the organization with their NABH preparedness
- The medical record documentation plays an extreme role in legal matters, it is necessary to check documents for better orientation of the doctors and nurses and to avoid any medico legal problems.

OBJECTIVES

- To study the existing system of medical record documentation.
- To check compliance of various parameters of documentation.
- To identify the gaps in the medical record documentation.
- To suggest ways to bridge the gaps in the documentation.

RESEARCH METHODOLOGY

- **Study Design-** Descriptive, Cross-Sectional Study
- The files are separated in
- **Active Files** -the files which are still in the respective wards and the patients are yet to be discharged from the hospital (Prospective study)

- **Passive Files** - the files received in MRD after the patient has been discharged (Retrospective study)
- **Location**- Surya Hospitals, Jaipur
- **Duration**- 2months (1st March to 30th April)
- **Sampling Technique**- Convenience sampling(Non-Probability Sampling)
- **Sample Size**-240 files (120 active files and 120 closed files)
  Inclusion-General Ward, Private Ward, LDR, OT Recovery, PICU
  Exclusion-NICU files
- **Data Collection Too**l- Medical Record Audit Checklist

DATA COLLECTION

Medical Record Audit Checklist

The aspects that was included in the Medical Record Checklist for the purpose of collecting the data of In-patient files are-

- IPD No.
- Patient Name
- Consultant/Specialty
- Provisional Diagnosis And Treatment Details
- Care plan documented
- Care plan counter signed with name by the clinician
- History sheet
- Investigation Summary
- Nutritional Assessment by Dietician
- Vital Monitoring Sheet & Input output chart

- Initial assessment in ward documented and completed
- Clinical progress sheet/progress notes as per reassessment frequency or at least twice a day
- Nursing initial assessment documented and completed
- Nursing care plan is documented and signed
- Nursing progress notes and handover properly documented
- All required consent forms
- Consent forms signed by correct persons
- Consent forms completely filled
- Consent forms signed by Doctor
- Legible Handwriting in medication chart
- Medicine order in Capital letter
- No prone abbreviation in medical record
- ICD coding
- Discharge Summary

PROCESS FLOW IN MRD

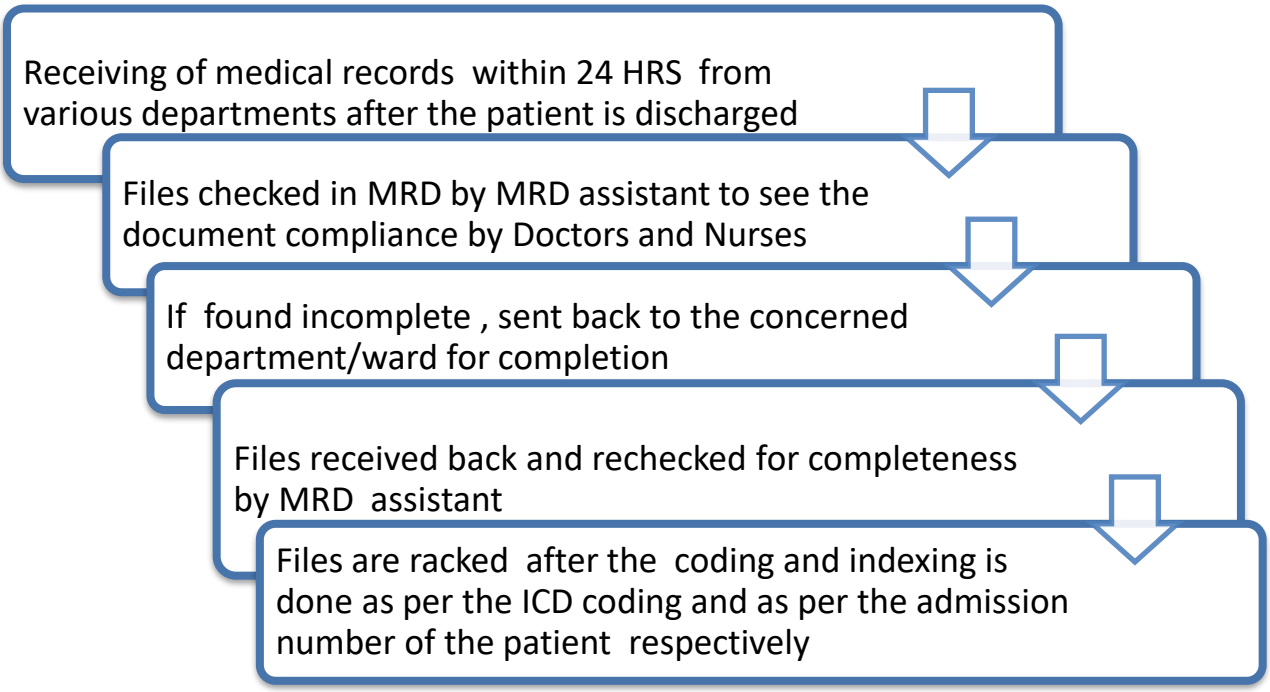

Fig.1-Representing the process of flow of documents in MRD

DATA ANALYSIS

- A total no of 240 files were checked from both active and closed sections.
- Each parameter and its sub parameters were marked with Compliance (C) and Non-Compliance (NC).
- The findings were observed on the basis of compliance more than 90% or less than 90%.

FINDINGS

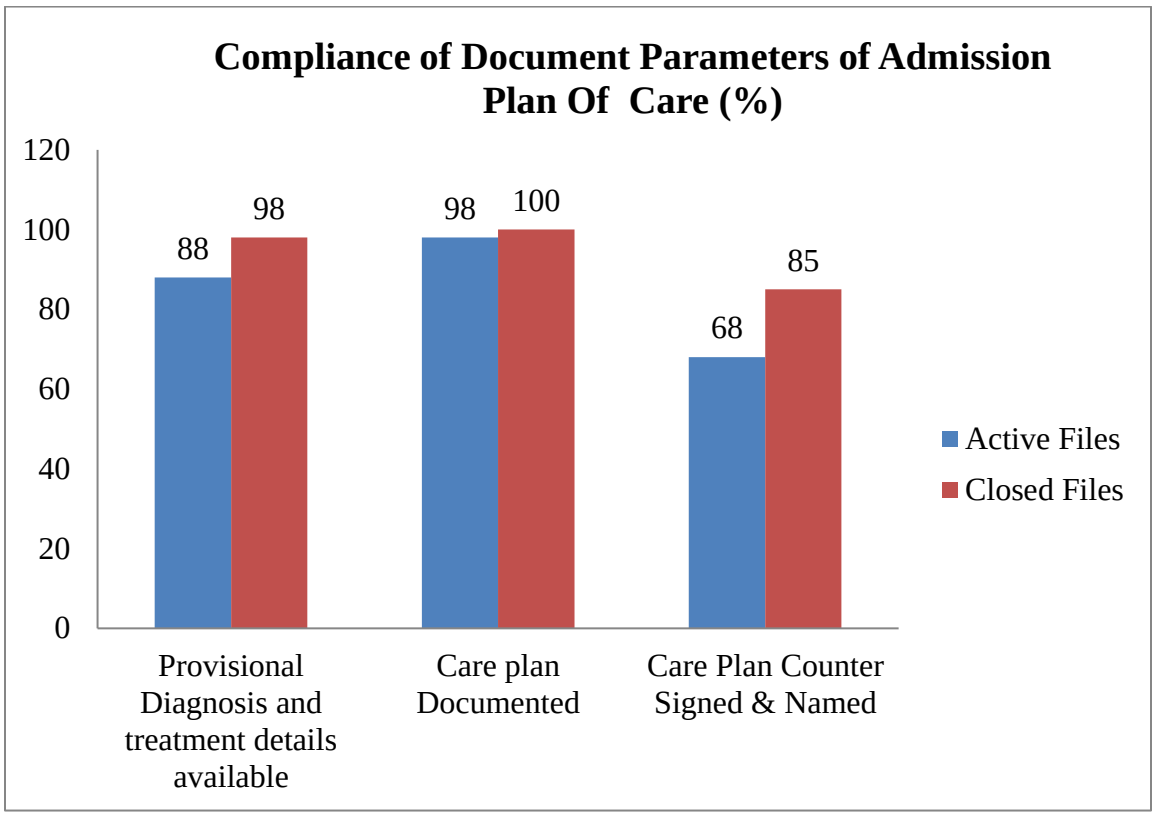

Fig.2

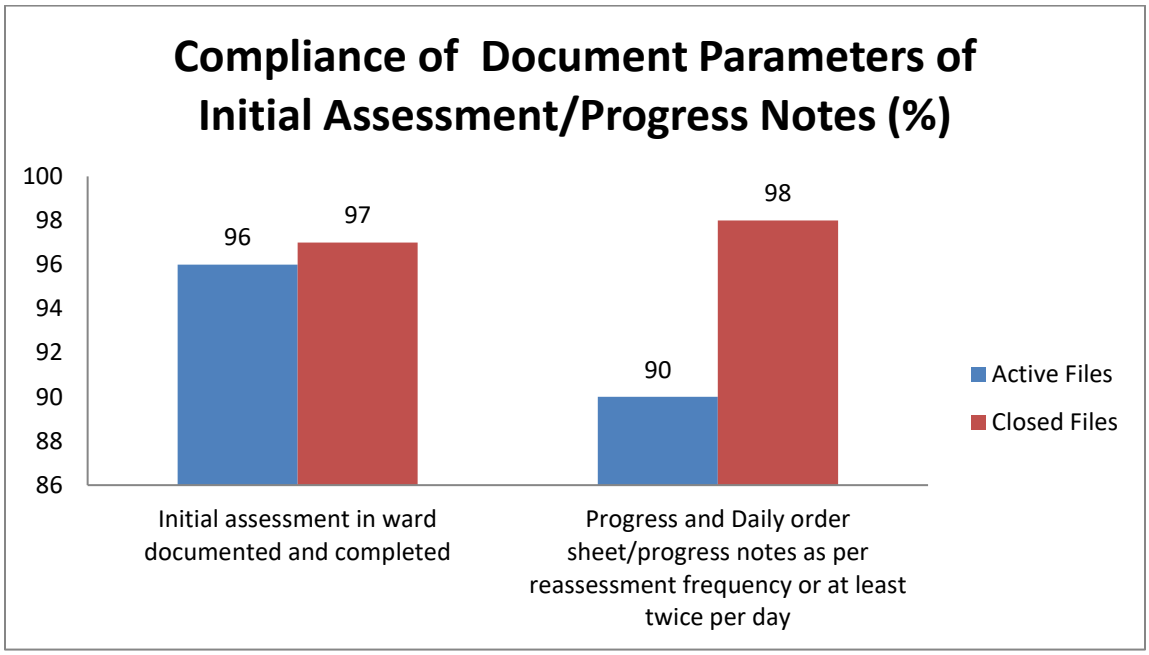
Compliance of Document Parameters of Initial Assessment/Progress Notes (%)
100
98
96
94
92
90
88
86
96
97
90
98
Initial assessment in ward documented and completed
Progress and Daily order sheet/progress notes as per reassessment frequency or at least twice per day
Active Files
Closed Files

Fig.3

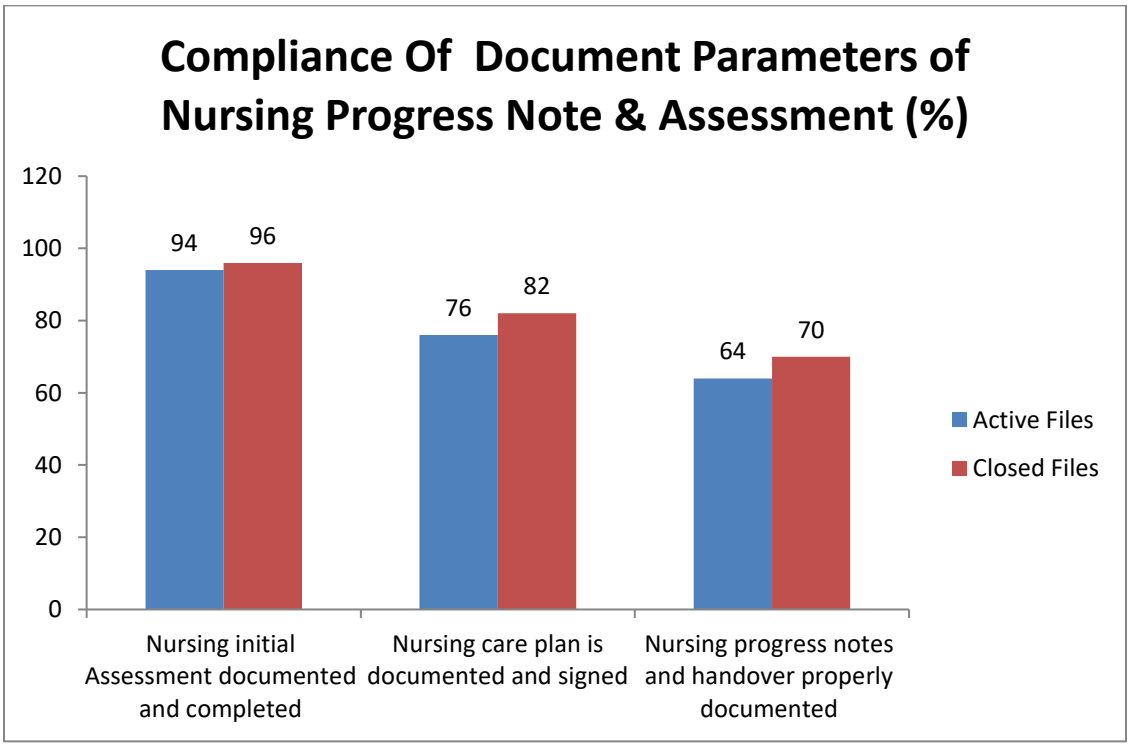
Compliance Of Document Parameters of Nursing Progress Note & Assessment (%)
120
100
80
60
40
20
0
94
96
76
82
64
70
Nursing initial Assessment documented and completed
Nursing care plan is documented and signed
Nursing progress notes and handover properly documented
Active Files
Closed Files

Fig.4

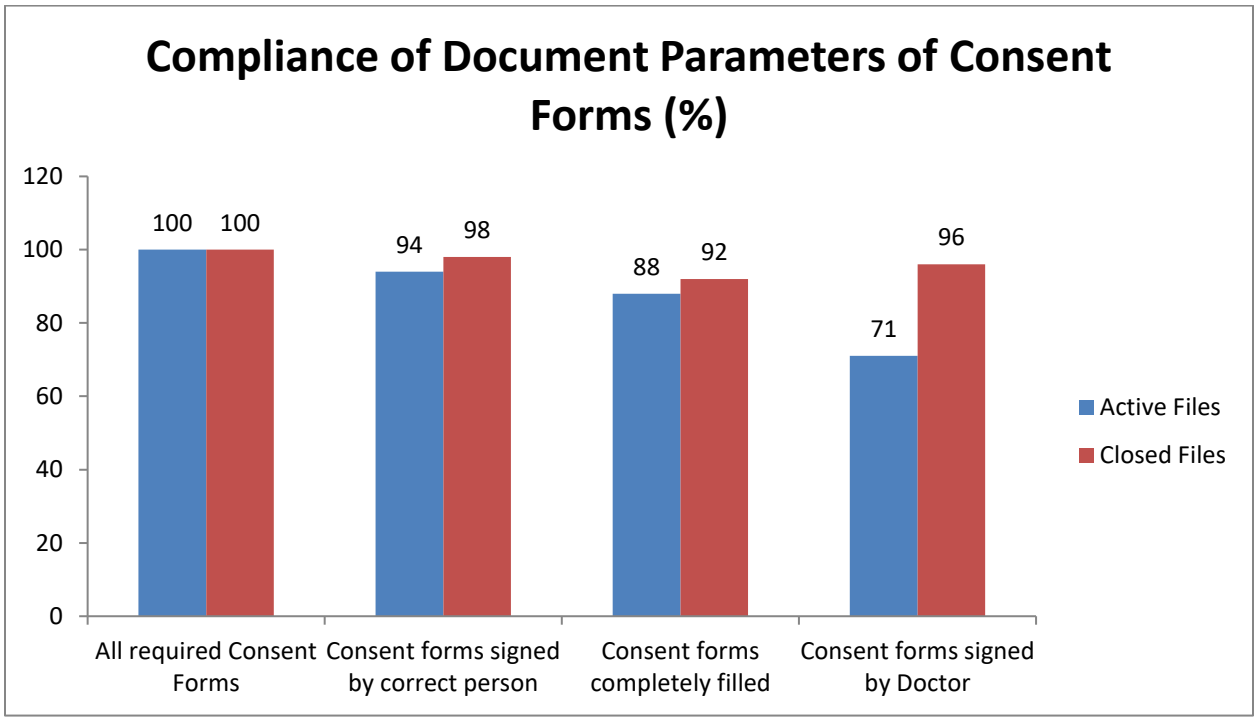
Compliance of Document Parameters of Consent Forms (%)
120
100
80
60
40
20
0
100
100
94
98
88
92
71
96
All required Consent Forms
Consent forms signed by correct person
Consent forms completely filled
Consent forms signed by Doctor
Active Files
Closed Files

Fig.5

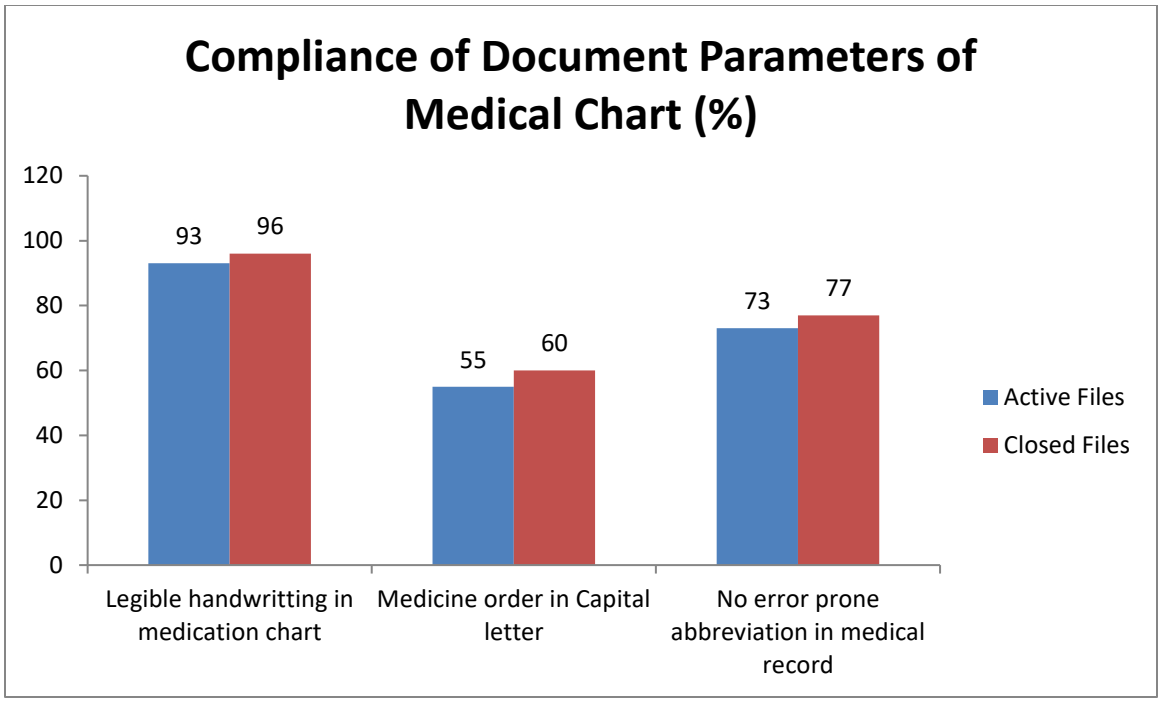
Compliance of Document Parameters of Medical Chart (%)
120
100
80
60
40
20
0
93
96
55
60
73
77
Legible handwritting in medication chart
Medicine order in Capital letter
No error prone abbreviation in medical record
Active Files
Closed Files

Fig. 6

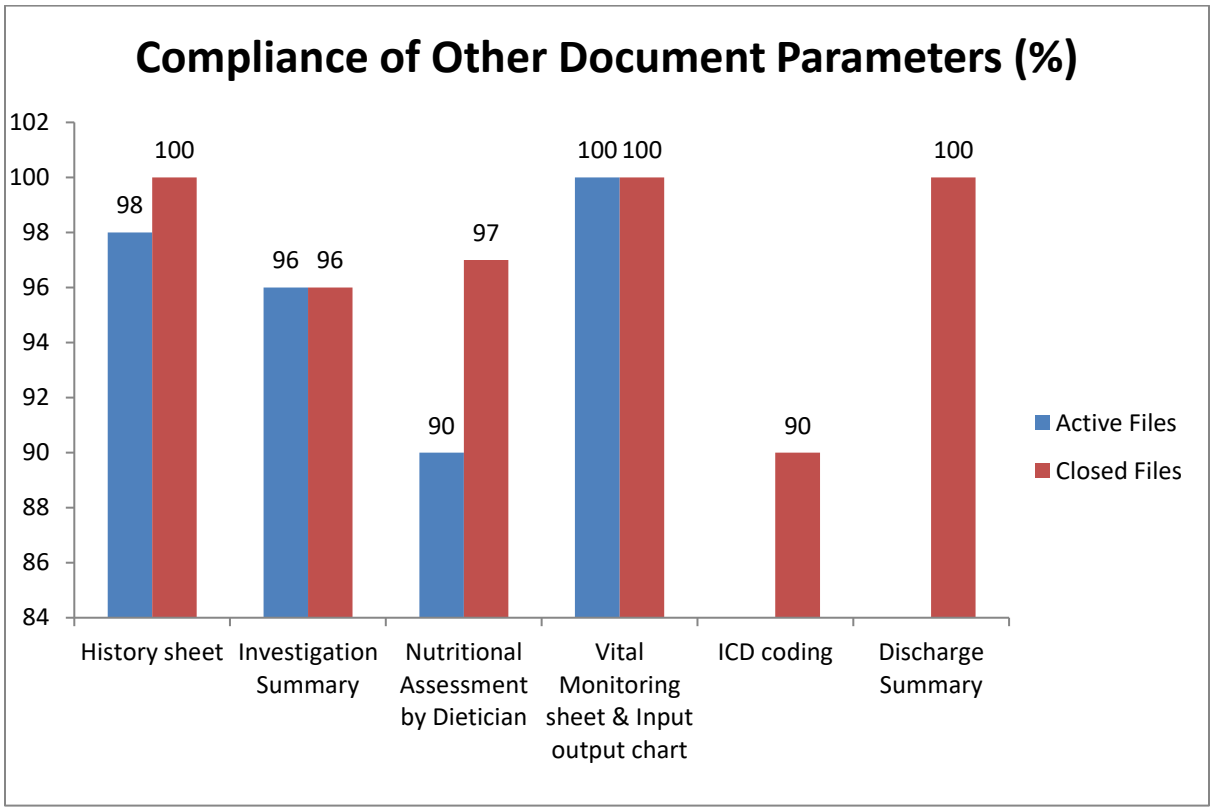
Compliance of Other Document Parameters (%)
102
100
98
96
94
92
90
88
86
84
98
100
96
96
90
97
100
100
90
100
History sheet
Investigation Summary
Nutritional Assessment by Dietician
Vital Monitoring sheet & Input output chart
ICD coding
Discharge Summary
Active Files
Closed Files

Fig.7

OBSERVATION

More than 90% compliance was observed in following parameters

- Care plan documented
- Initial assessment in ward documented and completed
- Progress and daily order sheet/progress notes
- Nursing initial assessment documented and completed
- All required consent forms
- Consent forms signed by correct person
- Legible handwriting in medication chart
- History sheet
- Investigation summary
- Nutritional assessment by dietician
- Vital monitoring sheet and input output chart
- ICD Coding
- Discharge Summary

Lesser Compliance was observed in the following parameters (less than 90%)

- Provisional Diagnosis and treatment details available
- Care plan counter signed and named
- Nursing care plan documented and signed
- Nursing progress notes and handover properly documented
- Consent forms completely filled
- Consent forms signed by Doctors
- Medicine order in capital letter
- No error prone abbreviation in medical record

FISH BONE ANALYSIS

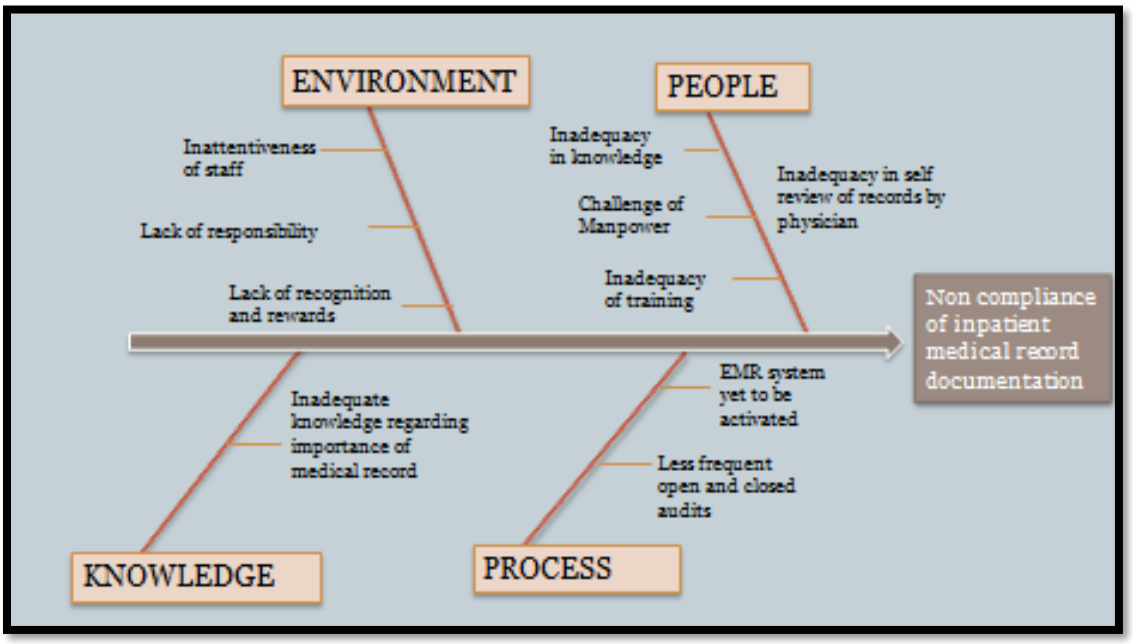

Fig.8- Representing the root cause of non-compliance of documentation

RECOMMENDATIONS

- Creating awareness among the staff about the importance of documentation of medical records
- EMR system implementation for inpatient medical records.
- Focused training sessions on documentation.
- Tracer audits (to explain and rectify the documentation mistakes done by staff on spot when documentation is going on).
- Recruiting new staffs to decrease the workload so that prompt documentation could be done.
- Peer group discussions inter/intra departments on medical records documentation involving Head of Departments, experienced doctors, nursing superintendent, MRD staff and quality department staff.

LIMITATIONS

- One of the major problems in the MRD of the hospital was the shortage of skilled and trained staff.
- Another problem in the hospital was that staff was not aware of importance of completing the medical records.
- The labeling of racks was not there in the MRD so it was difficult and time consuming to retrieve a medical record as and when required.

REFERENCES

1. Bali A, Bali D, Iyer N, Iyer M. Management of medical records: facts and figures for surgeons. Journal of maxillofacial and oral surgery. 2011 Sep 1;10(3):199.
2. Tavakoli N, Jahanbakhsh M, Akbari M, Baktashian M, Hasanzadeh A, Sadeghpour S. The study of inpatient medical records on hospital deductions: An interventional study. Journal of education and health promotion. 2015;4.
3. Singh, Madhav & Patnaik, Saroj & Sridhar, Bhandaru. (2017). Medical Audit of Documentation of Inpatient Medical Record in a Multispecialty Hospital in India. International Journal of Research Foundation of Hospital and Health Care Administration. 5. 77-83. 10.5005/jp-journals-10035-1080.
4. Ajami S, Ketabi S, Sadeghian A, Saghaeinnejad-Isfahani S. Improving the medical records department processes by lean management. Journal of education and health promotion. 2015;4.

Annexure

Active Files

Document Parameters	Compliance (in %)
Admission Plan of Care	
Provisional Diagnosis and treatment details available	88
Care plan Documented	98
Care Plan Counter signed with name by clinician	68
Initial assessment/Progress Notes	
Initial assessment in ward documented and completed	96
Progress and Daily order sheet/progress notes as per reassessment frequency or at least twice per day	90
Nursing Progress Note and Assessment	
Nursing initial Assessment documented and completed	94
Nursing care plan is documented and signed	76
Nursing progress notes and handover properly documented	64
Consent	
All required Consent Forms	100
Consent forms signed by correct person	94
Consent forms completely filled	88
Consent forms signed by Doctor	71
Medicine Chart	
Legible handwriting in medication chart	93
Medicine order in Capital letter	55
No error prone abbreviation in medical record	73
History sheet	98
Investigation Summary	96
Nutritional Assessment by Dietician	90
Vital Monitoring sheet & Input output chart	100

Table1- Representing Compliance of Document Parameters of Active Files

Passive Files

Document Parameters	Compliance (in %)
Admission Plan of Care	
Provisional Diagnosis and treatment details available	98
Care plan Documented	100
Care Plan Counter signed with name by clinician	85
Initial assessment/Progress Notes	
Initial assessment in ward documented and completed	97
Progress and Daily order sheet/progress notes as per reassessment frequency or at least twice per day	98
Nursing Progress Note and Assessment	
Nursing initial Assessment documented and completed	96
Nursing care plan is documented and signed	82
Nursing progress notes and handover properly documented	70
Consent	
All required Consent Forms	100
Consent forms signed by correct person	98
Consent forms completely filled	92
Consent forms signed by Doctor	96
Medicine Chart	
Legible handwriting in medication chart	96
Medicine order in Capital letter	60
No error prone abbreviation in medical record	77
History sheet	100
Investigation Summary	96
Nutritional Assessment by Dietician	97
Vital Monitoring sheet & Input output chart	100
ICD Coding	90
Discharge Summary	100

Table2- Representing Compliance of Document Parameters of Closed Files