

**Assessment of Compliance Rates of In Patient File Documentation As Per NABH
Standards In Bansal Hospital, Bhopal.**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

By

Dr. Ritima Garg

Under the Supervision and Guidance of

Ashish Bandhu

2022

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled **Assessment of Compliance Rates of In Patient File Documentation As Per NABH Standards In A Multi-Speciality Hospital** is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

A handwritten signature in black ink, reading "Ritima Garg", with a stylized flourish at the end.

(Signature)

Name of Student: Dr. Ritima Garg

Date: 29.07.2022

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26/06/22

CERTIFICATE

This is to certify that, Dr. Ritima Garg in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from IIHMR University, Jaipur has successfully completed her internship at Bansal Hospital, Bhopal during March 30th, 2022 to June 27th, 2022.

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CERTIFICATE

This is to certify that dissertation titled **Assessment of Compliance Rates of In Patient File Documentation As Per NABH Standards In A Multi-Speciality Hospital** is a record of the research work undertaken by Mr. Gurpreet Singh in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

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Date:

School Dean

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Date:

ABSTRACT

- 1) **Background:** Medical records is the systematic documentation of the patient's personal and social data, history of his or her ailment, clinical findings, investigations, diagnosis, treatment given, account of following up and outcome. A key medical-legal function in risk management, documentation in the medical record makes diagnosis and treatment easier, disseminates vital information to other caregivers to maintain patient safety and minimize medical errors, and helps other caregivers ensure that they are on the same page. The most crucial component of medical practice is documentation, which must be timely, precise, and comprehensive. The only defense available to hospitals when allegations of medical malpractice are made is their medical records.. Good records always provide a good defense. The complete documenting of this medical record is critical, because deficiencies in this documentation have rendered the doctors helpless in medical negligence claims brought against them in court.
- 2) **Methodology:** A descriptive cross sectional study was carried out from 30th April'2022 till 10th June'2022, in a multispecialty hospital in the quality department. A passive audit was carried out to compare the compliance rates for 309 In patient file via a structured checklist for the documentation process.
- 3) **Results:** The study showed a large discrepancy between the established standards for documentation and findings observed during the audit. Some departments were more aware about the documentation than the others. The nursing staff was more aware of the importance of the medical record documentation than the doctors. Some parameters showed higher compliance than other parameters such as Nursing Initial Assessment and Frequency, Route, dose of medicine mentioned in the medication charts while lesser compliance was seen in SNDT parameter. If the departments are to be concerned, The Critical Care Team had the most compliance. Noncompliance was observed due to inadequate knowledge, lack of human resources, inattentiveness and negligence of the staff.
- 4) **Conclusion:** Proper documentation of medical record promotes patients' and physicians' best interests for many reasons. Recording all relevant data of a patient's care helps physicians monitor what's been done, and curtails the risk of mistakes scrambling into the treatment process. Systematic medical records document basic facts about the patient's health care delivery system, including who did what, and what results

occurred. Improper documentation on the other hand may invite medical litigation at any point of time. Sound record keeping also plays a role in quality assurance practices; hence medical litigation can be avoided.

- 5) Key Words: Medical Records, Documentation, Medical Records Department, Compliance rate, Quality care, Inpatient Records

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Expressing gratitude is a difficult task and words often fall sort of reflecting one's feelings. I express my sincere gratitude towards all those who have contributed their valuable efforts, their guidance and encouragement toward the completion of my project. It is my pleasure to be indebted to various people, who directly or indirectly contributed to the development of this work and who influenced my thinking, behavior, and acts during study.

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ABBREVIATIONS

1.	ICU	Intensive Care Unit
2.	NICU	Neonatal Intensive Care Unit
3.	CCU	Critical Care Unit
4.	IPD	In-Patients Department
5.	OPD	Out-Patients Department
6.	NABH	National Accreditation Board for Hospitals
7.	HDU	High definition Unit
8.	MRD	Medical Records Department
9.	SNDT	Sign, Name, Date and Time

CHAPTER 1: INTRODUCTION

Hospitals are concerned about the safety and well-being of their patients. Medical care requires well-trained medical professionals, high-quality infrastructures, and adequate records.¹

A MEDICAL RECORD is an organized and chronologically recorded document that contains information about the patient and his care while in the hospital. The full medical record must have enough information to reliably identify the patient, establish the diagnosis, justify the therapy, and chronicle the result.³

Medical documents, health data, and health charts are all terms for the vital to the process of a patient's history and care across time while under the care of a single health care provider. Observations, drug administration, surgical operations, instructions for drug administration, and test findings are only some of the 'notes' recorded by healthcare professionals over time in the medical record. Medical professionals must retain specific and comprehensive hospital documents, which is normally enforced as a licensed requirement.⁷

Medical records administration includes the planning, regulating, directing, organizing, educating, advocating, and other administrative operations relevant to the growth, management, usage, and disposition of medical records. Good record-keeping ensures that the hospital's administration functions smoothly. The hospital's records also demonstrate that it is responsible for its operations, and they are an useful data source for clinical research, analytical reporting, and health informatics.¹

A medical record allows healthcare providers to plan and evaluate a patient's treatment while also ensuring care continuity among numerous providers. The correctness and legibility of the information in a patient's medical record directly affects the level of care they receive. Maintaining a thorough record is critical not only for meeting licensing and certification requirements, but also for allowing a healthcare professional to prove that a patient received adequate care³

The complete documenting of this medical record is critical, because deficiencies in this documentation have rendered the doctors helpless in medical negligence claims brought against them in court.⁴

The most widely used strategy for investigating adverse occurrences in hospitals is patient medical record review. The way information is recorded could have an impact on how visible unfavorable events are. Inadequate information integrity in patient health records has been related to higher incidence of adverse events as a cause or result of poor care. Improvements in the quality of healthcare data in patient health records might have an influence on patient and managerial decision-making in health care delivery and patient safety.²

Documentation should be done in such a way that it guarantees treatment continuity, scheduling, and accountability, and also the growth and advancement of evidence-based processes. A patient's record should be accurate, full, and updated on a regular basis. In establishing quality patient care, the caregiver's ability to effectively communicate through records as part of the healthcare continuum is crucial.⁵

Thus, in order to offer excellent patient care and to protect a health care professional from malpractice litigation, standardized medical record recording is critical. This should emphasize the "Golden Rule" of documentation, which states, "If it isn't written down, you didn't do it." 4 "Doctors also come under the preview of the Consumer Protection Act, 1986, which holds the medical fraternity accountable under the consumer forum for shortcomings in the quality care and treatment," according to a 1995 Supreme Court decision. The only protective proof available to protect physicians from these forums was appropriate recordkeeping, which is urgently needed.⁶

A clinical audit is a quality-improvement process which involves a systematic examination of patient care against predetermined standards/ guidelines and, if necessary, the implementation of practice adjustments. The term "clinical audit" refers to the process of evaluating "a quality improvement process that strives to enhance patient care and outcomes by systematic examination of treatment against specific criteria and implementation of change," according to the National Institute Of Clinical Excellence (NICE).⁶

Medical record users

One can speculate that the records were first retained for the physician's benefit rather than anything else. Similarly, to how modern medicine is expanding in leaps and bounds, the demand for good hospital records is growing.⁷ There are numerous useful uses of health data for various purposes, as follows:

Table 1: Medical record users

Primary users	Secondary users	Third party users
• Attending physician(s) • by other physicians (for consultation)	• Nursing/paramedical staff • Patient (during consultation or referral) • Hospital administrators—Students • Clinical Research • Epidemiology, Statistics • Insurance companies • Tool for training of medical staff • Anticipate future health problems	• Social worker • Occupational therapist • Audit purpose • Accreditation purpose • MCI/CEA purpose • Government agencies(Statutory bodies: PCPNDT Act, MTP Act, etc., Blood bank licensing) • Court of law(during trial) • Investigating agencies (police, internal

	• Serve basic for standard preventive measures	enquiry, criminal negligence enquiry)
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Contents of medical records:

A patient's personal medical record identifies him and offers details about his medical records. In the medical record, or any digitally recorded form of the old paper files, the patient's identification is accurately identified.

Inpatient medical records, on the other hand, according to NABH, should include the following:

- Demographic information
- Preclinical information
- Clinical information
- Therapeutic information
- Documentary information
- Ancillary diagnostic media include X-rays, CT scans, MRI scans, pathology specimens/documents, ECG/EEG, and pictures, among others.
- Other: Consent form, MTP forms, insurance records, legal documents and correspondence (referral form/consultation advice), and so forth.²

Importance of medical records:

Because it contains a participant's medical care, prior and current health conditions, and treatment ideas for future health care, a medical record is a critical element in the provision of healthcare services. It encompasses the following functions aside from personal interest:

- Quality of patient care/continuity of care
- Medical training
- Research
- Efficient administration
- Multidisciplinary team/group practice communication
- Medical audit
- Medical tourism (transmission)

While doctors understand the importance of a health record in medical medicine and healthcare education, there's still growing acknowledgment that the database, as well as our existing model for managing medical data, is severely inadequate. The severity of these defects has a significant impact on the effectiveness of modern medical record auditing approaches. The aforementioned are the most pressing concerns:

- Storage and preservation
- Confidentiality
- Affluent communication
- Legibility (handwriting, typed, computer generated)
- Medico-legal reporting
- Storage (space)
- Uniformity
- Utility
- Quality
- RTI
- Terminology/Abbreviations
- Retrieval (timing)

One of the most important concerns with medical paperwork is illegible handwriting. To address the issue, the Punjab and Haryana High Courts have advised practitioners not to write on documentation for personal consumption, and the administrators of health care services in Punjab, Haryana, and Chandigarh have been instructed to ensure that their handwriting is legible.²

The National Accreditation Board for Hospitals (NABH) is a component board of the Quality Council of India (QCI) that was created to develop and administer accreditation programmes for healthcare institutions. The Documentation of Health Records in Context of National Accreditation Standards, with an Emphasis on Tertiary Healthcare Hospitals The hospital must meet the NABH's requirements, which are organized into ten chapters and include 100 standards and 503 objective elements, in order to be recognised.¹

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).¹

The research work is aimed on the quality of patient files and medical records management. The study is reviewed on the basis of the protocol for documenting patient files. Managing appropriate documentation and patient information examines the issues of maintaining clinical and non-clinical medical reports, focusing on the areas where new procedures are necessary to suit the specific needs of a record keeping service in a hospital context.

The gap analysis is conducted to determine the level of training for hospital employees in order to give the highest quality care to admitted patients in accordance with national accrediting board of health requirements. The quality of clinical services provided by hospitals was reflected in the medical record management. The primary focus of health-care institutions must be on service quality. The medical superintendent, director, chief officers, ward managers, and nursing superintendent meet to review the audit's results. The training and education provided to employees at regular intervals so that they can follow the documentation process and maintain effective data files.

CHAPTER 2: LITERATURE REVIEW

Table 2: Literature review

S.NO	AUTHOR	YEAR	RESEARCH QUESTION	STUDY LOCATION	SAMPLE SIZE	SAMPLING TECHNOQUE	SALIENT FEATURES
1	Prerna Singh, Sakhi John	2017	Analysis of Health Record Documentati on Process as Per the National Standards of Accreditation with Special Emphasis on Tertiary Care Hospital	New Delhi	200	Convenience Sampling	The findings of this study demonstrate that 100% compliance is achieved in HIV consent, anesthetic consent, and high-risk surgeries, but that medical initial assessments recorded within 24 hours, medical assessments reported before to surgery, and other parameters have partial or low compliance. When surgical and medical files are compared, it is clear that there is a factual difference

							between them.
2.	Kasu Tola, Haftom Temesgen, Yemane Gebremariam, and Birhanu Jikamo	2017	Improving Completeness of Inpatient Medical Records in Menelik II Referral Hospital, Addis Ababa, Ethiopia	Ethiopia	111	Simple Random Sampling	The overall review of inpatient medical record completeness was found to be 84%. Higher compliance of 96.4% completeness was found in inpatient physician order sheet. And the least completeness was seen in inpatient medication administration sheet with 70.3% of forms completed.
3.	Rajesh Kumar Sinha, Nandana Shenoy	2013	Assessment of Oncology Medical Records as per NABH Standards	South India	520	Stratified Random Sampling	The findings of this investigation revealed that the emergency clinic's clinical documentation and board of clinical records meet the most stringent NABH IMS requirement. Nursing's record, Physician's record, and

							Anesthetics reports in Breast and Neck and Head cancer, as well as Radiation records in Cervical cancer, showed the highest level of clinical documentation completion. Most elements of the General consent and Procedure consent were missing, such as the signature of the patient/relative, the signature of the witness with names and addresses, and the time of consent.
4.	Rajaa A. Mahmoud, Riyadh A. Hussein, Nihad Q. Al-Hamadi, Shabeeb A. Saihoud	2018	Assessment of the documentation completeness level of the medical records in Basrah General Hospital	Iraq	268	Random Sampling	The study revealed a clean weak point in documentation of admission notes of patient in the surgical, general medical and Gynecology /

							Obstetric wards. A huge defect was discovered in documentation completeness for the Progress sheets specifically in the Gynecology/ Obstetric words (93%) accompanied by the surgical word (75%).
5.	Ramasamy R. Ganesh Rajendiran ,Kagne R.N	2021	Practice of documentation at casualty of tertiary care hospital – an interventional study	Puducherry	680	Random Sampling	The study was done in two phases, pre intervention and post intervention. In the study the personal history was documented in 54.7 % on pre interventional period. Investigation and Provisional diagnosis were documented without any fail in the admission case sheets during both intervention periods

6.	N. Junior Sundresh Anupriya Jose Sandeep Muraleedharan	2016	A Study on Quality Improvement and Awareness of NABH Accreditation Standards in A Cardiac Speciality Hospital	India	200	Descriptive Study	The study shows that 62% of the staff are very knowledgeable about NABH accreditation and its policies however only 59% are knowledgeable about standards and policies in NABH accreditation.
7.	Mohd Ai Hatram Khan, Nilima, Jackline Prathibha, Bhaskar Tiwary, Monika Singh	2019	Documentation on compliance of in-patient files: A cross sectional study from an east India state	India	80	Convenient sampling	The majority of nurses (67.5 percent, n=54) reported that their knowledge, attitude, and practise were satisfactory. Gender, knowledge, attitude, and practise were found to have no significant relationship ($\chi^2=0.15$, df=1, and $p=0.697$) using the Chi-squared test of association. Age ($\chi^2=1.48$, df=2 and $p=0.477$) and years of professional experience

							($x=2.3, df=1$ and $p=0.128$) had no significant effect on knowledge, attitude, and practice.
8.	Madhav.M Singh, Saroj Patnaik, Bhandaru Sirdhar	2017	Medical Audit of Documentation of Inpatient Medical Record in a Multi-specialty hospital In India	India	320	Systematic Random Sampling	The investigation reveals a significant disparity in record-keeping practices among the hospital's departments. The department of psychiatry was determined to be the most complying with the requirements, while the departments of Gynecology and Pediatrics were found to be the least compliant. In most departments, including the gynecological department, there was no entry in the medical record for date/name/sign (25 percent).

9.	Saiedeh Sharifi, Mansour Zahiri, Hosein Dargahi, Farzad Faraji-Khiavi	2021	Medical record documentation quality in the hospital accreditation	Ahvaz, southwest Iran	28	Qualitative research	Almost half of the interviewees said the programmes structure was a barrier. They claimed that a high number of desired documents was one of the problems preventing proper information registration; also, some required elements are time-consuming and can only be provided through formal recording of particular medical data.
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CHAPTER 3: METHODOLOGY

a) Research question:

1. What is the compliance rate of documentation of IPD files documentation as well as rate of compliance of different departments in the hospital according to NABH standards?

b) Objectives:

1. To assess the compliance rates of the in-patient files documentation as per the policy proposed by the hospital.
2. To carry out passive audit to compare the compliance rates for different departments in patient file documentation process.
3. To identify the lacunae and suggest recommendations to overcome the gaps and implement the changes required for quality improvement.

c) Research design: Descriptive Cross-sectional study.

d) Study setting :

1. The study was conducted at Bansal multi-specialty Hospital, Bhopal, Madhya Pradesh with help of the Medical administration and Quality department.

Duration

2. The study was conducted from **30th April 2022 to 10th June 2022**. Files for in patients were audited passively and the non-compliance was checked according to the check list.

e) Study population:

Inclusion criteria:

Patient files in the IPD department, and ICU (including NICU, HDU, CCU), only admitted patients were considered.

Exclusion criteria:

1. Patient discharged in less than 24 hours, mostly day care patients.
2. Active Patients, that is the patients who are currently admitted in the hospital and have not been discharged yet.

f) Research Approach/ procedures: Quantitative.

Quantitative Assessment: Using a set checklist for each sheet/form, the contents of basic medical records were reviewed. Recorded items were checked as positive findings while missing or illegible ones were considered as negative findings.

Study procedure

All the files from all departments (randomly) (clinical and non-clinical) across the facility were observed for non-compliance.

g) Study Approach:

1. **Sample size:** The sample size is taken to be 309 files (passive audit). As per NABH standards, if the discharges in a hospital are above 1500, the sample size should be equal to or greater than 300.⁸
2. **Sampling technique:** Convenience sampling used, wherein during the audit random patient files were picked up and analysed.

3. Data collection procedure:

The primary data was collected by preparing a checklist approved by the quality department head. The data was collected by passively auditing every file.

To fill the assessment checklist tool, data were acquired randomly of paper-based medical records of discharged patients during the year 2022. Data about quantitative assessment can be found on the assessment checklist page.

If all basic forms were contained in the medical record, it was deemed quantitatively complete (essential forms that have to be included and completed for each patient admitted to hospital during period of hospitalization). Every record included in the study had the following 10 basic forms checked: admission and discharge form (front sheet), consent form, discharge summary sheet, medical history sheet, physical examination sheet, and clinical progress notes sheet. Sheets for treatment orders and nursing notes.

4. **Statistical tool:** Microsoft excel was used for data cleaning and data analysis.

h) Ethical considerations:

- The study was approved by Quality department manager and Medical Superintendent.
- Formal approval from managers of hospitals was taken to work in the medical record department.
- Medical record personnel were oriented about the purpose and procedure of the study.

i) Operational Definitions

1. Medical Records: A patient's medical record, treatment option received, test results, diagnoses, and prescriptions used are all properly documented.
2. Documentation: It's a communication tool that facilitates the transmission of data between caregivers.
3. Inpatient: A person who lives within the hospital while under treatment.
4. Anesthesia: It is a state of controlled, temporary loss of sensation or awareness that is included for medical purpose.
5. Serology: The scientific study for the examination of blood serum.
6. Accreditation: A process of officially recognizing someone as having a particular status.
7. Informed Consent: Permission granted in full knowledge of the possible consequences.
8. Quality: The degree of excellence of something.

CHAPTER 4: RESULTS

1. To check the compliance rate of documentation of IPD files in the hospital under consideration according to NABH standards according to set parameters

The following table shows the compliance on different parameters of patient file documentation comparisons.

Table 3: Compliance in IPD files

	COMPLIANCE	NON-COMPLIANCE	NA
Time taken for initial assessment by doctor	43%	57%	
Provisional diagnosis and treatment record	76%	24%	
Care plan documented	77%	23%	
Countersign by clinician	65%	35%	
History sheet completely filled	85%	15%	
Nutritional screening done	84%	16%	
Progress and daily order sheet	88%	12%	
Nursing initial assessment	97%	3%	
Nursing care plan documented and signed	88%	12%	
All nursing records signed	89%	11%	
OT book duly filled and signed	42%	20%	38%
Consent form signed by patient/attender	95%	5%	
Consent form completely filled and signed by doctor	74%	26%	
Frequency, route and dose of medicine mentioned	97%	3%	
Legible prescription	82%	18%	
Capital letters in Medication Chart	82%	18%	
No Error Prone abbreviations in medication Chart	73%	27%	
SNDT	33%	67%	

The above compliance table shows that the highest compliance rate was found in both Nursing Initial assessment and mentioning of frequency, route, dose of medicine in the medication chart, which was 97%. This was followed by consent forms signed by patients/ attender (95%).

The alarming situation was observed in Sign, Name, Date and Time, which was observed by noticing if the signatures, name, date and time if filled where mentioned. This percentage was 33% and was the lowest among all the parameters.

The second lowest parameter where the compliance rate was below 50% was for OT booklet completed and signed and Time taken by doctor's for initial assessment, which were found out to be 42% and 43% respectively.

2. To check compliance rate of documentation of IPD files with respect to different departments in the hospital according to NABH standards.

The following graphs depict department-wise compliance for different parameters:

A. Time taken for Initial Assessment by Doctor

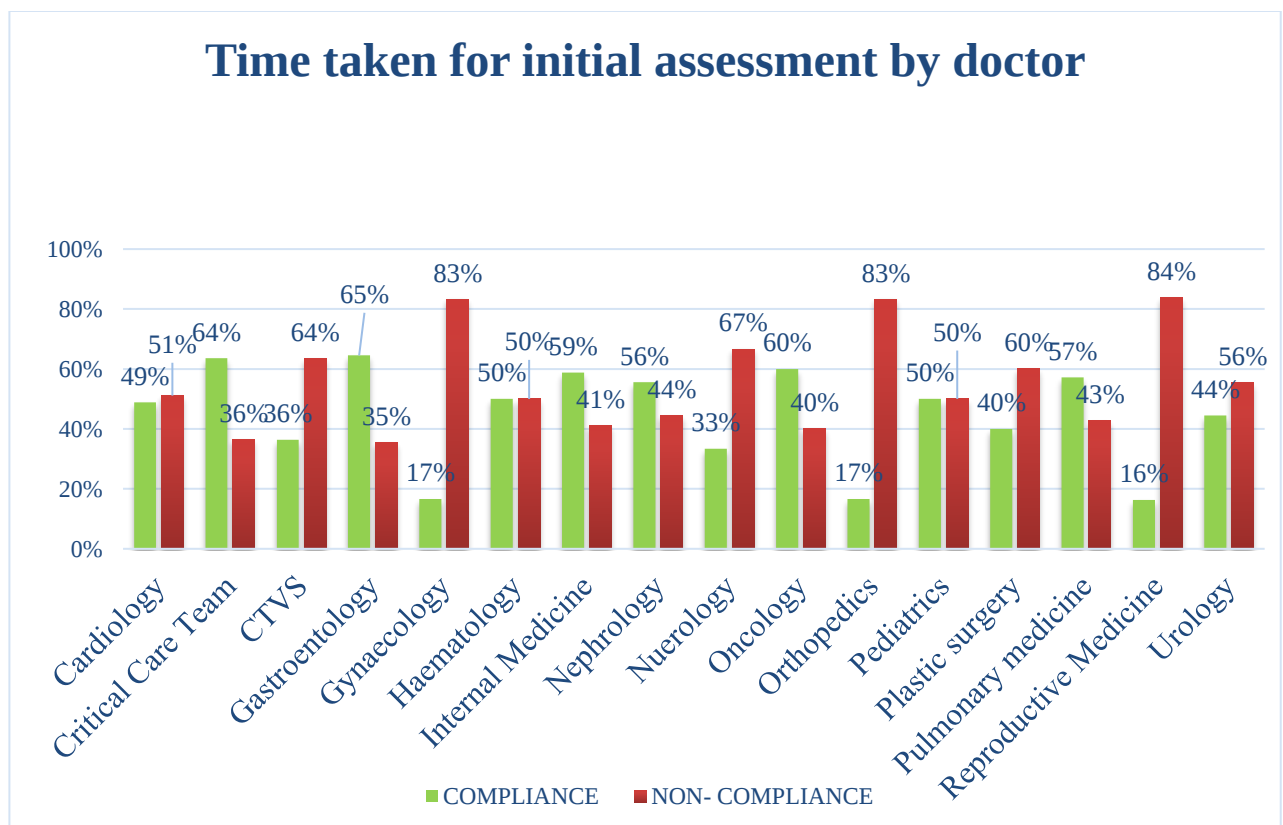


Figure 1: Time taken for Initial Assessment by Doctor

The following graph shows department wise analysis of the first parameter, "Time taken for initial assessment by doctor", which means whether the initial assessment has been done within 30 mins from the start time, also, the assessment need to be done within 30mins

from the admission time. This time varies if the patient arrives in Emergency, then the time changes to 15 mins. Non Compliance is also noted if the time is not mentioned in the sheet.

The highest percentage of compliance percentage was found to be 65% in the Department of Gastroenterology, followed by a similar percentage of 64% compliance rate seen with Critical Care team

The graph shows highest noncompliance rate in Reproductive Medicine with 84% of non-compliance. Similar rates were shown in department of Gynecology and Orthopedics, with 83% of noncompliance.

B. Provisional Diagnosis And Treatment record

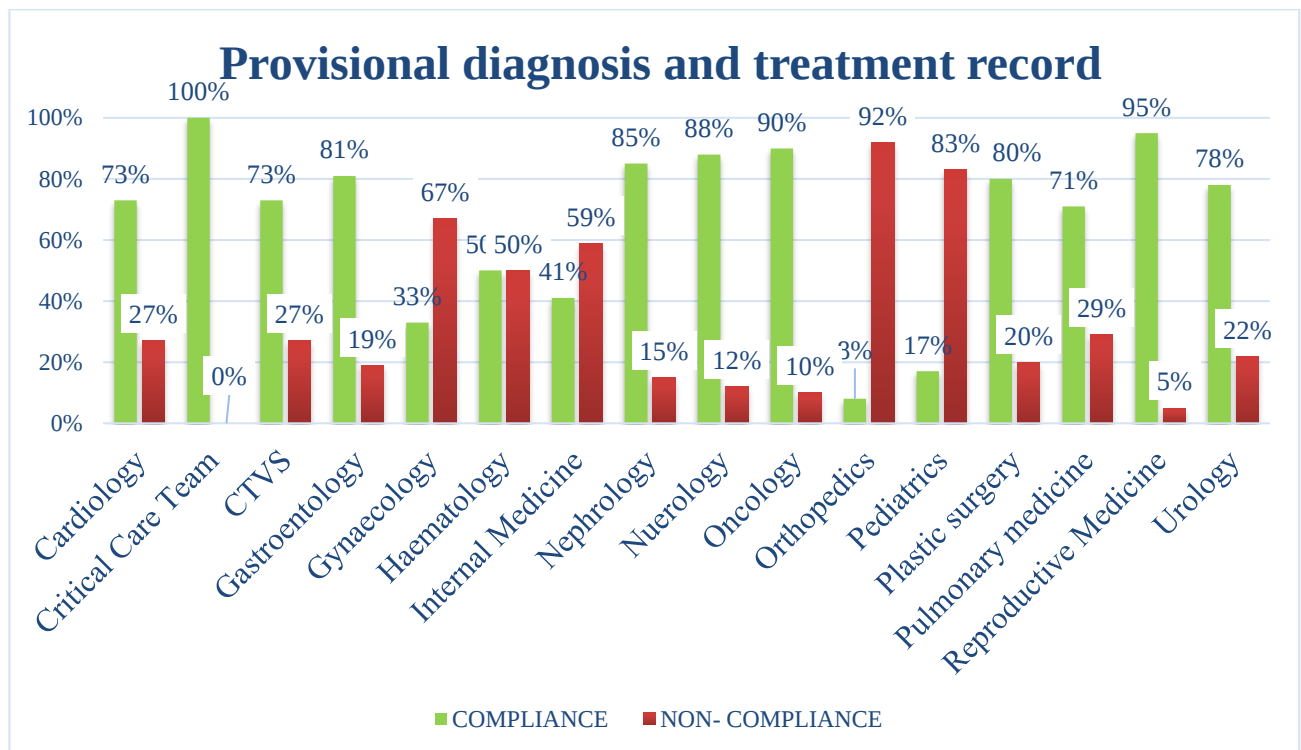


Figure 2: Provisional Diagnosis and Treatment record

This graph analyses the second parameter of the study, namely, “Provisional diagnosis and treatment record” which indicates if the provisional diagnosis has been filled in the initial assessment sheet by the examining doctor.

Full compliance has been observed in Critical Care Team, and Above 90% compliance rate has been observed in Departments of Oncology and Reproductive Medicine, which are 90% and 95% respectively.

The highest noncompliance was found in Department of Orthopedics, with 92%. This was followed by 83% in Department of Pediatrics.

C. Care Plan Documented

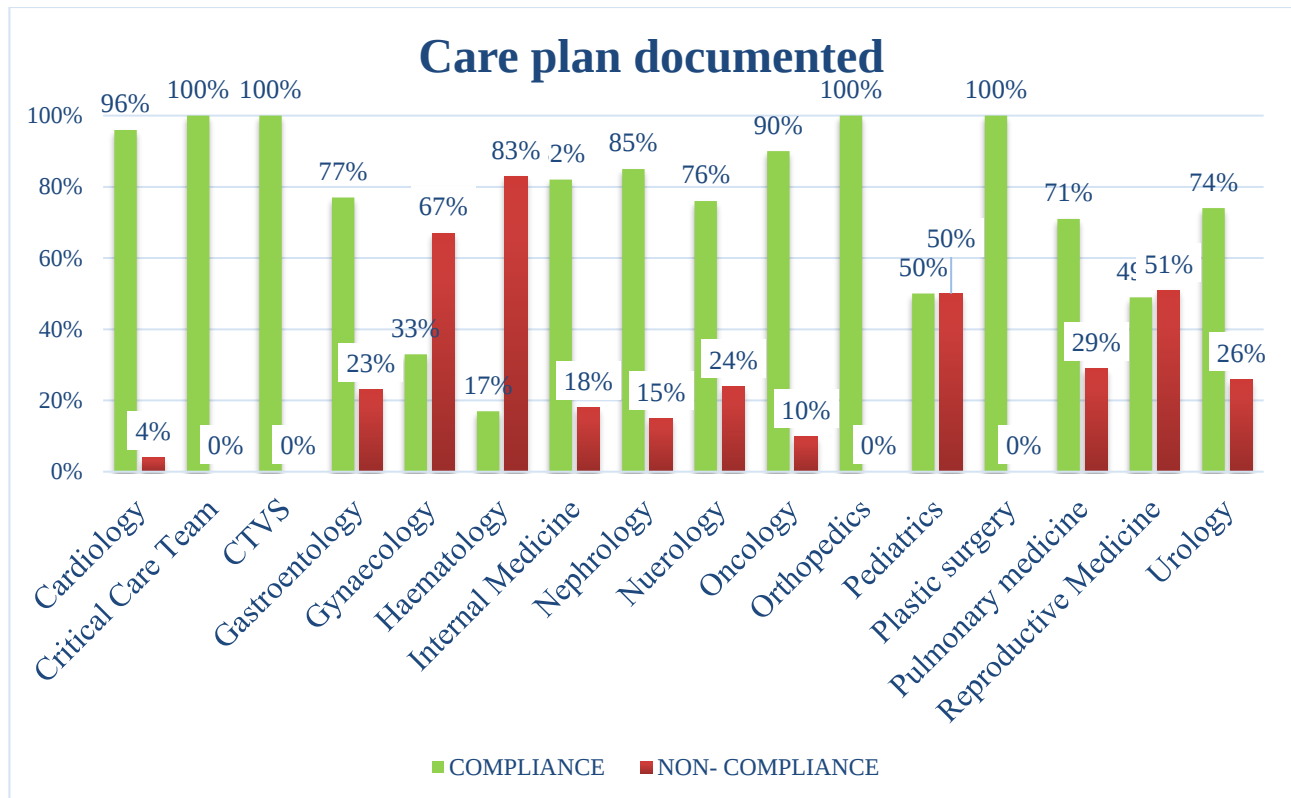


Figure 3: Care Plan documented

The third parameter in the list was “Care Plan documentation”, wherein compliance was noted when the care plan column was noted by the examining doctor during initial assessment.

One of the highest compliance percentages were seen with this parameter. Full compliance rates were seen in four departments, namely, Critical Care, Cardio-vascular Thoracic, Orthopedics and Plastic Surgery. Above 90% compliance rate was seen in Departments of Cardiology and Oncology.

Least compliance was seen in Hematology, with 83% followed by 67% and Gynecology.

D. Countersign By clinician

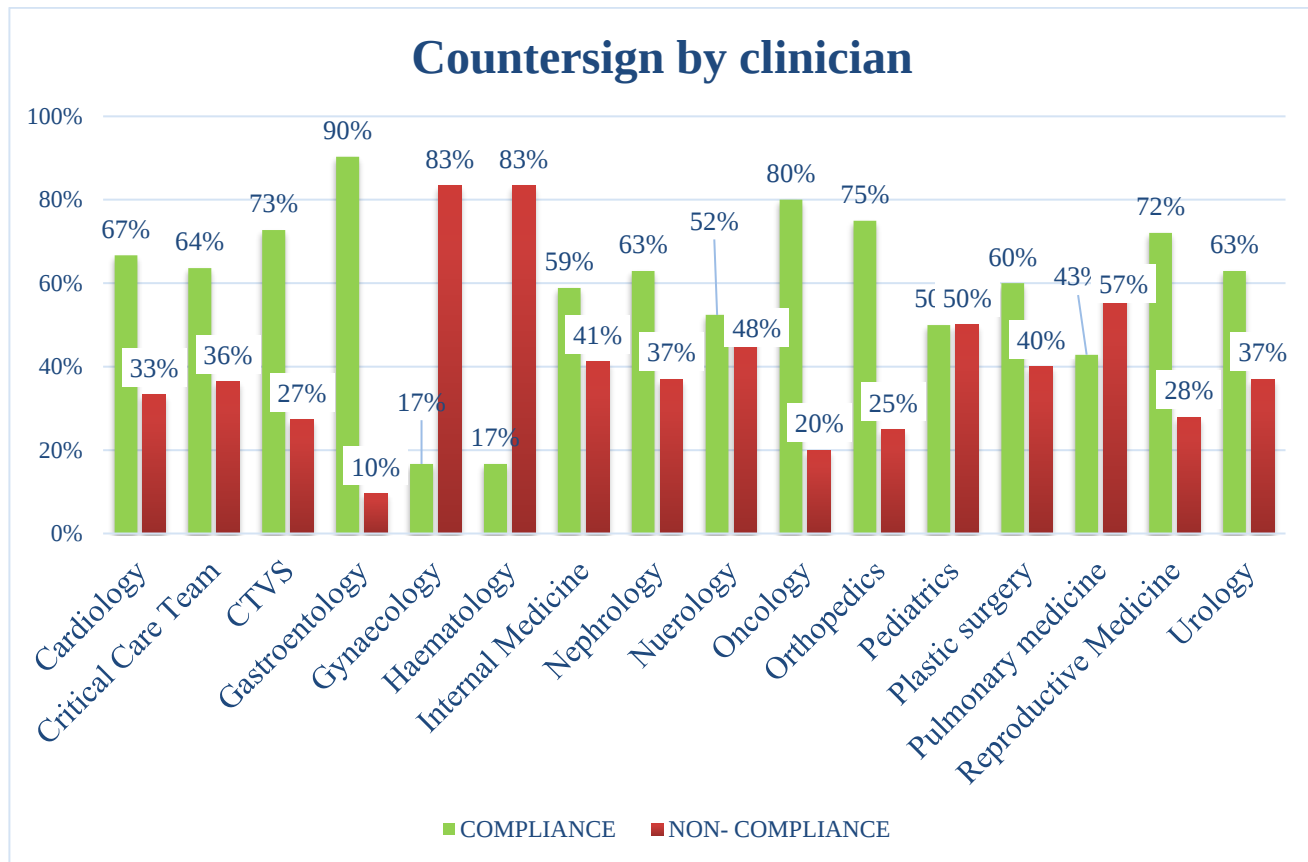


Figure 4: Countersigned by Clinician

The fourth parameter named, “Countersigned by Clinician” which indicates the signature columns were signed by the examining clinician and countersigned by a consultant.

The highest compliance rate was seen in Department of Gastroenterology with 90%. Most departments had compliance rate above 50%.

The lowest was seen only in two departments, that is Gynecology and Hematology. The percentage of non-compliance for both of them was 83%.

E. Initial Assessment Sheet completely filled

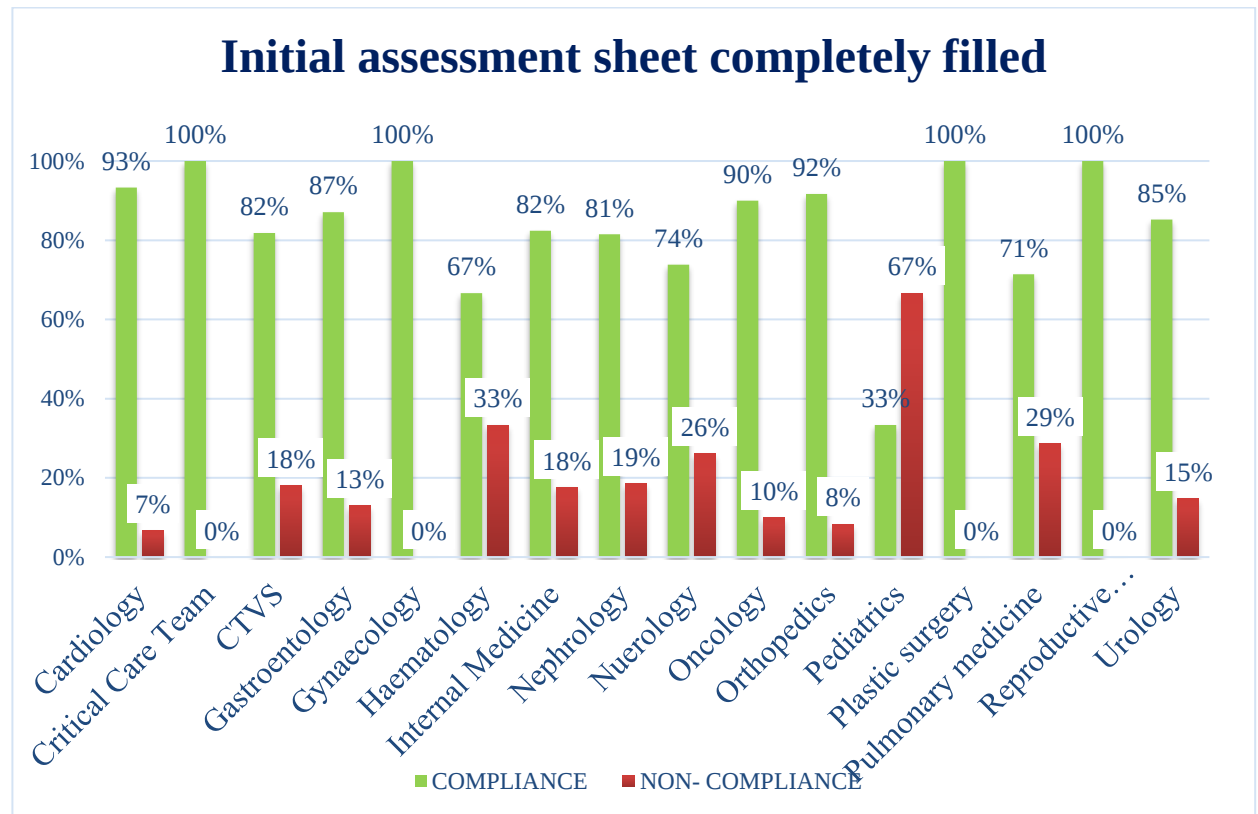


Figure 5: Initial assessment sheet completely filled

One of the Highest compliance rates was seen with this parameter “Initial assessment sheet completely filled”, in which compliance was noted if the initial assessment sheet was filled, with all the details mentioned.

Most of the departments had compliance more than 70% with full compliance rate observed in Critical Care, Gynaecology, Plastic surgery department and Reproductive Medicine.

Only the Department of Pediatrics and Neonatology noted the least compliance with non-compliance rate of 67%.

F. Nutritional Screening Done

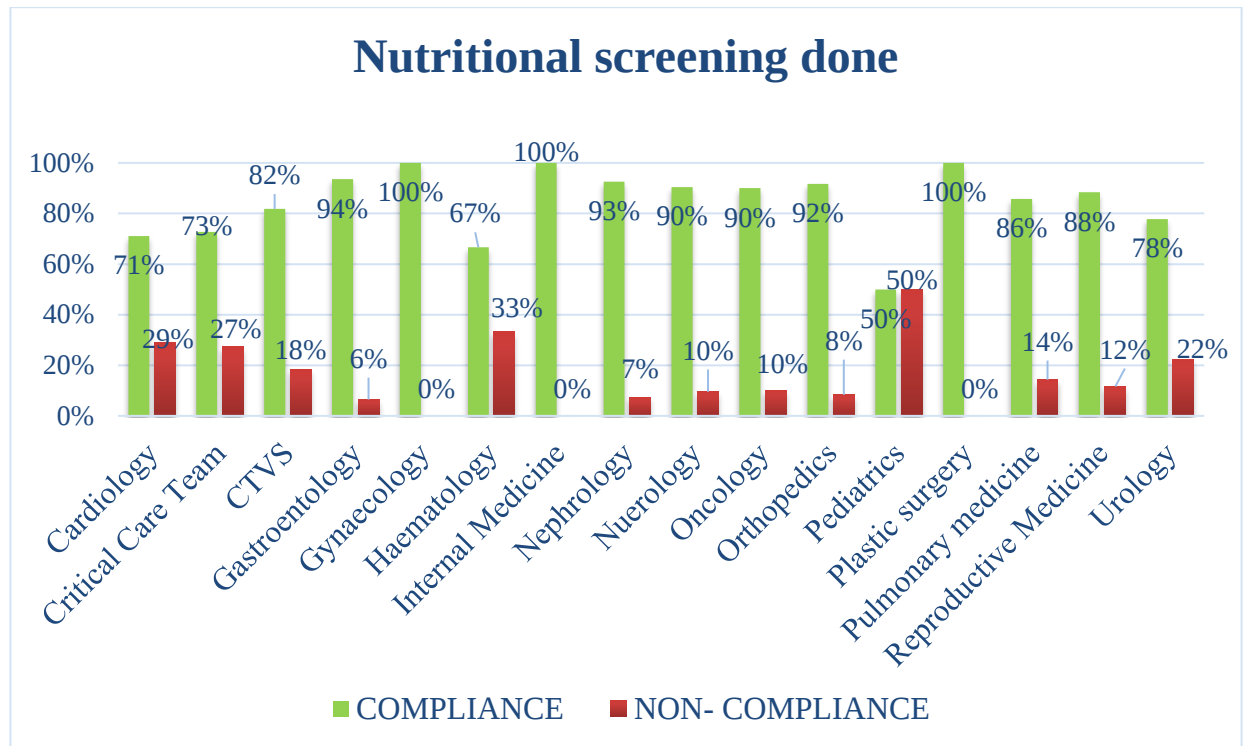


Figure 6: Nutritional Screening Done

This parameter, “Nutritional Screening Done” indicated if the nutritional screening sheet was added in the patient file and was completely filled and signed by the dietician. Absence of any lead to non- compliance.

Average showed that with most departments, the compliance rate was above 70% which is a good indicator.

Full compliance rates were seen with Internal Medicine, Plastic surgery department, and Gynecology.

The only department with 50% noncompliance rate was Pediatrics.

G. Progress and Daily order sheet

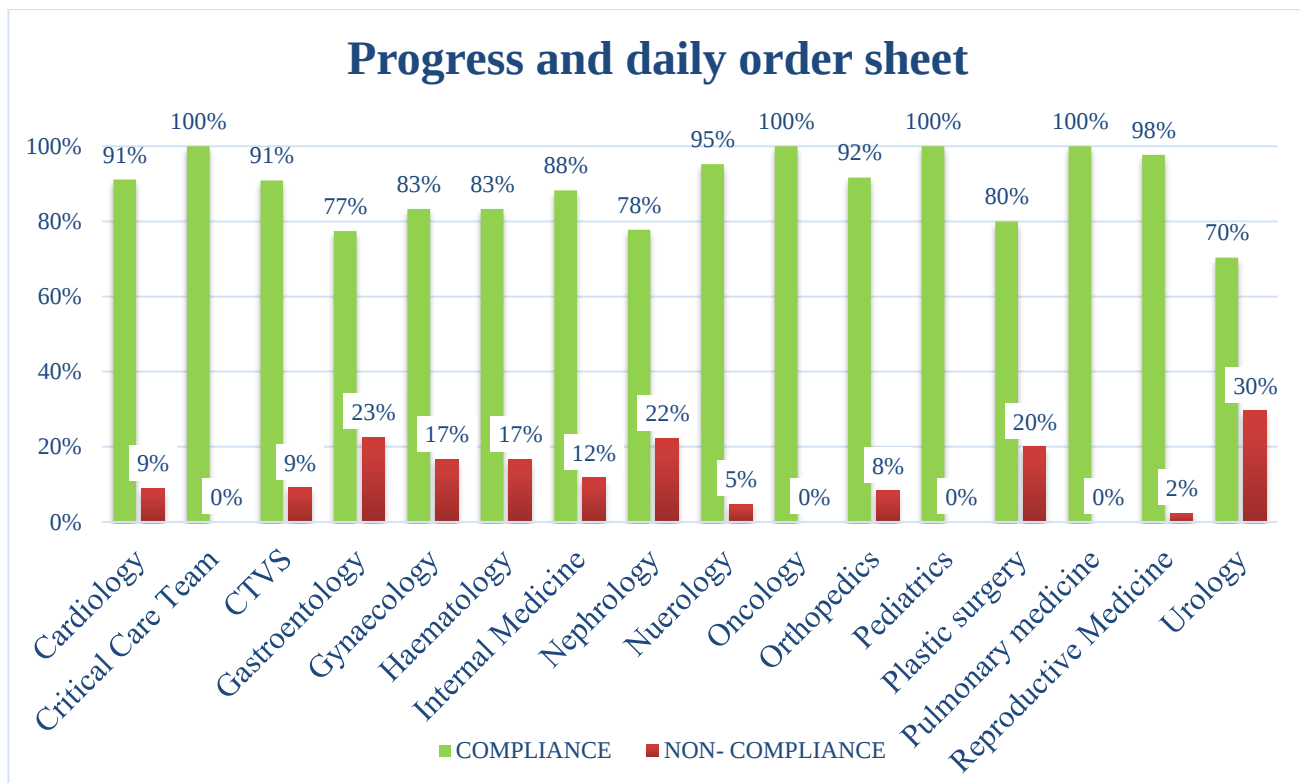


Figure 7: Progress and Daily Order Sheet

This parameter, “Progress and Daily Order sheet”, compliance was noted when All the progress sheets and daily order sheets were present in the patient’s file, for every date till the time patient was admitted.

All of the departments showed pretty good compliance rate with all of them above 70%. Full compliance rate was seen in Critical Care Team, Department of Oncology and Department of Pediatrics.

The Department of Urology has 30% noncompliance among all of them.

H. Nursing Initial Assessment

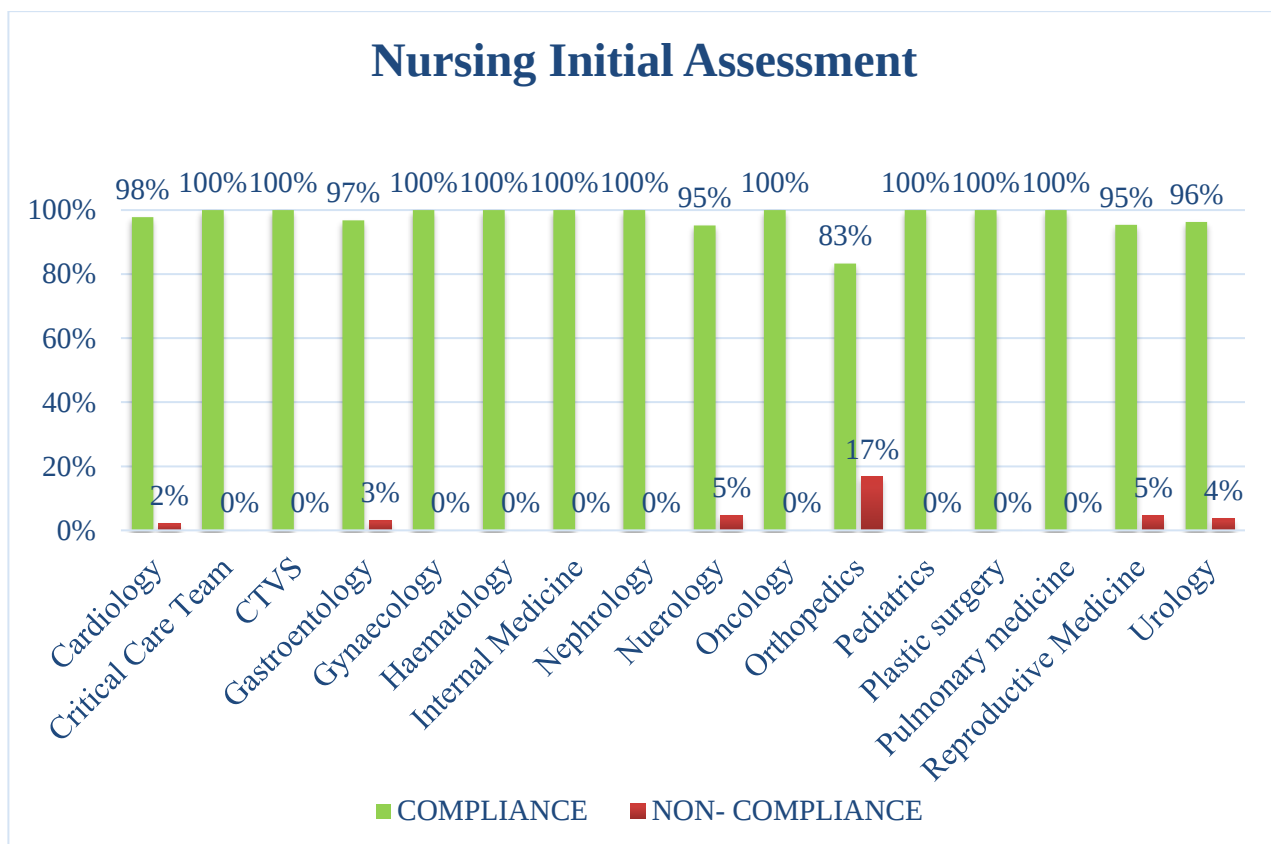


Figure 8: Nursing Initial Assessment

The parameter “Nursing Initial Assessment” is the second parameter which has the highest compliance rate. All the departments except one have compliance rate above 90%. This parameter indicates, if the initial assessment by the nursing staff has been completely filled or not.

The only department which has compliance rate below 90% is Department of Orthopedics, with noncompliance rate of 17%.

Full compliance rate can be seen in 10 departments.

I. Nursing Care plan Documented and Signed.

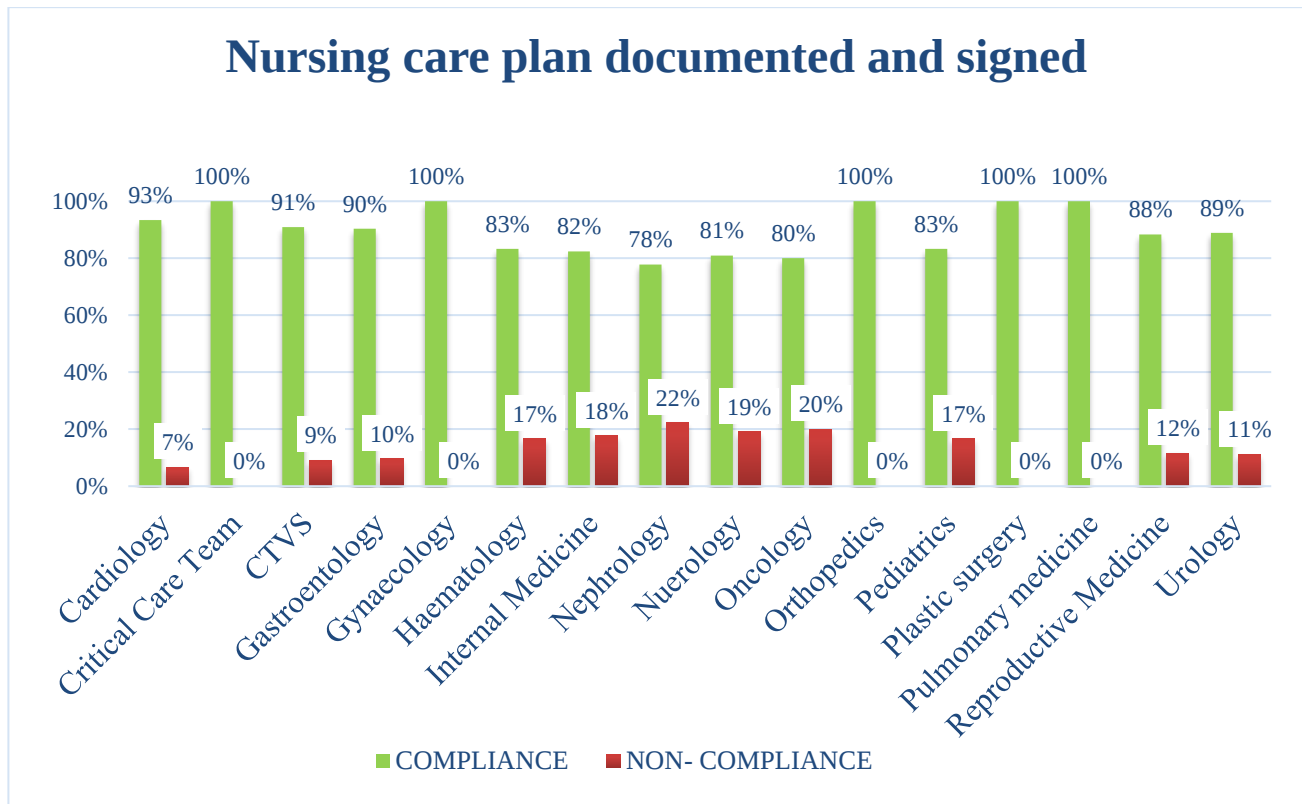


Figure 9: Nursing Care plan Documented and Signed

The ninth parameter is, “Nursing care plan documented and signed”, which is when the nursing care column had been filled and the sheet has been signed by the nursing staff.

The average compliance rate for this parameter is fairly high, mostly being above 75%, with five departments having full compliance rate.

The two departments having noncompliance 22% and 20% are Department of Nephrology, and Department of Oncology, respectively.

J. All nursing records signed

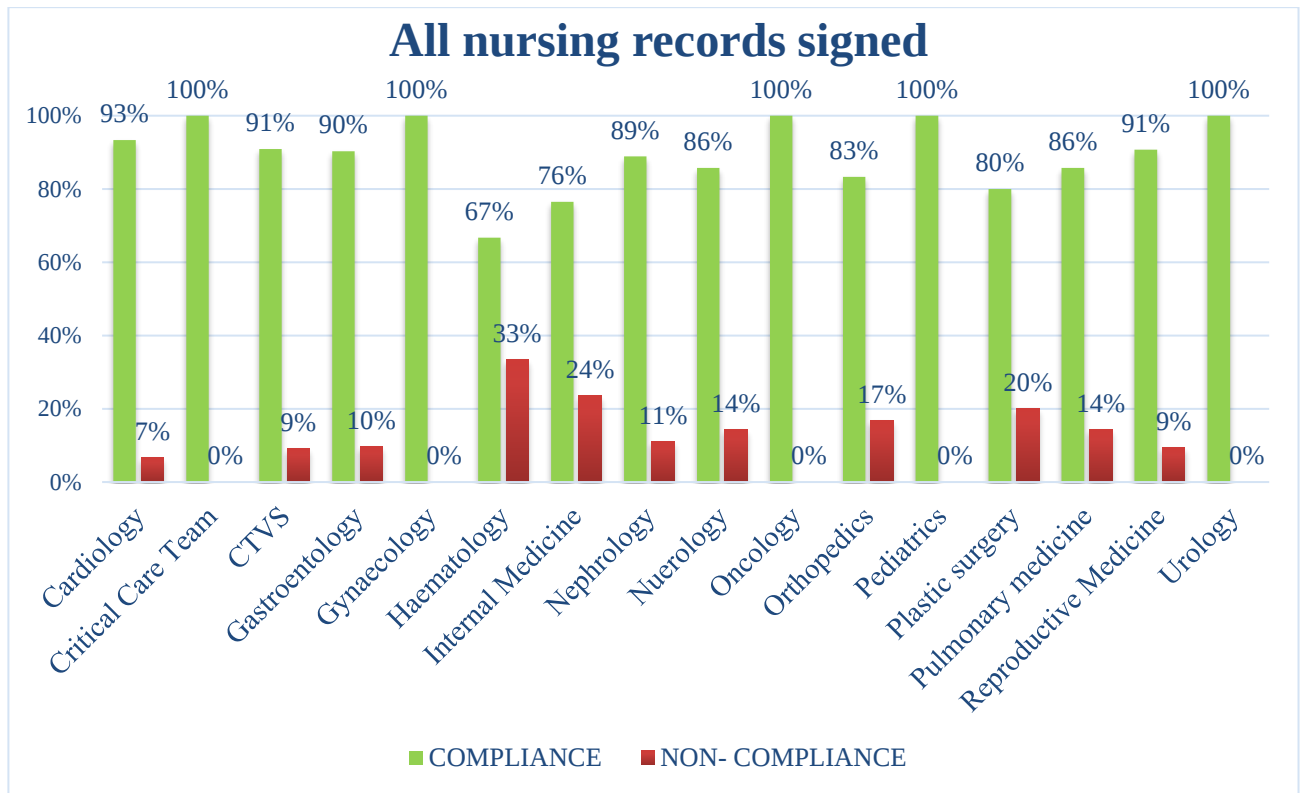


Figure 10: All nursing records signed

The parameter “ All nursing records signed”, compliance was calculated on the basis of, if all the nursing records, including history sheet, progress sheets, transfer forms, consent forms are signed by the nursing staff.

The average compliance rate for the same has been noted to be fairly good, with five departments having full compliance, and most of them above 80%.

The only department with high noncompliance is observed to be the Department of Hematology, with 33% noncompliance. This is followed by Department of Internal Medicine with 24% noncompliance rate.

K. OT book duly filled and Signed

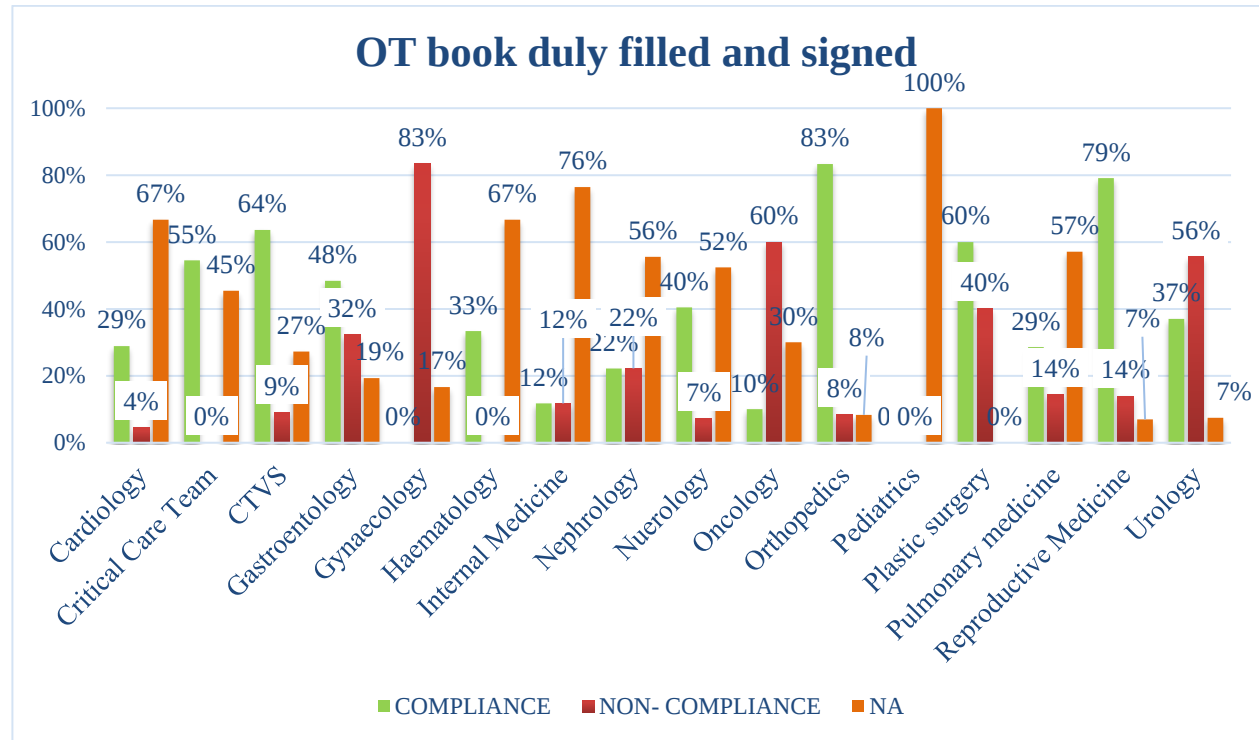


Figure 11: OT book duly filled and signed

This parameter “OT book duly filled and signed” indicates that all the information mentioned in the OT booklet has been filled by the doctor and the nursing staff, which includes patient details, doctor’s details, OT notes and procedural details.

NA (Not Applicable) means that particular patient did not undergo any surgical procedure.

The above graph shows highest compliance in the Department of Orthopedics (83%), followed by Department of Reproductive Medicine (79%).

Whereas Department of Hematology and Critical Care Team showed 0% noncompliance rate, which also means highest compliance in the applicable files.

The highest noncompliance rate was seen in Department of Gynaecology, which was observed to be 83% with 0% compliance rate.

The Department of Pediatrics had no data of any surgery in all the observed files.

L. Consent form Signed by patient/attender

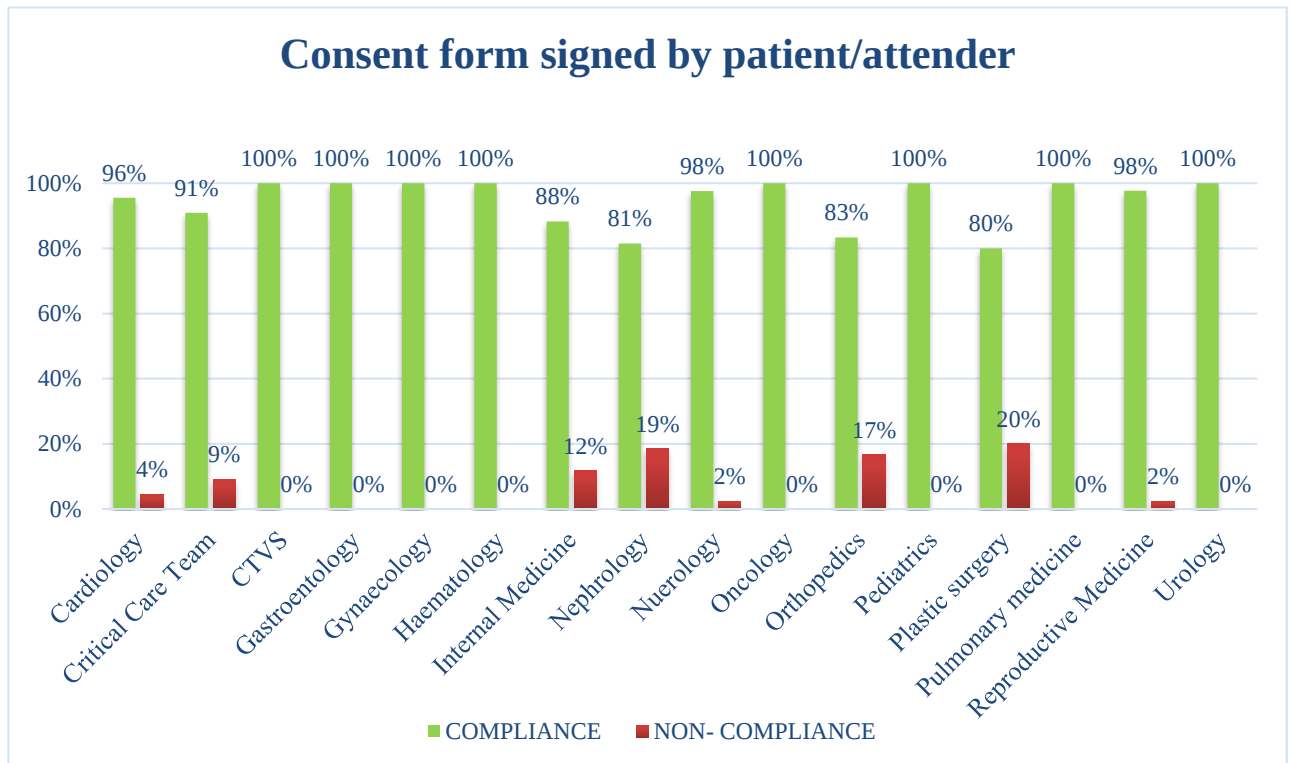


Figure 12: Consent form signed by patient/ attender

The parameter, “Consent form signed by patient/ attender” included forms, namely, admission consent form, surgical consent form, high risk form, blood transfusion form, anesthesia consent form, dialysis form, restrain form. Absence of signature in any of these forms (if applicable), lead to noncompliance.

This parameter showed an average compliance above 80%, if all the departments are summed up. The graph shows that eight departments have full compliance rates for this parameter and all the others being above 80%.

The graph shows high noncompliance rate for two departments namely that of , Plastic Surgery and Nephrology, having 20% and 19% respectively.

M. Consent form completely filled and signed by doctor

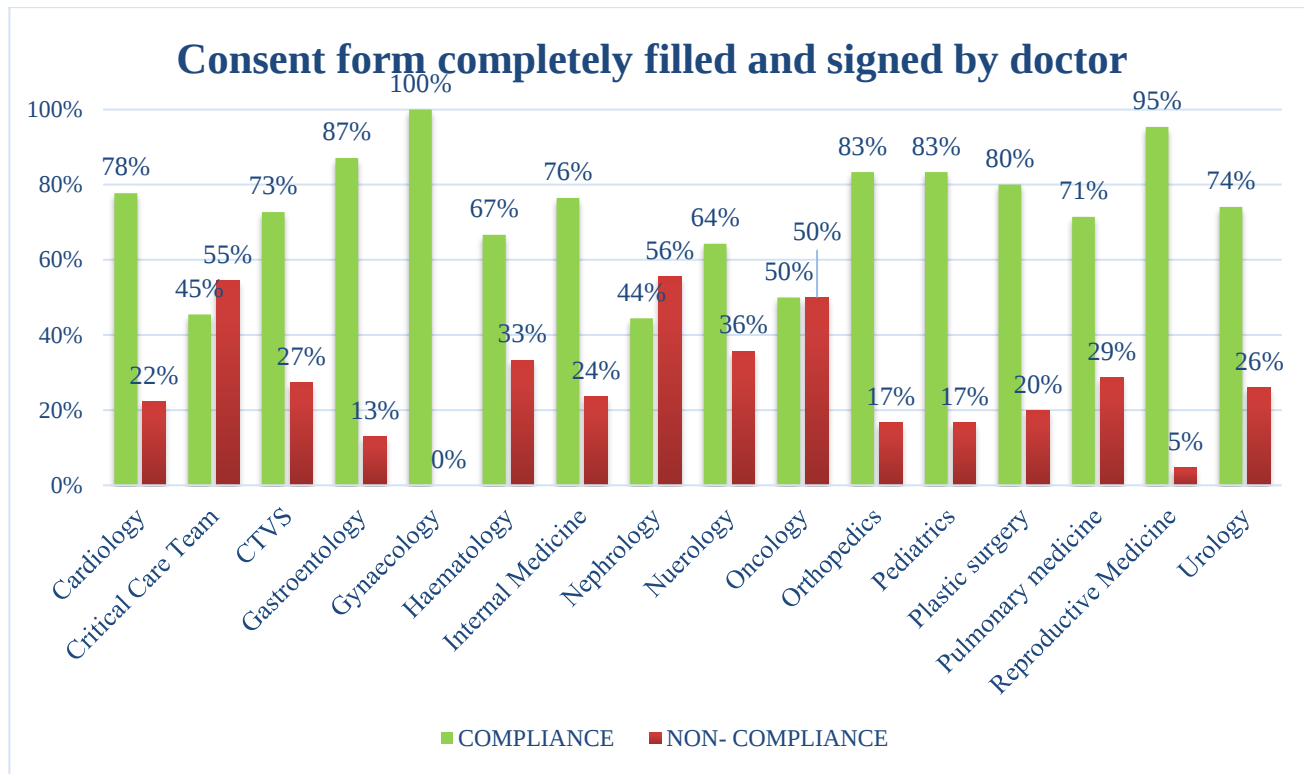


Figure 13: Consent form filled and signed by doctors

This graph shows compliance about “Consent form completely filled and signed by doctors.” According to standards, the consent forms apart from the admission consent needs to be filled and signed by doctor in charge. This includes, surgical consent form, high risk form, blood transfusion form, anesthesia consent form, dialysis form, restrain form and admission consent has to be just signed by the doctor. If discrepancy is seen, it is marked as noncompliance.

According to the above graph, The Department of Gynecology has full compliance, while Department of Reproductive medicine has 95% compliance rates.

The graph also shows noncompliance rate above than 50% for three departments.

The highest noncompliance has been observed in Department of Nephrology, that is 56% which is fairly high,. This is followed by Critical Care Team, with 55% noncompliance for this parameter.

This parameter has one of the highest noncompliance rates.

N. Frequency, route, and dose of medicine mentioned

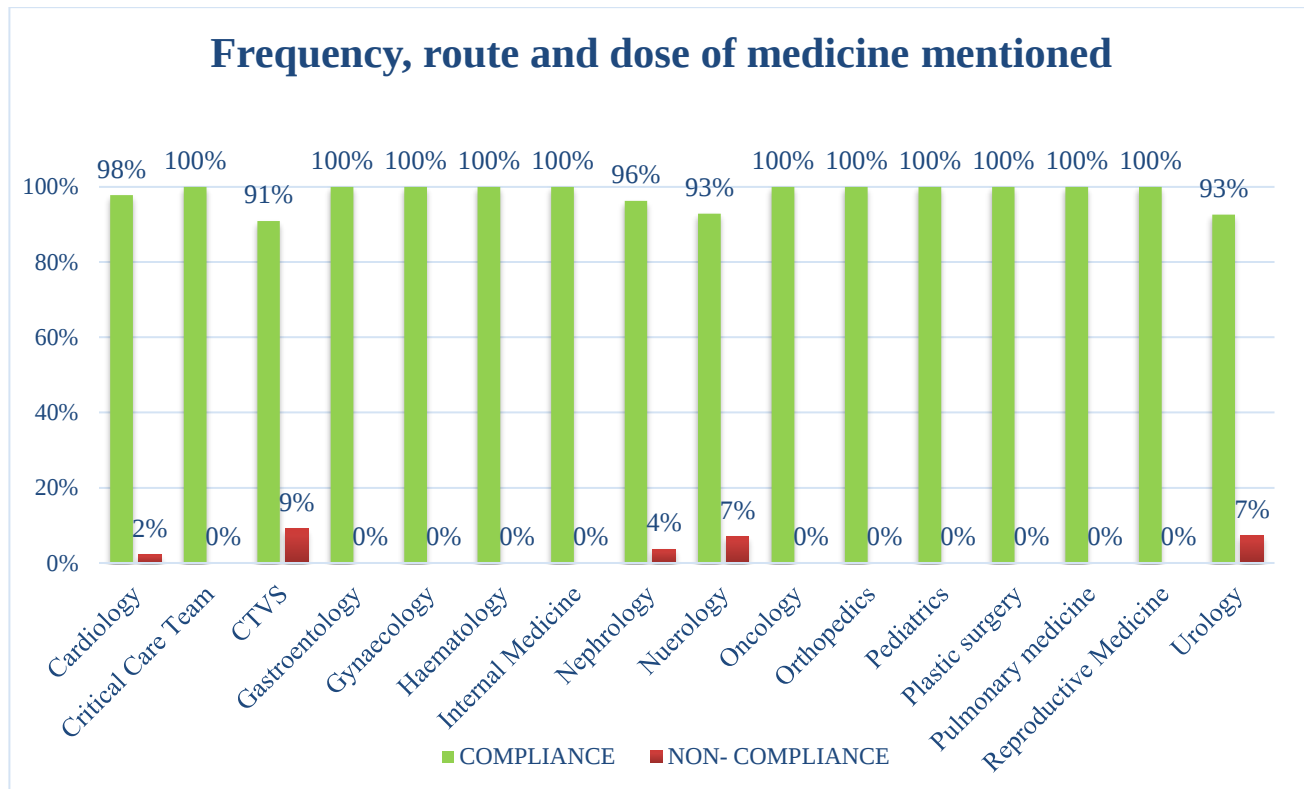


Figure 14: Frequency, route, and dose of medicine mentioned

The next parameter is “Frequency, route, and dose of medicine mentioned” wherever the medicines have been prescribed by the consultant/doctor. This is mainly in the medication chart, or in doctors daily order sheet.

Most departments showed full compliance for this parameter. The lowest compliance rate was 91% observed in CTVS department. The average compliance rate for the parameter is above 90%.

The highest noncompliance as mentioned is with CTVS department, that is 9% which is fairly low.

O. Legible Prescription

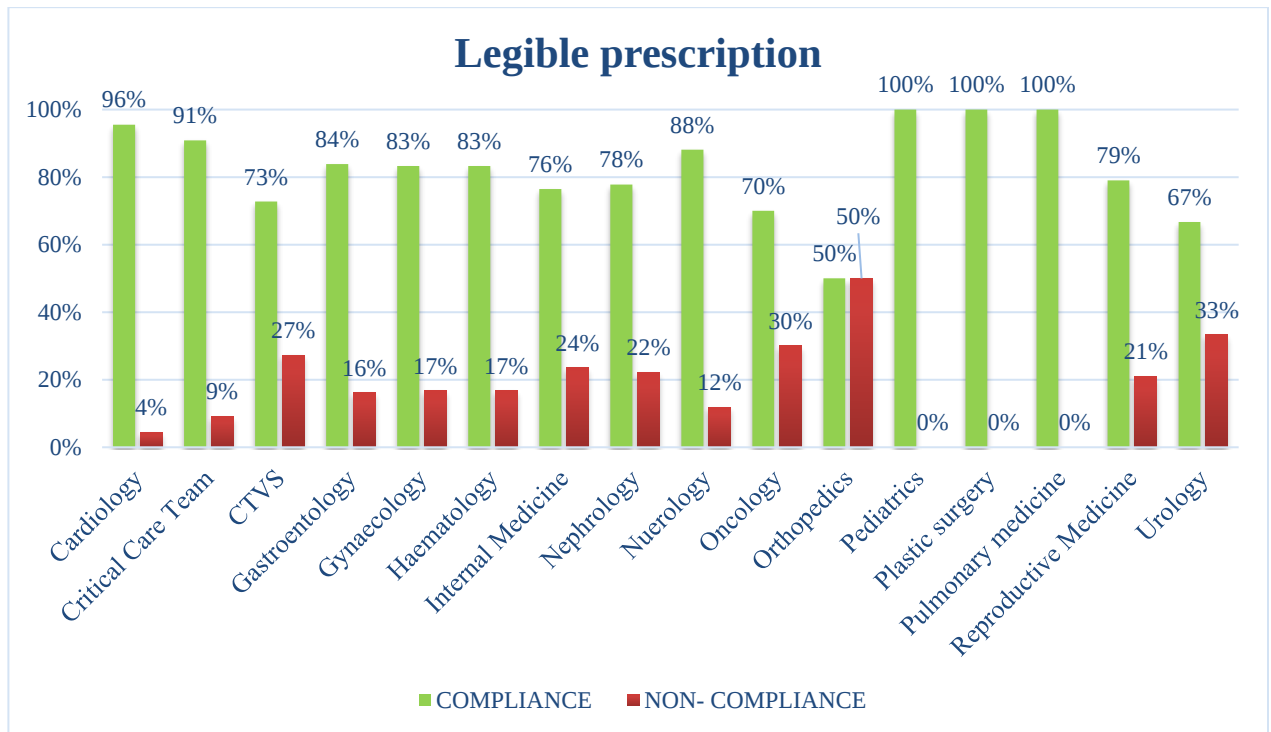


Figure 15: Legible Prescription

“Legible prescription” referred to wherever in the IPD file, medicine has been prescribed, is it legible for the other health workers to read, and understand which medicine is mentioned by the prescribing physician.

This parameter had varied compliance rates. Though three departments showed full compliance, namely, Pediatrics, Plastic Surgery and Pulmonary Medicine; the noncompliance rate was observed more than 30% for a couple of departments.

The noncompliance rate was above 20% for seven departments, with Department of Orthopedics having 50% noncompliance and Department of Urology having 33%.

P. Capital Letters in Medication Chart

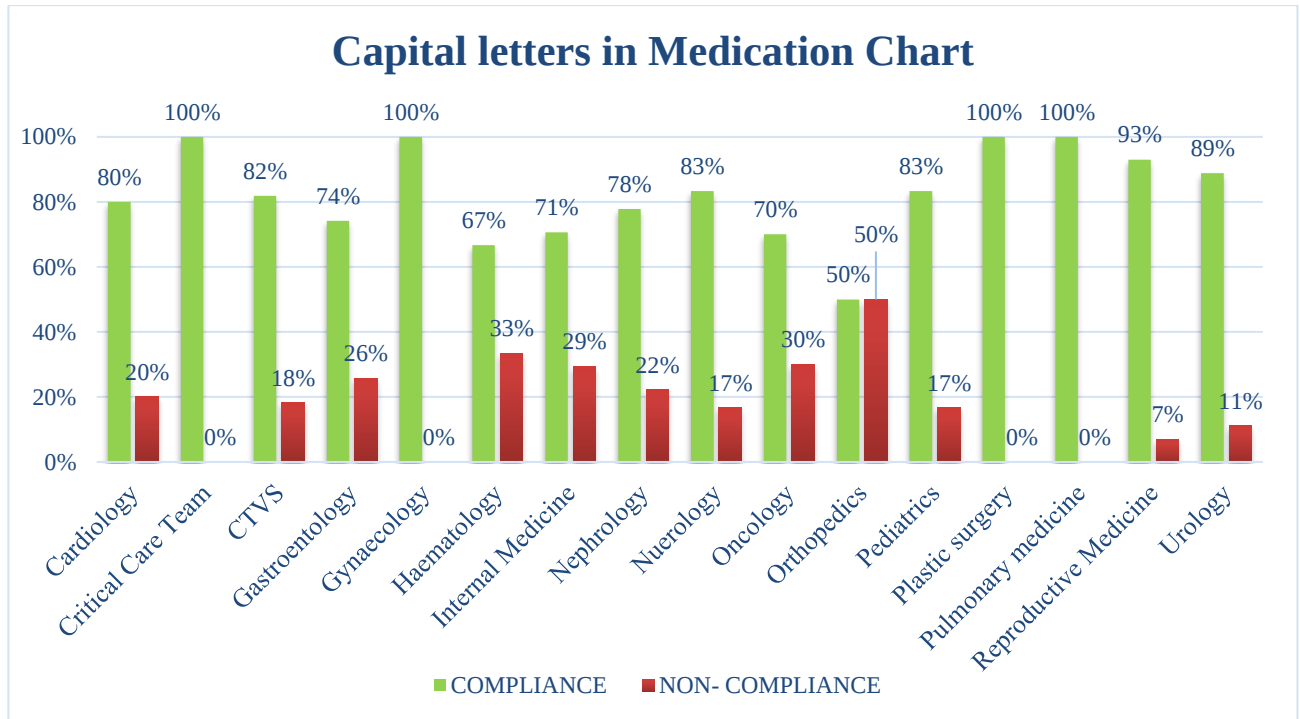


Figure 16: Capital Letters in Medication Chart

According to NABH standards, the medicine prescription should always be in capital letters, so that there is no discrepancy in communicating the drug the physician is mentioning.

The graph shows full compliance rate for four parameters, an average compliance around 80%. The Departments with full compliance rates, Plastic Surgery, Pulmonary Medicine, Critical Care Team and Gynaecology. Department of Reproductive Medicine was observed to have 93% compliance.

The lowest compliance rates were seen in the Department of Orthopedics with 50% noncompliance. This was followed by the Department of Hematology, with 33% noncompliance.

Q. No Error Prone Abbreviation in Medication Chart

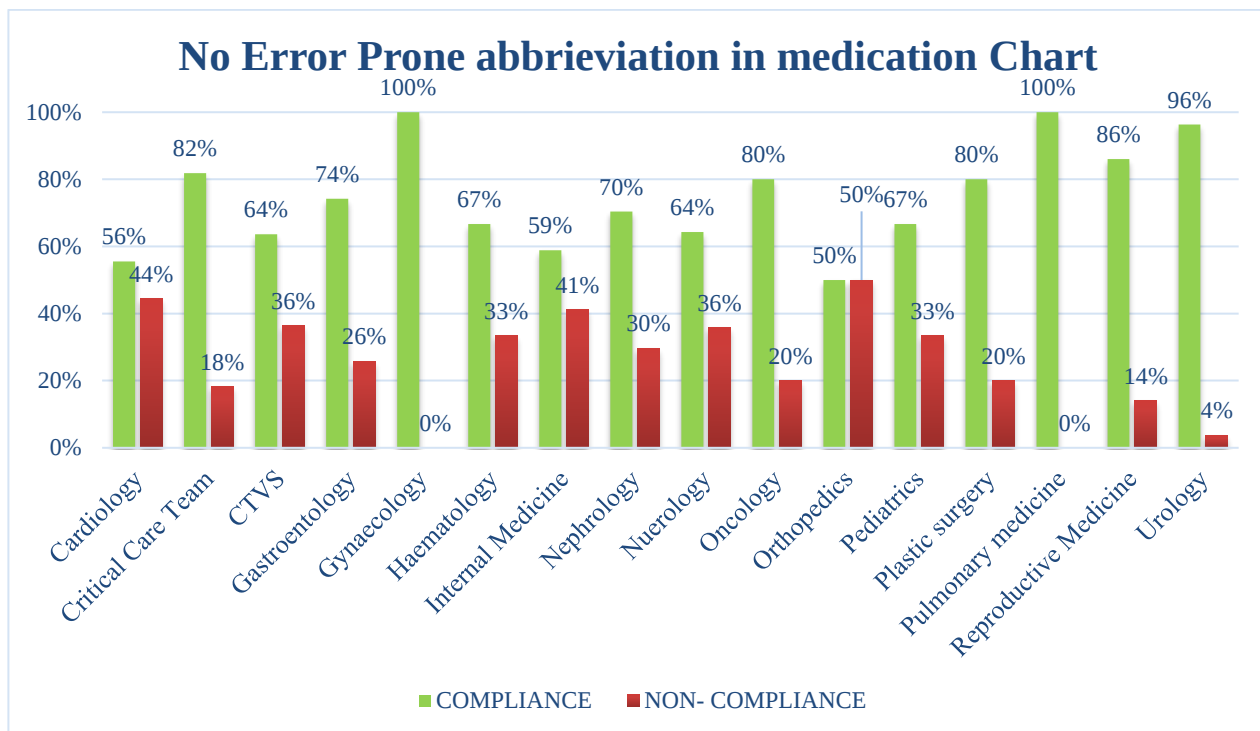


Figure 17: No Error Prone Abbreviation in Medication Chart

This graph shows the parameter “No Error Prone Abbreviation in Medication Chart” which means, refraining from mentioning abbreviations like OD/ once daily, BD/ Twice daily, TDS/ Thrice a day. The standards suggest not using these abbreviations, because the staff attending the patient might not be aware of these abbreviations, which might cause problem while drug administration.

The graph shows an average of around 70% compliance with only three departments having compliance above 90%, in which two departments, namely, Gynaecology and Pulmonary Medicine having absolute compliance.

The non-compliance rate was seen with the average of 30% , which is comparatively on the higher end. Three departments have noncompliance more than 40% and Department of Orthopedics having 50% noncompliance.

R. Signature, Name, Date and Time

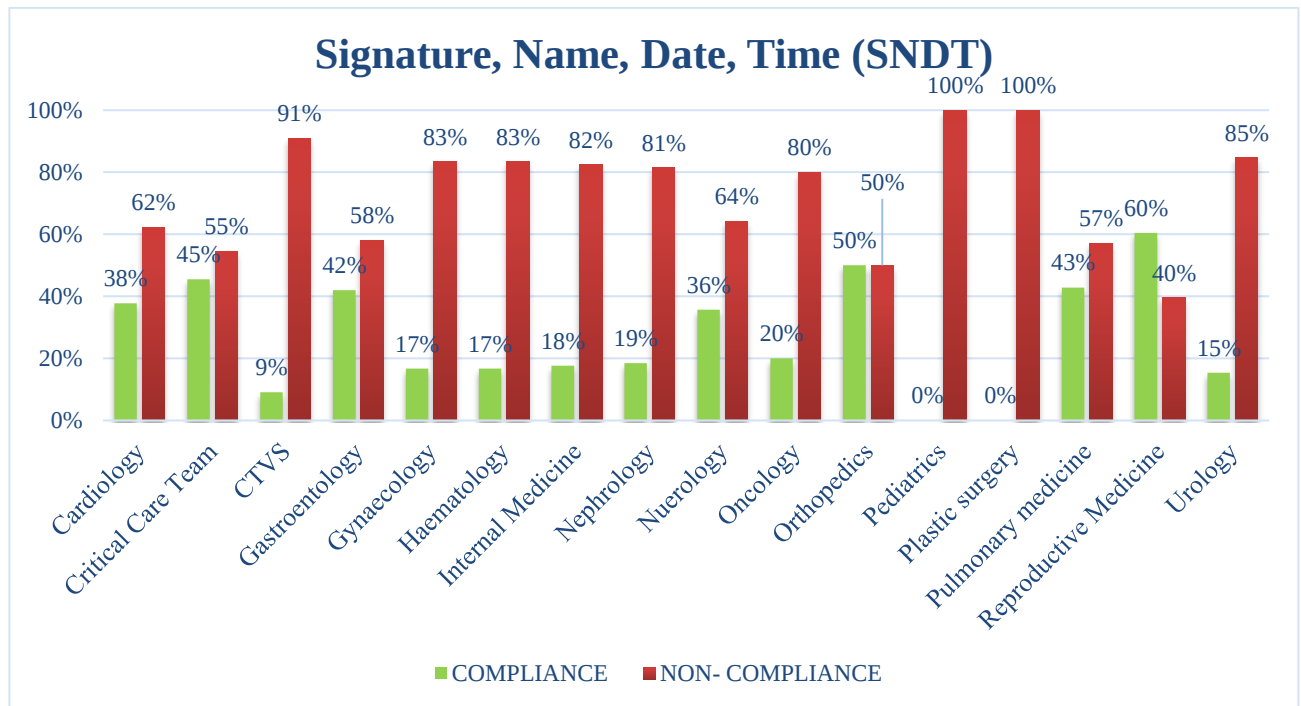


Figure 18: Signature, Name, date, Time

The last parameter in the study was “Signature, Name, Date , Time” commonly called as “SNDT”. The guidelines suggest the all the required places mentioned with these four parameters should be filled. Absence of any one of them leads to noncompliance.

This parameter showed highest noncompliance. Two departments showed absolute noncompliance. They are department of Pediatrics and Plastic Surgery. This is the most alarming parameter. Most departments had noncompliance more than 60%.

The average compliance rate for SNDT was only 33% with Department of Reproductive Medicine having 60% compliance, else all the others had compliance mostly below 50%.

CHAPTER 5 : DISCUSSION

Health records are useful for a variety of reasons. Their main goal is to keep track of the treatment and services delivered to patients. Health records, on the other hand, must be kept for legal reasons. Health records must be preserved in order to be used as records, they must comply with applicable rules, accrediting criteria, professional practice, and legal norms. These requirements may differ depending on the type of care provided, the legal jurisdiction in which it is administered, and the location of the facility. As a result, an organization must determine the content that must be included in its legal health record, as well as the rules for maintaining that content's integrity. This is true regardless of whether health records are created and stored on paper, electronic, or hybrid media.

It's crucial to retain detailed records not only to comply with licensure and certification standards, but also to assist healthcare providers to demonstrate that a client receives adequate care. A healthcare facility's bylaws or procedures should require medical personnel to complete patient data within a specific length of time, and those who don't ought to have their clinical qualifications revoked automatically. The above study was done in a tertiary care hospital in Bhopal, in the hospital's quality department.

In the study the total sample size was 309, which is according to NABH standards, which suggests if the discharges in a hospital is between 1500- 2000, the sample size should be above 300.

The parameters for the study were set by the Quality Department HOD, which included, Initial assessment sheet variable, progress and daily order doctors sheets, Nutritional screening by dieticians, Nursing records, Consent forms, and Medical Prescription.

The department wise analysis included IPD files randomly selected, and the Departments in the study were, Department of Cardiology(45) , Critical Care Team (11), CTVS (11), Gastroenterology (31), Gynaecology (6), Hematology (6), Internal Medicine (17), Nephrology(27), Neurology(42), Oncology (10), Orthopedics (12), Pediatrics (6), Plastic Surgery (5), Pulmonary Medicine (7), Reproductive Medicine (43), Urology(27).

This study was done in two parts, firstly to identify the compliance of different parameters and further more to check compliance department-wise. The department wise study was mainly done to narrow as to which department has been most non-compliant for which parameter so it can be notified to the concerned authorities.

The above study shows a large discrepancy and clear weakness between the standards established and the findings observed in various departments.

The above analysis shows individual analysis for all the parameter in different parameters', if the average is calculated, it shows the Department of Hematology has

the least compliance, overall (63%), whereas, The Critical Care Team had the highest compliance rate, as per overall average, that is 84%.

Also, if the individual parameters are to be observed, the highest compliance rates were seen for “Nursing Initial Assessment (97%)” and “Frequency, Route, dose of medicine mentioned (97%).”

Whereas, the lowest compliance rates were seen in “SNDT (67%)” followed by “Time taken for Initial Assessment (57%)”.

For SNDT, the highest noncompliance rates were seen with Department of Paediatrics, and Department of Plastic Surgery. Both these departments showed absolute noncompliance.

While, for Time taken for Initial Assessment, the highest non compliance percentage was 84% for Department of Reproductive Medicine.

CHAPTER 6 : CONCLUSION

The study came to the following conclusions: awareness of the completeness of medical records documentation was present only in some areas of recording, mostly with that related to the nursing staff, and with medical prescription.

If observed according to different departments, some departments were more informed than the others, especially The Critical Care Team and Department of Hematology.

These are the following recommendations:

- In each department, a root cause analysis should be performed to determine the cause of the lapse.
- The need of good record keeping should be reinforced to clinical and clerical staff, both from a patient care and research standpoint.
- Rewarding the best department showing highest compliance will enforce a positive attitude, and further educating by emphasizing the importance of complete documentation of medical records should be done through regular trainings.
- The interns/ resident doctors who are mostly responsible for IPD files, should be thoroughly trained about how to fill the records, in a standardized manner.
- The discharging ward in charge before passing on the file to The Medical Records Department, should thoroughly check for discrepancies or absence of any information, and should get it completed within 48hours of discharge.
- In the Medical Record Department, screening of the discharged IPD file should be done, on the day of reception. Incomplete files should be colour tagged and comments should be written, and should be returned to the concerned department.
- The quality department must do a daily audit initially to ensure higher compliance rates, and informing the concerned authorities about the noncompliance found in the records.
- A group of qualified individuals should execute a hospital-based quality improvement effort to boost medical record documenting completion, with periodic random reviews by the NH quality unit.

By demonstrating a significant improvement in the documentation practice of case sheets in this study, it is more useful in explaining the importance of documenting medical records to the medical fraternity in modes of intervention in today's era of evidence-based medical education and rising cases of medical negligence against doctors. However, by having frequent interventions and employing structured papers designed for each department in a user-friendly manner, there is still room for improvement in the documentation process

As per the findings, the facility should focus on mandating patient data documentation in the right aspects of medical and procedural records, which would improve the accuracy

and completeness of patient records documentation while also supporting with NABH certification.

CHAPTER 7: REFERENCES

1. Singh1 P, John S. Analysis of Health Record Documentation Process as Per the National Standards of Accreditation with Special Emphasis on Tertiary Care Hospital 2018 [cited 28 June 2022].
2. Mahanta P, Yadav M. Documentation of Medical Record in Day-to-Day Medical Practice [Internet]. 2015
3. ALLAH A. AHMED H, EL-SALAMI R, AYAD K, EL-DEEB A. Assessment of Medical Records Documentation in Secondary Health Care Facilities in Kafr El-Sheikh and El-Mahalla El-Kubra Cities Mjcu.journals.ekb.eg. 2019
4. Rajendiran G, Kagne R. View of PRACTICE OF DOCUMENTATION AT CASUALTY OF TERTIARY CARE HOSPITAL – AN INTERVENTIONAL STUDY .Ijop.net. 2011
5. Khan MA, Nilima N, Prathibha J, Tiwary B, Singh M. Documentation compliance of in-patient files: A cross sectional study from an east India state. Clin Epidemiol Glob Health [Internet]. 2020 ;8(4):994–7.
6. Patnaik SK, Singh MM, Sridhar B. Medical audit of documentation of inpatient medical record in a multispecialty hospital in India. Int j Res Found Hosp Healthc Adm [Internet]. 2017;5(2):77–83.
7. Tola K, Abebe H, Gebremariam Y, Jikamo B. Improving completeness of inpatient medical records in Menelik II Referral Hospital, Addis Ababa, Ethiopia. Adv Public Health [Internet]. 2017;2017:1–5.
8. NABH 5th Ed. [Internet]. Nabh.co. 2020

Annexures

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