Internship Training
at

Aakash Healthcare, Dwarka, New Delhi
(01 Feb - 30 April 2018)

Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital

By
Col Rajeev Khatri
PG/16/040

Under the guidance of
Dr A K Khokhar

Post-Graduate Diploma in Health and Hospital Management
Batch 2016-18

International Institute of Health Management Research,
New Delhi
2018

Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital (Aakash Healthcare, Dwarka, New Delhi)

(01 Feb - 30 April 2018)

Internship and Dissertation Report Submitted in Partial Fulfillment of the Requirements for the Award of

Post-Graduate Diploma in Health and Hospital Management

Batch 2016-18

By

Col Rajeev Khatri
PG/16/040
(On study leave)

Under the guidance of

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International Institute of Health Management Research, New Delhi

2018

Abstract

Review of Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital

(Aakash Healthcare, Dwarka, New Delhi)

Aim of the study was to audit the patient medical documents in In-patient wards, ICUs and MRD section for contributing towards patient safety and physician defensibility in a super specialty hospital. **objectives** of the study was to establish role of medical documentation in the patient safety and physician defensibility, to identify the likely non-medical errors by doctors and nurses in patient medical documentation having direct bearing on safety of patient, to utilize internal audit as a possible means to patient safety and to recommend a broad mechanism of internal audit so as to bring behavioral changes in the approach to documentation as means to improve patient safety in a hospital. In **methodology,** the study was carried-out in a super specialty tertiary care hospital (Aakash Health Care) from 01 Feb to 30 Apr 18. It is cross sectional descriptive study design. A sample of 530 patient medical documents folders was audited for the study and non-probability convenience sampling technique was used. For study tool existing patient medical documentation audit form was utilized. Major **findings/results** related to various patient medical documents covered aspects (non medical errors) of non-use of stamps, illegible signatures, not mentioning the time and plan of treatment, non endorsement of pain score, non counter signature by primary consultants, lack of endorsement of initial assessment and time of admission in the clinician progress notes, prescription of medication in block letters was not done, name and signature of doctor was not legible, nutritional assessment was not carried out within 24 hrs in number of cases etc. Ultimate aim of any healthcare organization should be to have zero tolerance towards patient safety. To **conclude** it is recommended to consider audit process as a method for positive behavioral change thus improving standards of medical care and not just be guided by the requirement of accreditation and legal framework only.

Key Words Patient Medical Documentation, Patient Safety, Internal Audit, Non medical Errors, Quality Improvement, Behavioral Change.

(Completion of Dissertation from respective organization)

The certificate is awarded to

Col Rajeev Khatri

in recognition of having successfully completed his

Internship in the department of

Medical Record Department

and has successfully completed his Project on

Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital

from 01 Feb – 30 Apr 2018

Aakash Healthcare, Dwarka, New Delhi

He comes across as a committed, sincere & diligent person who has a strong drive and zeal for learning.

We wish him all the best for future endeavors

Dr Kamal K Parwal
Chief of Medical Services
Aakash Health Care
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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Col Rajeev Khatri**, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at Aakash Health Care, Dwarka, New Delhi from 01 Feb 18 to 30 Apr 18.

The student has successfully carried out the study **"Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital"** which was assigned to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

We wish him all success in all his future endeavors.

Dr Supten Sarbadhikari
Dean (Student Affairs and Academics)
IIHMR, New Delhi

2.5.18

Dr AK Khokhar
Dean (Training),Mentor
IIHMR, New Delhi

Certificate of Approval

The following dissertation titled **"Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital"** at **"Aakash Healthcare, Dwarka, New Delhi"** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
Prof. V.K. TIWARI	16.5.18
Prof. S.N. SARBADHIKARI	
Ms. KIRTI UDAYAI	

Certificate from Dissertation Advisory Committee

This is to certify that **Col Rajeev Khatri,** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He is submitting this dissertation titled **Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital** at **IIHMR, New Delhi** in partial fulfillment of the requirements for the award of the **Post-Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Dr AK Khokhar,
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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Col Rajeev Khatri**, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has successfully completed internship training at Medical Record Department at Aakash Health Care, Dwarka, New Delhi from 01 Feb 18 to 30 Apr 18.

During his tenure with the organization he has successfully completed the project on the topic **"Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital".**

During the tenure of his association with the organization, I found him sincere, hardworking and focused in the tasks and assignments allotted to him. Throughout the training he was found to be a keen learner and his performance during training was found to be excellent.

I wish him all success in all his future endeavors.

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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Reviewing Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility in a Super Specialty Hospital (Aakash Healthcare, Dwarka)** and submitted by Col Rajeev Khatri, Enrollment No. PG/16/040 under the supervision of **Dr A K Khokhar**, for the award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from **01 February to 30 April 2018** 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.

(Col Rajeev Khatri)
PG/16/040
(On Study Leave)

FEEDBACK FORM

Name of the Student: Col Rajeev Khatri

Dissertation Organisation: Aakash Health Care, Dwarka, New Delhi

Area of Dissertation: Audit of Patient Medical Documentation as Means to Enhance Patient Safety and Physician Defensibility (Medical Documentation Practices)

Attendance: 100%

Objectives achieved: Yes

Deliverables: All met

Strengths: Time management, sincerity and focus towards tasks assigned

Suggestions for Improvement: Health Information and Digital Technology

Suggestions for Institute: None

Signature of the Organisation Mentor (Dissertation)

Date:

Place: Aakash Health Care, Dwarka, New Delhi

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CONTENTS

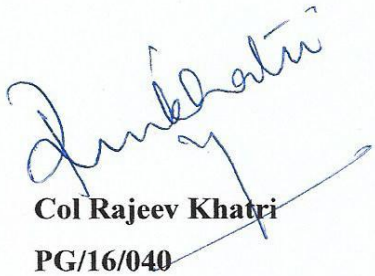
ACKNOWLEDGEMENT

I express my gratitude and sincere thanks to Dr A K Khokhar, Dean (Training), at International Institute of Health Management and Research, New Delhi, for his valuable guidance and co-operation in my endeavour.

I am thankful to the management of Aakash Healthcare, Dwarka, New Delhi, for giving me the opportunity to carry-out Internship-cum-Dissertation in their esteemed hospital. I express my heartfelt gratitude to the functionaries and the staff of all medical and non-medical administrative departments of the hospital who were helpful in familiarizing to me their tasks and duties performed by them. Their kind cooperation assisted me to have a holistic view of various departments and their linkages, thereby, providing me with an on-the-job insight into the functioning of a modern and technologically advanced Hospital.

I wish to express my sincere gratitude and heartfelt thanks to Dr Kamal K Parwal, Chief Of Medical Services, Aakash Healthcare, for his foresight and full support, without which I wouldn't have been able to set my objectives for my Dissertation. His mentoring and guidance during the Internship provided me with an opportunity wherein I improved my understanding of Medical Record Department of a hospital. During the three months training, I was given opportunity to be part of audit of Patient Medical Documentation which helped me in observing the functioning of Medical Record Department and various wards. The training schedule ensured that there was adequate in-build flexibility provided to me to understand finer aspects of patient safety and physician defensibility. Thus the Internship-cum-Dissertation training has equipped me with an expertise which will ensure my appropriate employability as hospital administrator within the Army.

My special thanks to Mr VK Harnal, MRD Manager and Mrs Indu Bala, Medical Record Technician, Medical Record Department, for being there to answer all my queries, even the very basic ones at times, pertaining to the hospital.



Col Rajeev Khatri
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ACRONYMS / ABBREVIATIONS

1. IPD- In Patient Department
2. NABH- National Accreditation Board for Hospitals & Healthcare Providers
3. MAS-Marker Assisted Selection
4. ENT- Ear Nose Throat
5. ICU-Intensive Care Unit
6. CCU- Critical Care Unit
7. CTVS- Cardio Thoracic Vascular Surgery
8. IT-Information Technology
9. HDU – High Dependency Unit
10. OPD-Out Patient Department
11. NHS- National Health Scheme
12. IOM- Institute of Medicine
13. HAI- Hospital Acquired Infection
14. FHL- Functional Health Literacy
15. Doc's IA- Doctor's Initial Assessment
16. Nursing IA- Nursing Initial Assessment
17. NA-Not Applicable
18. Doc's CP- Doctor's Care Plan
19. Nursing CP- Nursing Care Plan
20. MRD- Medical Record Department
21. BOO- Board of Officers
22. HIS – Hospital Information System
23. LAMA – Leave against medical advice
24. PC – Partially Complete

SECTION 1: OVERVIEW

INTERNSHIP REPORT

Aakash Healthcare, Dwarka, New Delhi


Aakash Healthcare
Super Speciality Hospital
We care, He cures
VISION
MISSION
VALUES
I C A R E


Aakash Healthcare
Super Speciality Hospital
ICARE

SECTION 1: OVERVIEW

INTERNSHIP REPORT

(01 Feb - 30 Apr 2018)

Introduction

1. Mr. J.C. Chaudhry, the Chairman of Aakash Institute started teaching with one institute in 1988 with 12 students. Today after 30 years of perseverance and excellence, Aakash is a household brand, with more than 150 centers across the country, training more than 1,25,000 students every year, turning them into accomplished medical and engineering professionals.

2. Aakash Healthcare is a subsidiary of the Aakash Group, and is a state of the art healthcare facility and the first smart hospital in this part of the city. Their patient-centric policy, erudite doctors and compassionate staff offer the best in class healthcare for everyone. Healthcare was a palpable choice for the parent organization, since this sector shall benefit the institute's enormous alumni network spread across continents.

3. In the month of November 2011, Dr. Aashish Chaudhry envisioned a smart orthopedic clinic for the people of Dwarka, New Delhi, which is Asia's biggest residential colony. The clinic thrived as a result of his ethical and transparent healthcare practices, and in present-day Dr. Chaudhry is a celebrated orthopedic surgeon, having performed innumerable successful orthopedic surgeries, giving agility and the ease of movement to the incapacitated.

4. Aakash Healthcare is a super specialty hospital, with state of the art infrastructure, path breaking technology, offering unrivalled healthcare services. Dr. Aashish Chaudhry, the founder and Director of Aakash Healthcare, aims to make Aakash Healthcare the most preferred healthcare brand by providing compassionate, inexpensive, and world class healthcare services, with a talented team of doctors, and ultra-modern technology, ensuring speedy recovery.

5. **Infrastructure Highlights**

(a) 230 Beds in Phase 1.

(b) 70 Bedded Medical and Surgical Critical Care Unit.

(c) 24x7 Cardiac Emergency & Trauma Services.

(d) 15 Bedded Dialysis Unit.

(e) Advanced Neonatal ICU.

(f) Ward Bed Options - Suite, Deluxe, Twin Sharing and Economy.

(g) 8 Modular OTs.

(h) Flat Panel Cath Lab and State-of-the-art diagnostic equipments - 3.0 Tesla MRI, 128 slice CT scan, Flat panel C-Arm, and 4-D Ultrasound.

(j) Automated Waste & Laundry Management System.

(k) Pneumatic Chute System.

6. Aakash Healthcare is under the process of obtaining the accreditation by the National Accreditation Board for Hospitals & Healthcare Providers (NABH), accreditation programme for healthcare organizations. It also aims to obtain accreditation from National Accreditation Board for Testing and Calibration Laboratories (NABL) as well as international bodies.

Vision

7. To become the most desired heath care brand by providing compassionate, caring and world class service with the help of talented team of doctors, professionals and latest technology.

Mission

8. To achieve highest patient satisfaction index by delivering patient centric best healthcare service amongst the local and extended community.

Values

9. Aakash Healthcare values define their organization and their ethos and what they stand for.. ***ICARE***. These values are:

I **:** Integrity

C **:** Compassion

A **:** Accountability

R **:** Respect

E **:** Excellence

Organization Profile

10. Aakash Healthcare, Dwarka provides Centre of Excellence in following Departments:

(a) Cardiology and Cardiac Surgery.

(b) Orthopedics and Joint Replacement.

(c) Neurology.

(d) Pulmonology.

(e) Oncology.

(f) Urology Sciences.

(g) Clinical Nutrition.

(h) Plastic and Cosmetic/Reconstructive Surgery.

(j) Dentistry.

(k) Endocrinology.

(l) ENT and Hearing and Speech.

(m) Internal Medicine.

(n) Ophthalmology and Refractive Surgery.

(o) Trauma and Emergency (24 x 7).

(p) Obstetrics & Gynecology.

(q) Physiotherapy.

(r) Blood Bank and Transfusion Medicine.

(s) Dermatology.

(t) Mental Health and Behavioural Sciences.

(u) Radiology.

(v) Critical Care.

Patient Information

11. **Hospital Facilities**

(a) **Rooms**: At Aakash Healthcare there are various room categories as under :

(i) **Suite:** Suite at Aakash Healthcare has an adjacent living room with a separate washroom, Wi-Fi Connectivity, small refrigerator, a TV, a microwave, two lockers for safekeeping and personal belongings, full time nursing staff, a housekeeper, and integrated dining facility.

(ii) **Deluxe:** Deluxe room at Aakash Healthcare has an attendant bed, Wi-Fi Connectivity, small refrigerator, a TV, two lockers for safekeeping and personal belongings, integrated dining facility for the attendant and full time nursing staff available.

(iii) **Single Room:** Single room at Aakash Healthcare has an attendant bed, Wi-Fi connectivity, small refrigerator, a TV, a locker for personal belongings, and integrated dining facility.

(iv) **Twin Sharing:** Twin sharing rooms at Aakash Healthcare has a bed for attendant, a TV and a locker for personal belongings.

(v) **Multi Bed Room:** Multi bed room at Aakash healthcare has chairs and a locker for personal belongings and essentials.

(b) **Cafeteria**: Cafeteria of Aakash Healthcare opens all day and night, with an assorted range of food and beverage options to choose from. It is located at the ground floor, and is open to employees and visitors. Another healthy food corner setup by Pappa Curry is open from 8:00am to 9:00 pm.

(c) **Laundry Services**: Provision of Laundry services have been catered for in the hospital.

(d) ATM.

(e) **Lounge for visitors**: Easy chairs have been provided on the 2nd floor.

(f) **Internet Access**: The entire facility is Wi-Fi enabled.

(g) **Travel Desk**: Aakash Healthcare has provision of travel desk.

(h) **Pharmacy**: Aakash Healthcare has a 24x7 pharmacy located on the ground floor, and one can get medicines anytime one wants.

(i) Prayer and meditation room.

Medical Record Department

12. During the Internship period I was attached with the Medical Record Department of the Aakash Healthcare, Dwarka. The organization of Medical Record Department comprises of one Senior Manager assisted by a MRD technician.

13. While being with the MRD of the Aakash Healthcare, Dwarka, I was provided with the opportunity to be part of audit of the Patient Medical Documents. For the audit, I had to go to the IPDs and ICUs of the hospital where the Patient Medical Documents were inspected including documents in the MRD Section itself. Audit as such is the evaluation of data, documents and resources to check performance of systems so that they meet the specified standards. It is a tool to reveal what is being done at present, and is often then compared with what has been done earlier, or what is the intention to achieve in the future. The details of Patient Medical Documentation Audit are as under:

(a) **Patient Medical Audit Checklist**. The detailed checklist (Appendix – A) as used to formulate the audit format form.

(b) **Patient Medical Audit Format**. The standard format (Appendix – B) was used for the audit of the Patient Medical Documentation.

(c) **Sample Size** Total number of Patient Medical Documentation folders audited was **530** (Five Hundred and Thirty) as per details in (Appendix – C).

14. The details of assessment of the data is as per the details given below:

Ser No	Name of Ward/ICU/MRD	Appendix
(a)	MRD Section	D
(b)	ICUs - 2nd floor	E
(d)	IPD- 5th floor	F

Recommendations

15. The recommendations based on the general analysis of data and observations during the visits to various departments which can go a long way in improving the Patient Medical Documentation:

(a) **Training-Case Studies**. There is a tendency to make clerical mistakes during the documentation of a formatted document. Also at times the entries are made just for audit purposes thereby not giving right picture of the quality of treatment. Hence to highlight the importance of correct and appropriate documentation the senior staff might share incidents during their career which might be used for teaching the importance of Patient Medical Documentation.

(b) **Use of IT**. In the wards and ICU, Nurse Initial assessment and Initial Nutritional Assessment were done directly on the computer post 15 Mar 18. There is legal requirement of keeping hard copies of the medical document; however, the feasibility of increasing the usage of IT throughout the hospital should be encouraged without compromising on the legal requirement of keeping hard copy of medical documentation.

(d) **Training of the Medical Staff.** Training of medical staff in the legal implication of the correct documentation should be done regularly. The aspect of vicarious responsibility should also be highlighted to stress on the proper signatures on the patient medical documents.

(e) **Formation of Quality Circles**. Quality Circles(QCC) should be formed among Resident Doctors, Nursing Staff, House-Keeping, etc so that the experience available amongst the people working on ground is shared amongst themselves for overall benefit of all stake holders.

(f) **Allocation of Helpers** in each Department for ensuring the completion of documents so that the documentation remains focused towards patient safety.

(g) **Increase the Pre-induction Training Period** of the new staff and regular structured refresher training for the complete staff.

(h) **Involving of Functional Staff in the Audit of all Departments** as first step in the audit of documentation. For that the staff from both medical and non medical departments can be detailed for carrying out audits on the monthly basis. This can help in the self assessment by the staff and bring in behavioural changes.

Other Key Learning

(a) Understood the daily working of various administrative departments.

(b) Learned the purchase process for procuring drug in the pharmacy.

(c) Familiarized with the HR department and policies of the Hospital.

(d) Understood the Bio Medical Waste Management of the Hospital.

(e) Developed specific learning about the project study undertaken.

(f) The job of a hospital administrator is dynamic, flexible and is full of challenges.

(g) Quality control and patient satisfaction are a dynamic process.

(h) Shortage of trained technical manpower/multi-tasking of the available manpower leads to lesser patient satisfaction.

(i) Inclusion of Comprehensive Annual Maintenance Contract (CAMC) during the preparation of supply order/initial documentation during procurement of equipment for hospital, leads to an easier maintenance post installation.

SECTION 2: DISSERTATION

REVIEWING PATIENT MEDICAL DOCUMENTATION AS MEANS TO ENHANCE PATIENT SAFETY AND PHYSICIAN DEFENSIBILITY IN A SUPER SPECIALTY HOSPITAL

CHAPTER 1: INTRODUCTION

Introduction

1. Although Hippocrates said first, do no harm over 2000 years ago and many hospitals have long hosted conference to discuss errors (Morbidity and Mortality conferences), until recently medical errors were considered an inevitable by-product of modern medicine or the unfortunate detritus of bad provider [i]. Inherent in this aspect of no harm to the patient is the aspect of all efforts taken for curing the patient and to take measures to prevent hospital acquired infections and adverse events and ensure patient safety.

2. **Patient safety** is a discipline that emphasizes safety in health care through the prevention, reduction, reporting, and analysis of medical error that often leads to adverse effects. Recognizing that healthcare errors impact 1 in every 10 patients around the world, the World Health Organization calls patient safety an endemic concern. Indeed, patient safety has emerged as a distinct healthcare discipline supported by an immature yet developing scientific framework.

3. Modern Hospitals have become complex organizations. They are not only providing 24X7 multi-specialty medical care but also a host of other hospitality based services to the patient. This has increased the number of people involved in looking after a patient during the period of healthcare. Hence, any patient entering a hospital may have to undergo following stages or places wherein there will be interaction various services both medical and non-medical: [ii]

(a) Reception.

(b) OPD of various specialties.

(c) IPD.

(c) Laboratory.

(e) Radiology.

(f) Emergency.

(g) ICU/HDU/CCU.

(h) Pharmacy.

4. While being in these areas, a patient may be exposed to various risks which can affect their safety due to the medical treatment itself or otherwise. The reason for the risk to the patient can be the human error, faulty procedure or malfunction of equipment/facility. Hence the total concept of healthcare has undergone paradigm change to cater for all aspects which affects the patient care. This has led to emergence of standardization in the processes for the safety of a patient.

5. The treatment *per se* depends on the subjective assessment of the doctors but from the perspective of a Hospital Administrator also one can influence patient safety by being involved in the development of the ways by understanding as to how patient safety works (e.g., high- reliability design, use of safety sciences, methods for causing change, including cultural change)[iii] and one of the simplest meeting ground for achievement of the **Patient Safety Goals** can be through the maintenance of **Patient Medical Documentation based on standardization.**

6. The process of evolution of the medical documentation in any hospital used to be based on the past experience of the healthcare organizations. However, these days this uncertain and uneven process of self learning has been replaced by taking the assistance of the accreditation processes which have evolved in the developed countries. In the developed West the accreditation in healthcare started in 1990‘s whereas in our country this was set in motion by establishment of NABH in 2006. There is a process followed for the accreditation which leads to the development of various check lists which are standardized. These check-lists form the back-bone for establishing standardized processes in a healthcare organization for ensuring patient safety. The accreditation leaves enough scope for adjustments which can be made with regards to the requirements of Patient Safety as per the facilities existing in an organization. These adjustments can be made by matching of the existing facilities with the vision/mission statements of the healthcare organization and the laying down of a suitable patient safety definition and the patient safety goals.

7. There has to be mechanism developed to continuously assess the patient safety parameters, however, in an upcoming accredited healthcare setup, the criteria for comparison may not be available. The past data required may not provide adequate inputs for evaluation which can assist in arriving at logical conclusions regarding the Patient Safety. In such cases, a lot of supervision is required over the processes which are being established so that a professional culture evolves in the outfit. As such, if the healthcare organization is accredited then the processes are followed as per the documented Standard Operating Procedures and every aspect is required to be documented. Hence, if proper Patient Medical Documentation is maintained in an accredited hospital, then its audit itself can act as one of the indicators for the management to assess continued maintenance of the standards of patient safety.

8. Medical Record or health record or medical chart is a systematic documentation of a patient's medical history and care. Medical records speak volumes on and about, inception and progress of Hospital, retrospective and prospective statistical analysis, trends of cases admitted to the hospital and so on. Medical Records must be meticulously and systematically compiled, preserved and protected for the benefit of hospital, doctor and patients. Accurate and adequate medical records are essential for clinical, legal, fiscal and research purposes and is based on the principle **"People forget, but records remember".**

9. Medical records department has become an essential department of every hospital. The information from the medical records department can be utilized for monitoring and controlling the quality of patient care, in assessing the performance of the medical staff, in assessing the utilization of the hospital resources and in compiling data for research purposes.

10. Medical record is personal document and there are many ethical and legal issues surrounding them such as third-party access and appropriate storage and disposal. The maintenance of complete and accurate medical records is a requirement of health care providers. The medical record serves as the central repository for planning patient care and documenting communication among patient and health care provider and professionals contributing to the patient's care. An increasing purpose of the medical record is to ensure documentation of compliance with institutional, professional or governmental regulation.

11. The **medical record is both an indicator of the quality of care, and a means of improving this quality**. In addition to being a source of information and a means of communication in the care of patients, the medical record is also becoming a document of increasing **legal importance**.

12. The objective of the Medical documents can be different to various stake holders even though the **safety of the patient should remain the pivot** of the whole exercise. The possible objectives of the creation of the Medical Record in a healthcare organization is to have sufficient data written in sequence of events to justify the diagnosis, treatment and end result of all patients treated in a hospital, keep them under safe custody and make them readily available as and when required for the patient, the doctor, the hospital administrators, for medico legal purpose and for external reporting as follows : [iv]

(a) **Patient**. For Patient, the medical record;

(i) Serves to document the clinical history and activities of patient treatment.

(ii) Serves to avoid omission or repetition of diagnostic and therapeutic measures.

(iii) Assists in continuity of Care even in future illness whether it requires attention in or out of the Hospital.

(iv) Serves as an evidence in Medico-legal Cases.

(v) Give necessary certification for employment purposes.

(b) **The Doctor**. For The Doctor, it

(i) Assures quality and adequacy of diagnostic and therapeutic measures undertaken.

(ii) Serves as an assurance of continuity of medical care.

(iii) Evaluates Medical Practices.

(iv) Protection in litigation.

(c) **Hospital Administrators**. For Hospital Administrator, it

(i) To document the type and quantity of work undertaken and accomplished.

(ii) To evaluate proficiency of Medical Staff for administrative and clinical purposes.

(iii) To evaluate the services of the hospital in terms of accepted norms and standards.

(iv) To serve as an Administrative record and Performance.

(v) To assist in futures Programmers for Planningand developments of hospital.

(d) **Medico Legal Purposes**. For Medico Legal Purposes, it serves

(i) As a documentary evidence

(ii) To dispose claims of the Insurances.

(iii) For Patient‘s WILL to indicate if the patient was of normal mental state or not.

(iv) Malpractice Suits.

(v) Authorization for operation etc. signed document for consent for operation will prove that the Patient / Relative have allowed the performance of such Procedure.

(vi) Criminal cases – as a Potential Document.

(e) **External Reporting**. Development of Hospital Performance Statistics, Statistical and epidemiological Data are needed to implement and manage medical care planning and to obtain Health Indicators to monitor and evaluate their effectiveness for Hospital Management as follows:

(i) Bed Occupancy Rate.

(ii) Average No. of Out Patients.

(iii) Average No. of Admissions.

(iv) Sex wise Admissions.

(v) Average Length of Stay of Patients.

(vi) Gross and Net Death Rate.

(vii) Number of Types of Operations performed (Major & Minor).

(viii) Number of X-ray / CT Scan, Ultra Sound etc.

(ix) Laboratory Tests.

(x) Information about Institution Deaths (Deaths occurring over 48 hrs).

(xi) Non Institution Deaths (Deaths occurring under 48 hrs).

(xii) Total Number of Babies born in a hospital. (Sex-wise distribution /sex ratio /Still Births).

(xiii) Daily Census of the Hospital.

13. The management of the present day hospitals is heterogeneous mix of people from medical and non-medical fields. The workers from non-medical fields too have assumed significant importance in healthcare and compliment the treatment of the patient. As such there is an obvious feeling of superiority amongst the doctors over the non-medical people in the hospitals set-ups and they consider themselves to be above scrutiny. Therefore, the healthcare set-up should evolve procedures where in the over-all functioning provides an integrated and holistic approach to patient care to ensure that the patient safety remains central to all activities.

14. In Indian context, the basic issue in general is the indifferent attitude towards the basic patient safety which is rooted in the culture and upbringing of those involved in the healthcare sector. Historically, as a civilization we are not known to be good record keepers and feast on the mythology. We tend to mystify and glorify the curative powers. Our country missed out on the revolutions through the scientific and technological advancement which is evident in the medical field too. It becomes more prominent in the medical field wherein cultural background coupled with efforts of medical professionals to dominate has led to evolution of standards which leads to shifting of focus from patient safety to the evasion of the likely legal tangles arising out of the errors during the course of treatment. The basic focus of the medical care should always be Patient Safety and if the approach to Patient Medical Documentation is only covering up legally then it will lead to lengthy and clerical documentation. Hence, during the initial medical qualification study stage itself there should be efforts to inculcate an approach which is patient centric and efforts should be to hone up skills including maintenance of documents which are oriented towards patient safety. Specific training and supervision in prescription should be emphasized during teaching to minimize related medical errors because the prescription errors may lead to adverse drug events.[v] Hence there is requirement of evolving procedures which are followed as drills and are developed as second nature among all stakeholders to improve Patient Safety keeping pace with the present times.

15. All organizations should have mechanisms to introspect to be able to improve continuously. For that to happen, there should be a hindrance-free flow of information both laterally and vertically. The basic parameter, in case of healthcare set-up, is the interest of the patients; however, to maintain the correct reporting in all circumstances from the people directly dealing with the patient, it is important that the information is not used against them. It should be comparable to an individual improving his looks by standing in front of mirror. Quality Department can directly and positively influence patient safety by coordinating amongst both medical and non-medical departments an internal audit mechanism which can actively effect the improvement of overall medication and patient safety. This can be in addition to the audit by Medical Records Department (MRD) which primarily focuses on completing them legally as per the standards being followed.

16. **Medical Audit**. Evaluation of quality of patient care based on measurable outcome criteria which can be applied to significant numbers of patients' records for purpose of documenting and improving provider performance and overall **quality of care**.

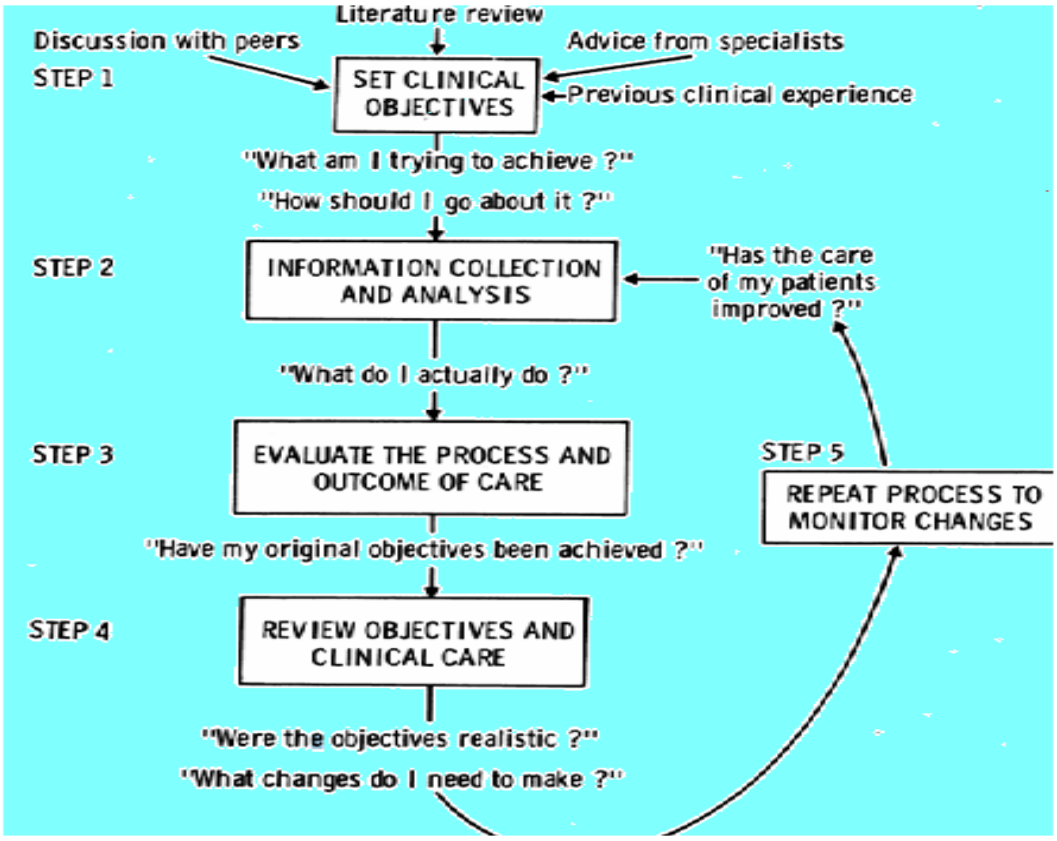

Figure 1.1 : The Steps of Medical Audit

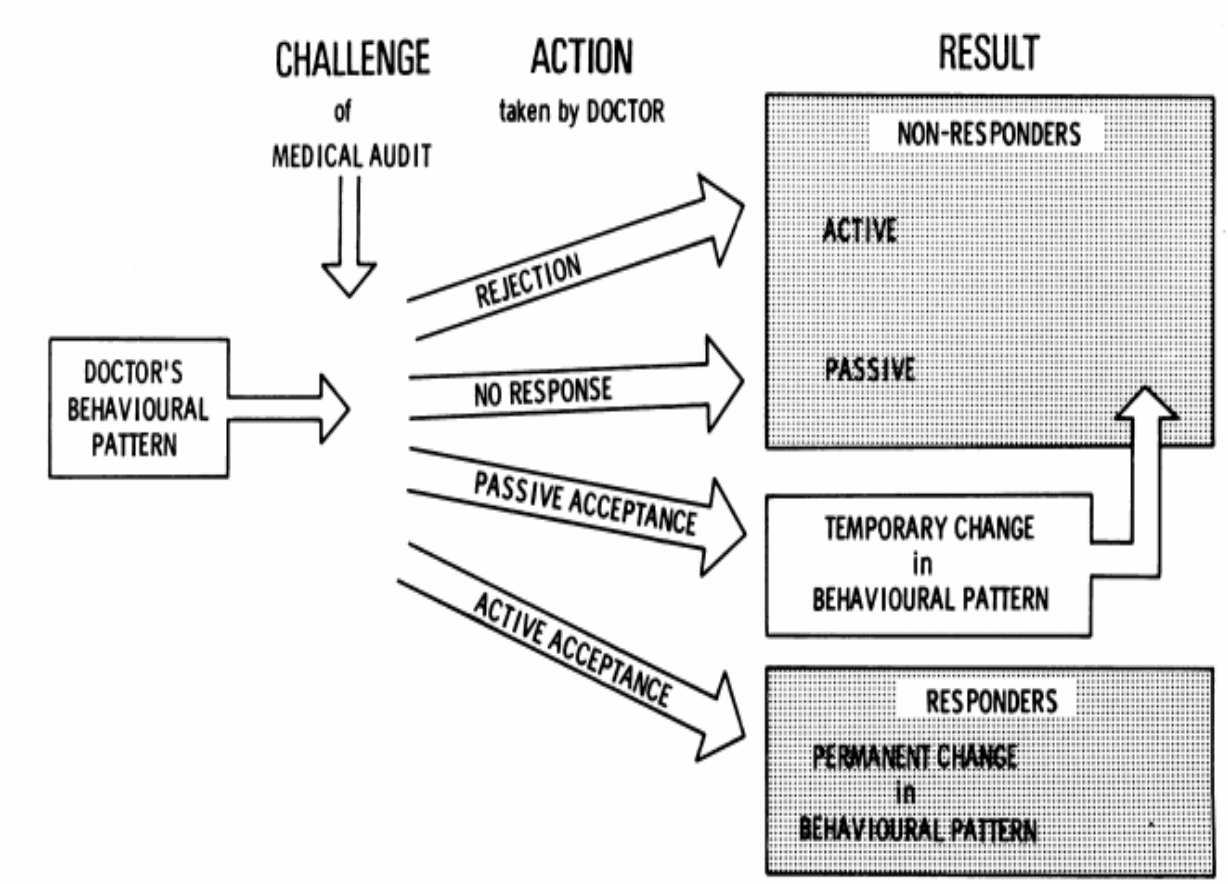

Figure 1.2 : The Possible Behavioural Change After Medical Audit

CHAPTER 2: REVIEW OF LITERATURE

PATIENT SAFETY

17. Despite all known power of modern medicine to cure and ameliorate illness, hospitals may not be completely and fully safe places for healing. They can harm the patients with Hospital Acquired Infections (HAI), accidents, sentinel events, medication errors etc. The most important response to this realization was the growth of interest of all stake-holders in patient safety which led to it developing into a discipline, complete with an integrated body of knowledge and expertise.

18. The authentic and reliable data regarding the parameters indicating the Patient Safety norms pertaining to India are not available. However, such data in the developed countries are maintained and are available for interpretation. For instance research carried in United Kingdom suggests that 1 in 10 patients admitted to hospital suffer an adverse event.

19 Although the Institute of Medicine (IOM) defined safety as freedom from accidental injury, patient safety as a discipline or field of inquiry and action has not been fully defined to date in the major consensus statements of the organizations that have propelled its existence. It is a subject within health care quality.

20. Patient safety is now recognized in the developing countries like India also with the help of world awareness fostered by the WHO‘s World Alliance for Patient Safety. One basic requirement to be adopted by a healthcare organization is to articulate a new approach which has a clear evaluation of its resources and its impact on the patient safety outcomes. A lot of aspects of patient safety have been expressed and implemented by established readers, and their model can be taken as reference points. The accreditation also provides various standardized expectations for the patient safety but even that is subjective. Within an organization the evolution of the Patient Safety Goals for a hospital should be first derived from the vision and mission statements given by the leader of the organization. Then these parameters should act like the backbone for reaching the desired standards for Patient Safety after considering all factors.

21. Patient Safety as a subject is generally absent from even the basic building block of the health-care, indicating the low priority given to safe patient care. Safe patient cares can only be improved if health-care workers receive correct training and are assisted to keep abreast with current knowledge on the subject. In a developing country like ours, a most pragmatic approach by a healthcare organization would be to focus on aspects of up to date training and assessment and make efforts to put in place mechanisms for institutionalized on-the-job learning.

22. To achieve the goals of patient safety the healthcare organizations should understand why people make errors[vi], and in so doing, it must learn from the experiences of developed world without just adopting the accreditation. One must learn from the evolution of the process of patient safety and bring in the conviction of following the norms set in by the standardization. It will be akin to upgrading equipment along with the transfer of technology. Hence, to arrive at the very basics of patient safety, the following stages can be identified from the evolution process of patient safety in the developed countries:

(a) **Limiting Blame**. The traditional approach assumed that well-trained, conscientious practitioners do not make errors and equated error with incompetence and regarded punishment as both appropriate and effective in motivating individuals to be more careful. This led to practitioners rarely revealing mistakes, and patients and supervisors were frequently kept in the dark. Low reporting made learning from errors nearly impossible, and legal counsel often supported and encouraged this approach in order to minimize the risk of malpractice litigation. Thinking began to change in the 1990s in response to several kinds of new information.

(i) First, medical injury was understood to have been taking place often then realized where injuries were preventable.

(ii) Second was the thought process that active errors at sharp end where practitioners interact with patients or equipment result from latent errors. Latent errors are upstream defects in the design of systems, organizations, management, training, and equipment that lead individuals at the sharp end to make mistakes. To punish individuals for such mistakes seemed to make

little sense, since errors are bound to continue until underlying causes are remedied.

(b) **Systems Thinking**. This involved reduction of mistakes through design features, standardization and simplification.

(c) **Transparency and Learning**. The idea that adverse events could yield information was applied in health care. Specialists on the subject emphasized that more the error related information was disseminated and shared, better lessons could be implemented all around [vii].

(d) **Culture and Professionalism.** People involved with health care delivery organizations were increasingly encouraged to think in terms of building high-reliability organizations. It involved a culture change and bringing in high level of professionalism wherein the clinicians could disclose all relevant facts to injured parties.

(e) **Accountability for Delivering Effective, Safe Care**. Importance of litigation to prevent ill behaviour and individual accountability for actions and procedures linked to adverse outcomes became embedded in both medicine and law of torts.

(f) Medical field began to establish methods for accountability as the treatments became more effective. Scientific methods were essential in that development, and medical profession has adhered to it.

(g) Due to developments of highly effective and safer health care delivery systems which commenced focusing on hospitals, standards for these health care delivery systems were understood to be necessary and hence certification of hospitals and other health care delivery systems followed.

(h) Recent realization that health care delivery system and its components also needed to be accountable for learning from errors was harder to tackle. Steps were taken to reform and bring in institutional accountability for safe practices.

23. As the healthcare systems evolved in the west, a number of mechanisms got incorporated as part of evolution and involved following to achieve patient safety:

(a) **High-Reliability Design**. The fundamental mechanism by which patient safety can be achieved is high-reliability design, which includes many components. Thus, the irreducible unit of patient safety delivery is multifaceted; all components of health care delivery must be integrated into a system that is as reliable as possible under complex conditions.

(b) The concept of a multilayered system, which includes the institution and its organization, the professional team and the individuals it includes, and the technology in use.

(c) Error traps (i.e., unpredictable situations in which error is highly likely) are another vivid concept on which safety sciences focus.

(d) For instance, patient safety designs can be thought of as falling into two types: those that are for types of routine care that varies little and can best be managed with protocols allowing for little deviation, and those that are for unique situations where on-the-spot innovation and significant deviation from protocol are required.

24. Invariably the main reason responsible for the failure of any system is the human aspects and factors. This concerns the interplay and interaction between system and human beings. During medical training topics like task management, multidisciplinary team working, risk perception, decision making and recognition of personal and technological limitations all contribute to a deeper understanding of error and have been shown to prevent error. Students are often encouraged to learn based on the principle of see one, do one, teach one. This is not an appropriate method of ensuring safe health care. Health care workers who are not trained properly can be a major contributing factor leading to adverse events.[viii] Healthcare organizations cannot do much about the basic training of its staff, however, it can adopt various means to update and upgrade its staff so as to proactively address the issue of Patient Safety. In present day multi-specialty hospitals presence of personnel from varied fields also provide expertise from other fields which may provide readymade insight into training methodology being followed in those fields.

ROLE OF COMMUNICATION IN PATIENT SAFETY

25. Effective communication is the key to patient safety and is a major cause of errors. Effective communication is also crucial to managing an incident once it has occurred. Communication in a health-care setting may be divided into two types: those between one health-care worker and another, and those between the patient (and/or family member) and a health-care worker. Each has different elements that can contribute to medical errors.

Communication Between Patients and Health-Care Workers

26. The patient/ health-care worker interaction is complex. Part of the complexity is due to changing expectations. Today, patients usually look to their health-care worker to help them navigate through a complicated system and expect communication to be based on shared decision-making.

27. During an interaction between a patient and a health-care worker, various forms of communication may be used:

(a) **Non-verbal communication**. The clues that patients pick up from their health-care worker‘s body language have been shown to be crucial in the way the patients interpret the information they are given.

(b) **Verbal Communication**. The studies have shown differences between how health-care workers think they are communicating and how patients perceive the transfer of information. One of the most important factors that contribute to communication is the ability of patients and health-care workers to communicate in the same language. Studies have shown that providing interpreters is not only better for patients but also cost-effective. What is not clear is how best to provide such interpretation. All are agreed that professional interpreters are the most accurate. However, they are not always available and are costly. Patients prefer family members as a second best, whereas health-care workers seem to prefer using telephone interpreting.

(c) **Written Information**. The final method that may be used to communicate between patients and health- care workers is written information. This too has pitfalls. Many patients find understanding written health-related information difficult. Studies show that the ability to understand this sort of material – also known as Functional Health Literacy (FHL) – is not correlated to other forms of literacy. Furthermore, the average FHL appears to be much lower than the FHL required to read the material generally produced. In addition, novel techniques like patient support material on the internet require literacy skills to navigate the sites that not everyone possesses.

Communication Between Health-Care Workers

28. It has been identified during research that communication among health-care workers plays a significant role in development of errors.

29. Breaking down hierarchy is an important aspect and through team-building exercises, professionals are empowered to speak out which is a crucial aspect in identifying errors before they occur.

Communication and the Management of Incidents

30. When an incident does occur, communication is very important in managing such adverse events. Apologizing and explaining to the patient and their family members is morally necessary, albeit difficult to pacify them.

31. Communication plays an important role in all aspects of error. It assists in improving the quality of communication among health-care workers and between patients and health-care workers and thus help prevent errors. Sound communication is must when dealing with errors once they have occurred.

PATIENT MEDICAL RECORD AND AUDIT

Patient Medical Record

32. Before looking at specific role of medical documentation with respect to patient safety, we need to discuss about the medical record, what it is, how it develops and why it is so important. The medical record is an important compilation of facts about a patient's life and health. It includes documented data on past and present illnesses and treatment written by health care professionals caring for the patient. The medical record must contain sufficient data to identify the patient, support the diagnosis or reason for attendance at the health care facility, justify the treatment and accurately document the results of that treatment[ix].

33. The **medical record** has four major sections:

(a) **Administrative,** which includes demographic and socioeconomic data such as the name of the patient (identification), sex, date of birth, place of birth, patient's permanent address, and medical record number;

(b) **Legal data** including a signed consent for treatment by appointed doctors and authorization for the release of information;

(c) **Financial data** relating to the payment of fees for medical services and hospital accommodation; and

(d) **Clinical data** on the patient whether admitted to the hospital or treated as an outpatient or an emergency patient.

34. The medical record is made up of a number of forms, which are all used for a specific purpose. The basic set of forms in the inpatient medical record includes [ix]:

(a) Front sheet or identification and summary sheet, which covers identification, final diagnoses, disease and operation codes, and the attending doctor's signature.

(b) Consent for treatment is often on the back of the Front Sheet and must be signed by the patient at the time of admission. There are two parts to this form. The first half of the form is a general consent for treatment and the bottom half is consent to release information to authorized persons.

(c) Correspondence and legal documents received about the patient, e.g., referral letter, requests for information, etc.

(d) Discharge summary, if required by the hospital/health authority.

(e) Admission notes, including the patient‘s family medical history, the patient‘s past medical history, presenting symptoms, results of a physical examination, provisional diagnosis (the reason the patient came or was brought to hospital), proposed tests and care.

(f) Clinical progress and handover notes recording the patient's daily treatment and reaction to that treatment written by the attending doctor and other health care professionals.

(g) Nurses‘ progress and handover notes recording daily nursing care including temperature, pulse and respiration charts, blood pressure charts etc.

(h) Operation report if an operation or operations are performed.

(j) Other health care professional notes, e.g., physiotherapy, Social Workers, etc.

(k) Pathology reports including hematology, histology, microbiology, etc.

(l) Orders for treatment and medication administration forms listing daily medications ordered and given with signatures of the doctor prescribing the treatment and the nurse administering it.

(n) Other reports – X-ray, etc and Special nursing forms for observation of head injuries etc.

Record v/s Documentation

35. Documents are created by planning what needs to be done and records are created when something is done. **Documents can change but records do not change.** [x]

(a) **Record Definition.** [x]

"Evidence about a past event"

Records consist of any data you collect during the operation of your business. Records are facts and should not change.

(b) **Documentation Definition.** [xi]

"The term documentation is generally used for the gathering and recording of information, especially to establish or provide evidence of facts or testimony."

36. In writing proper Assessments, Care and Discharge plans entails in- depth professional judgment and reflection. Rather than viewing documentation as tedious and time-consuming, professionals should view it in the light of it being an essential element of professional practice to deliver successful outcomes for clients. [xii]

Common Standard of Documentation [xiii]

37. Medical record standards at a minimum, compliance to these standards must be reviewed with focus on aspects like, record must contain identifying information, must be legible and maintained in detail.

Audit

38. An audit is a planned and documented activity performed by qualified personnel. Audit in the wider sense is simply a tool to find out what you do now; this often to be compared with what you have done in the past, or what you think you may wish to do in the future [xiv]**.** Generally in healthcare organizations Audit refers to Clinical Audit, Audit by MRD, Audit by Accreditation Agencies, External Audit etc.

39. The **audit** is a **cyclical process** which can be outlined in five stages [xv]**:**

(a) **Stage 1-Planning for audit**

(b) **Stage 2-Standard/criteria selection**

(c) **Stage 3-Measuring performance**

(d) **Stage 4-Making improvements**

(e) **Stage 5-Sustaining improvements**

40. **Selecting and Developing Appropriate Performance Levels**. Audit criteria should consist of measurable statements of what should be happening with explicit and quantifiable performance levels. For the audit to be carried out for non-medical aspects the criteria of 100% adherence needs to be followed. The documents at the sharp-end can be broadly classified as:

(a) Initial assessment

(b) Plan of Care.

(c) Progress Notes.

(d) Findings and Reports.

(e) Discharge Summary.

Initial Assessment

41. Initial assessment of a patient is done for finding out the medical state of patient and to give broad direction to the treatment and the nursing care. Being the foundation of the subsequent treatment it should bring out the details of the ailment based on existing facts and symptoms and suggest the best possible future course of action. It is important that this is documented and validated since it lays down the starting time of the medical-care of the patient in a hospital. It also is the medium to give a brief insight into the courses of events leading to the condition of patient and the first medical judgment in the hospital.

Plan of Care

42. Plan of Care basically outlines the medical and nursing care to be provided to a patient. It involves actions the doctors and nurses will put into place to support diagnoses identified by Doctor‘s and Nursing Initial Assessment.

Progress Notes

43. Progress Notes are part of a medical record where healthcare personnel record details to document a patent‘s clinical status or achievements during the course of hospitalization or over the course of outpatient care. Progress notes may be written in variety of formats and details are as under:

(a) One example is the SOAP note, where the note is organized into Subjective, Objective, Assessment, and Plan sections.

(b) Another example is the DART system, organized into Description, Assessment, Response, and Treatment.

44. Progress notes are written by both doctors and nurses to document patient care on a regular interval during a patient‘s hospitalization period. Doctors are normally expected to write at least one progress note for each patient encounter.

Findings and Reports

45. There are thousands of medical tests used on patients to diagnose, measure progression of a disease or condition, or measure the effectiveness of the treatment. There are two basic types of medical tests results:

(a) Tests that give yes or no answer (usually used for diagnostic purposes).

(b) Tests that gives relative results, as in measuring something to be higher or lower, bigger or smaller than before, or inside or outside a normal range.

Discharge Summary

46. Discharge summary means a clinical report prepared by a doctor or other health worker at the end of a hospital stay or series of treatments of a patient. It outlines the patient‘s chief complaint, the diagnostic findings, the therapy administered and the patient‘s response to it, and recommendation on discharge.

Medication Safety

47. Medication safety is a broader term that encompasses errors which are not side-effects of the intended drug, but, for example, the result of the wrong drug being administered in error or the right drug being given in the wrong dose or via the wrong route. These are termed adverse drug events.

48. Harm from adverse drug events occurs across the world. Some studies suggest that they account for a quarter of all medical errors. It has been suggested that 75% of these errors are preventable. There is no such statistics available in our country, however, in all probability it is likely to be more alarming and hence need to be audited so as to prevent adverse drug events.

49. In a super specialty hospital, medical notes are the only means health-care workers have of communicating with each other. Medical records should be clear, precise and unambiguous. They need to provide an accurate way of conveying important information concerning patients.

Nutritional Assessment

50. The health care organizations requires to ensure that patients have a choice of food that is prepared safely and provides a balanced diet. This highlighted the need to be monitoring the nutritional requirements of the patients. [xvi]

51. The barriers to compliance with nutritional screening within the first 24 hours of admission should be identified and suitable actions taken to obviate those thus ensuring proper and timely nutritional assessment.

52. **Other Important Patient Medical Forms**

(a) General & Informed Consent Form.

(b) Pre Operation Check List.

(c) Pre Induction Evaluation & Monitoring Form.

(d) OT Surgery and Post surgery Notes.

(e) Monitoring Form for PACU.

(f) OT Recovery Nursing Record.

(g) Swab/Needle/Instrument Count Check List.

Accountability

53. Once clarity over objectives, stakeholders and outcomes has been achieved, there is a requirement to identify the key accountability parameters within ones organization.

54. Thereafter the requirement of laying down the capability required to meet ones objectives need to be arrived at. Monitoring and Review processes will also look at the work carried out by those individuals, functions and organizations providing aspects of internal or external independent assurance. Internal audit and clinical audit are ways of doing the above. Externally, may be done through external audit, professional colleges, accreditation bodies, and various other regulatory bodies. Lay down and put in place the organization‘s arrangements for effective communication and consultation with both internal and external stakeholders.

CHAPTER 3: AIM AND OBJECTIVES

Aim

55. To Audit the Patient Medical Documentation in MRD, In-patient wards and ICUs contributing as means to enhance Patient Safety and Physician Defensibility in a super specialty hospital.

Objectives of Study

56. The objectives of this study are to analyze the following from the perspective of an administrator:

(a) To establish the role of documentation in the patient safety and physician defensibility.

(b) To identify the likely non-medical errors by doctors and nurses in Patient Medical Documentation having direct bearing on safety of patient.

(c) To utilize internal audit of the Patient Medical Documentation as means to Patient Safety and physician defensibility in a new hospital.

(d) To recommend a broad mechanism of internal audit so as to bring behavioral changes in the approach to documentation as means to improve patient safety and physician defensibility in a hospital.

CHAPTER 4: METHODOLOGY

57. **Methodology of Data Collection.**

(a) **Study Area**. The study was carried-out in a Super Specialty Tertiary Care Hospital (Aakash Health Care, Dwarka, New Delhi).

(b) **Study Design**. Cross sectional Descriptive study design.

(c) **Study Period**. 01 Feb to 30 Apr 2018.

(d) **Study Population**. Patient Medical Documents in In-patient wards, ICUs and MRD section itself.

(e) **Sample Size**. A sample of 530 (Five Hundred and Thirty) Patient Medical Documents folders in the In-patient wards, ICUs and MRD Section was audited for the study (Appendix- C').

S No	MRD Section/Wards	Number of Folders Audited
1.	MRD Section	230
2.	IPDs	225
3.	ICUs	75
4.	**TOTAL**	**530**

(f) **Study Tool**. Existing Patient Medical Documentation Audit form (Appendix - A) was utilized.

(g) **Sampling Technique**. Non-Probability Purposive Sampling Technique was used. Intention was to not disturb the process of medical care and hence the patient safety.

58. **Procedure**. To have an initial understanding about the Patient Medical Documentation, a checklist was prepared after going through the NABH Guidelines. It was

analyzed for the medical and non-medical aspects. Being a management study, the non-medical aspects were excluded and then matched with the Performa (Appendix – A) of the existing Audit of Patient Medication Documentation of the hospital. Since the MRD Section and in-patient departments are the most complete part of any hospital which requires maintenance of all types of Patient Medical Documentation, the data was collected from IPDs, ICUs and MRD Section of the hospital. The departments/ floors selected were basically the ones where a patient is admitted in the hospital and wherein the documentation covers the complete array of medical and non-medical documentation. Patient files in MRD, IPD and ICU patients Medical Documentation was scrutinized for meeting the Patient Safety requirements and simultaneously understanding how the Quality standards are maintained through Continuous Service Evaluation Methodology.

59. For initial 230 patient medical folders the data was collected from MRD section. For the balance of the documents audited the data was compiled from ICUs and IPDs along with photographs of the documents where there was any observation. This data was periodically shared with the authorities concerned to be able to reflect upon the areas of improvement with respect to documentation. Simultaneously, the data was compiled for collective analysis of the data.

60. **Terms of Reference**. The terms of reference for the audit were to assess the Patient Medical Documentation from the perspective of contributing to patient safety and physician defensibility by the management as per the existing format without commenting on the medical aspects. The focus of the audit was to scrutinize the HOW and WHEN. the forms were filled in the Patient Medical Documents without getting into WHY and WHAT of the whole process.

61. The Patient Medical Documents were scrutinized as applicable for the following parameters:

(a) Face Sheet.
(b) Admission Request Form.
(c) IP Initial Assessment.
(d) ER/ IP Nursing Initial Assessment.
(e) Clinical Progress Notes.
(f) Clinician Handover Notes.

(g) Medication Administration Records.

(h) Nursing Needs, Care and Hand over Plan.

(i) IP Initial Nutritional Assessment.

(j) IP Nutritional Progress Notes.

(k) Vital Monitoring Chart.

(l) General Consent Form.

(m) Informed Consent Form.

(n) Pre Op Check List.

(o) Pre Induction Evaluation & Monitoring Form.

(p) OT Surgery & Post surgery Notes.

(q) Monitoring Form for PACU.

(r) OT Recovery Nursing Record.

(s) Swab/Needle/Instrument Count Check List.

CHAPTER 5: OBSERVATIONS AND ANALYSIS

62. **Department Wise Breakdown of Cases.** A total of 530 medical record files were examined. The breakup of the records audited specialty wise is as under:

Table 5.1: Total Medical record files audited

Department	No of Files
Neurology & Spine	19
Ophthalmology	15
Orthopaedics	44
Paediatrics	80
Obstetrics & Gynaecology 1 & 2	71
Nephrology	12
Oncology	03
Pulmonary Medicine	04
Urology	06
ENT	08
General Surgery	96
Cardiology & CTVS	31
Internal Medicine 1 & 2	141
Total	**530**

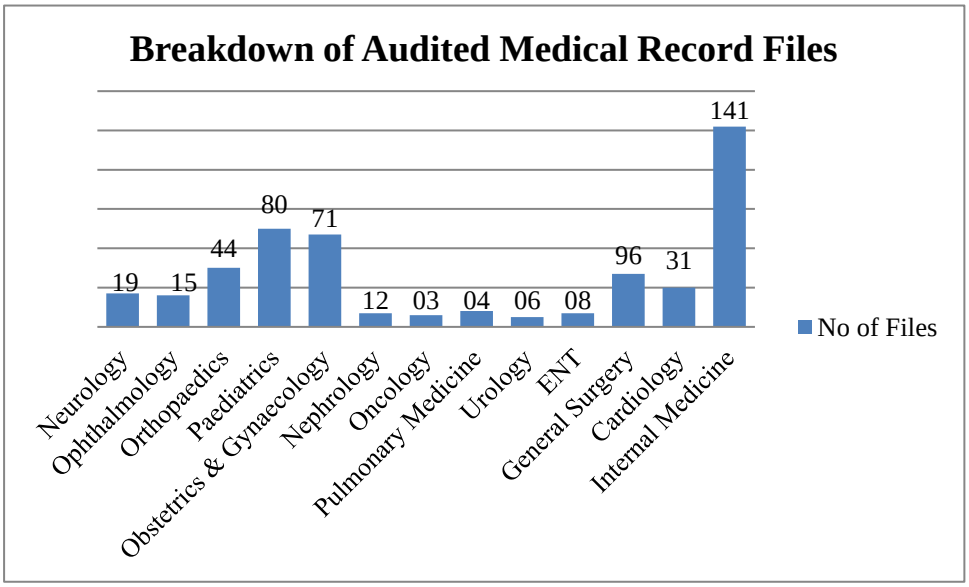

Figure 5.1: Total Medical Record Files Audited

63. **Face Sheet** All the files had face sheet. Of the entire face sheet, some were partially filled. The details are as under:

Table 5.2: Face Sheet

Face Sheet	Quantity	Percentage
Compliance	455	85.0
Partial Compliance	75	15.0

A total of 75 files were found with partially filled face sheets. It works out to be approx 15 percent of the total files audited.

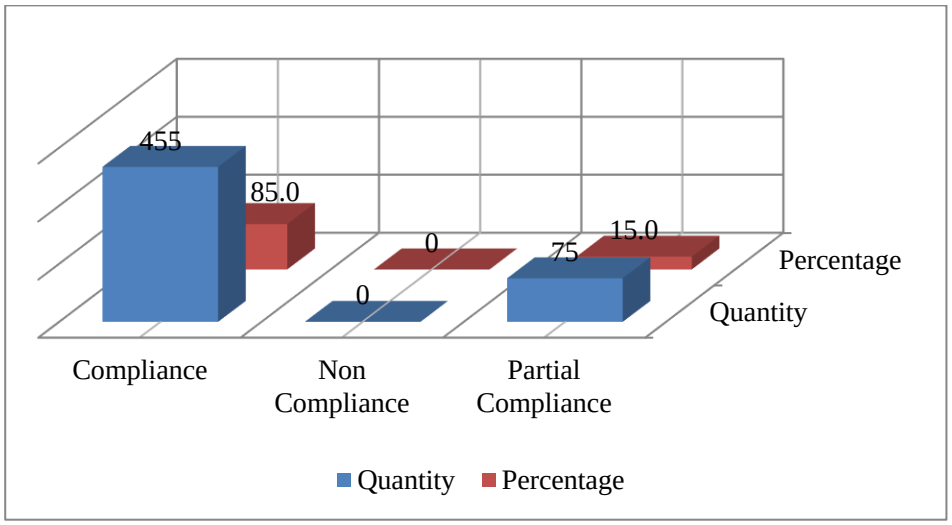

Figure 5. 2: Face Sheet

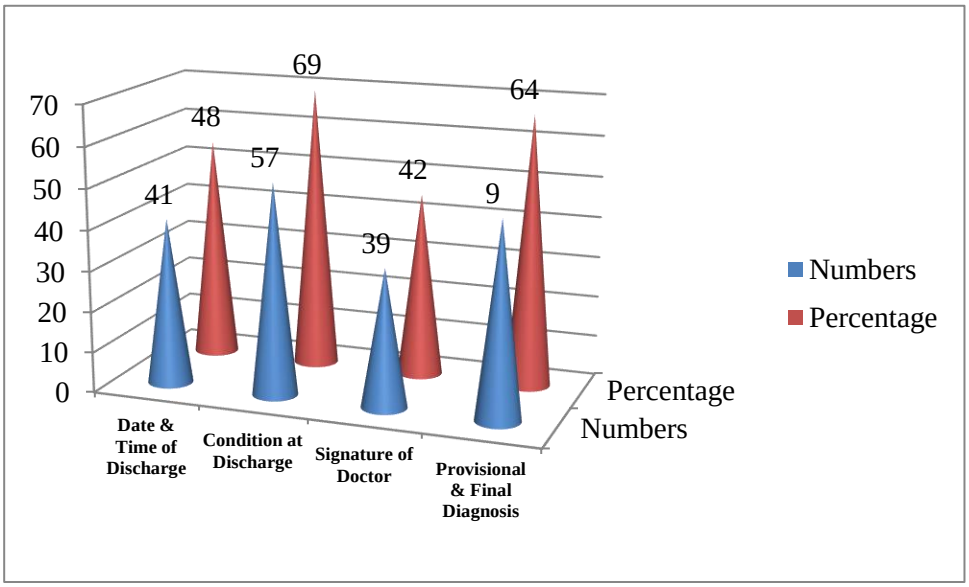

Figure 5.3: Partially Compliance Face Sheet

It can be seen from the **(Figure5.3)** above that 'condition at discharge' was missed out in approx 69 percent of the partial compliance forms followed by 'provisional and final diagnoses'.

64. **IP Initial Assessment (IA).** 96.0% of the IP Initial Assessment were documented **(Figure 5.4)** and 93.0 % of the documents have been validated **(Figure 5.5).** The IP Initial Assessment (Doc's IA) is responsible for the plan of treatment and needs to be done as per the documented procedure and should be completed. Even though, the Doc's IA seemed to be complete as per the format evolved as per the NABH guidelines, there were general shortcomings noted in the documentation which are given as under:

(a) The time for Doc's IA has not been endorsed in 22 % of the documents.

(b) The names of doctor's and consultants were not legible in 31% of the places. This despite the fact that many doctors have been issued with personalized rubber stamps, they were not used in many of the forms.

(c) The plan of care was not marked in 15 % of the cases.

(d) These shortcomings reduced the adequacy of the documents substantially to 78.0% as depicted in **Figure 5.6** from seemingly better looking statistics of **Figure 5.4 and 5.5.**

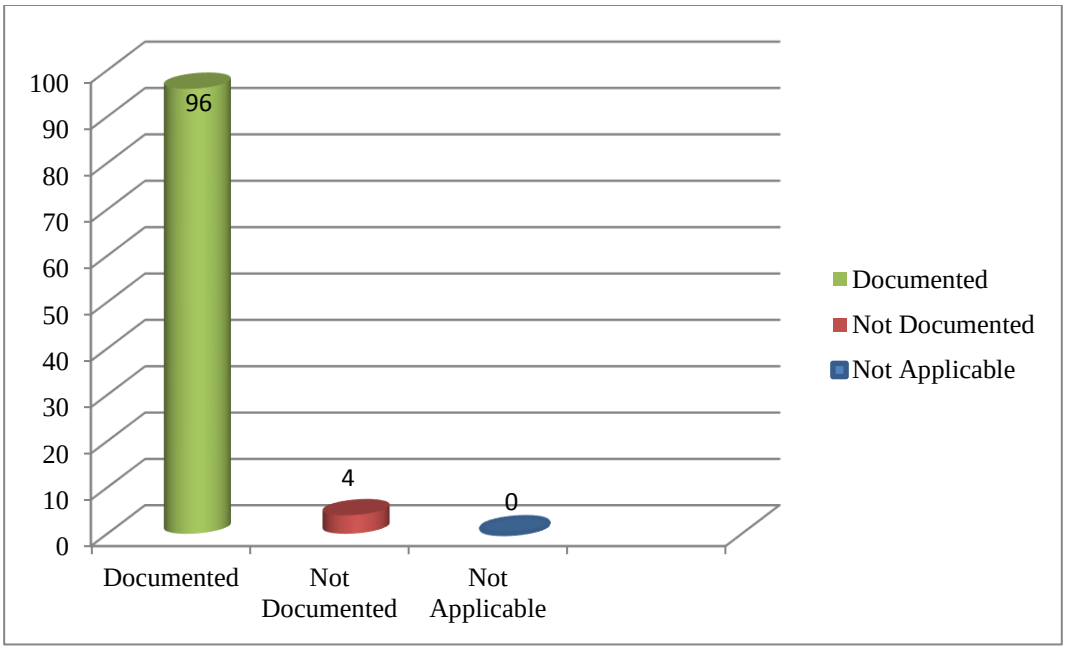

Figure 5. 4: IP Initial Assessment (Doc's IA)

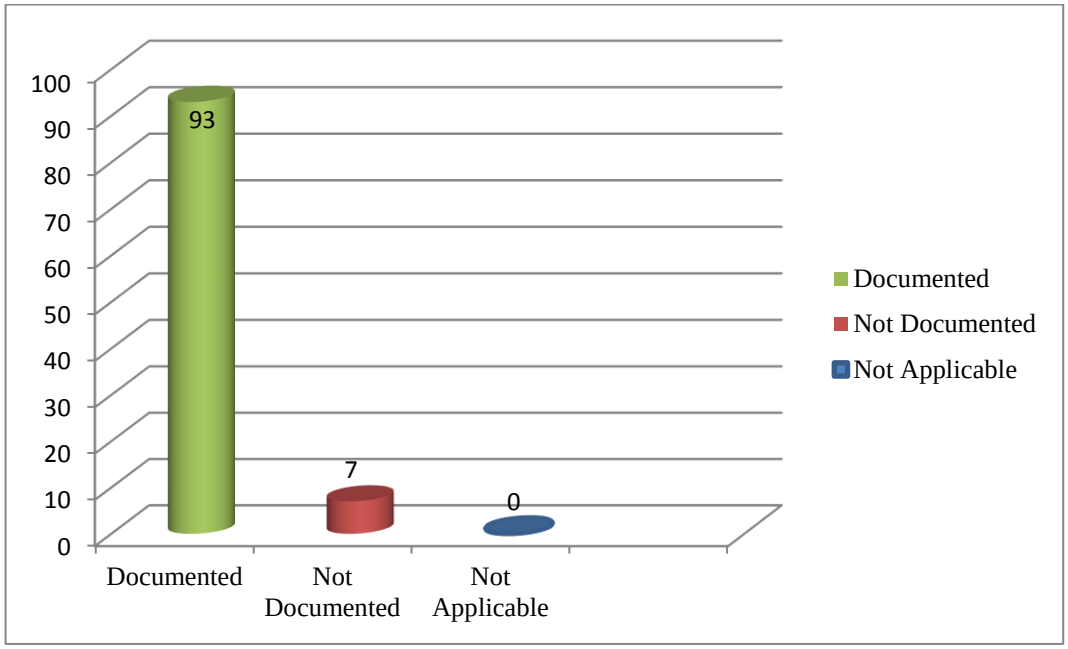

Figure 5.5: Signature, Date and Time on IP Initial Assessment Form

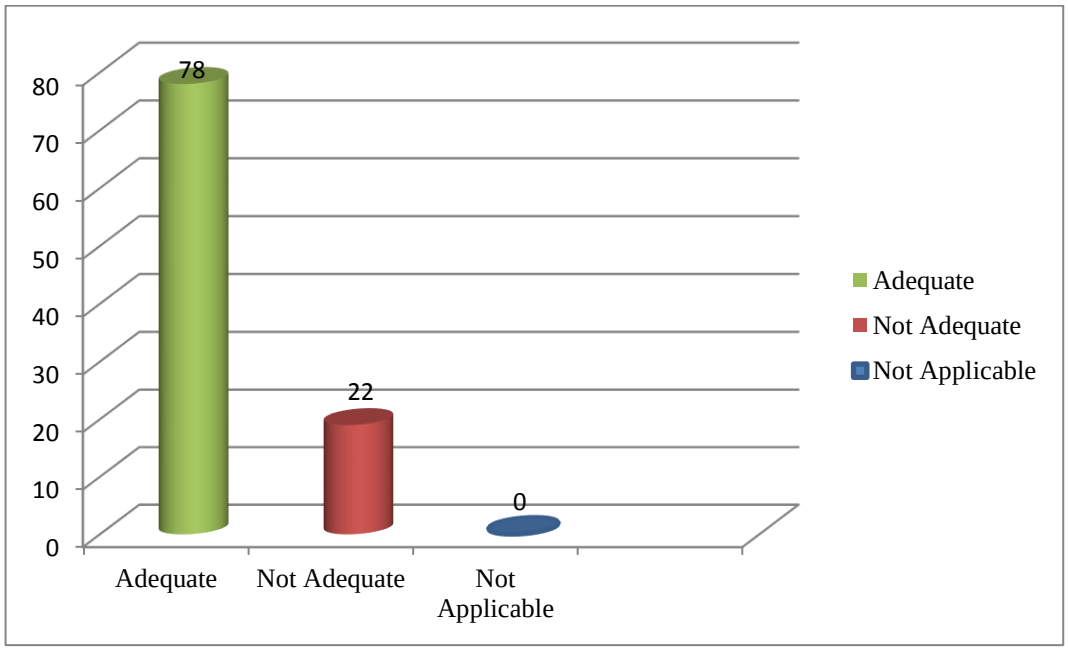

Figure 5.6: Adequacy of IP Initial Assessment Sheet (Doc's IA)

65. **<u>Nursing E R / I P Initial Assessment (Nursing IA).</u>** 99.0% of the Nursing IA are documented **(Figure 5.7)** and 98.0% of the documents have been validated **(Figure 5.8).** The general documenting deficiencies noticed in the documentation are as follows:

(a) The column of "Handed Over To" has not been signed in certain documents.

(b) The date and timings were not written clearly.

(c) The entries which are not relevant should be scored out or endorsed with a remark "NA" and not left blank as was done in a few documents.

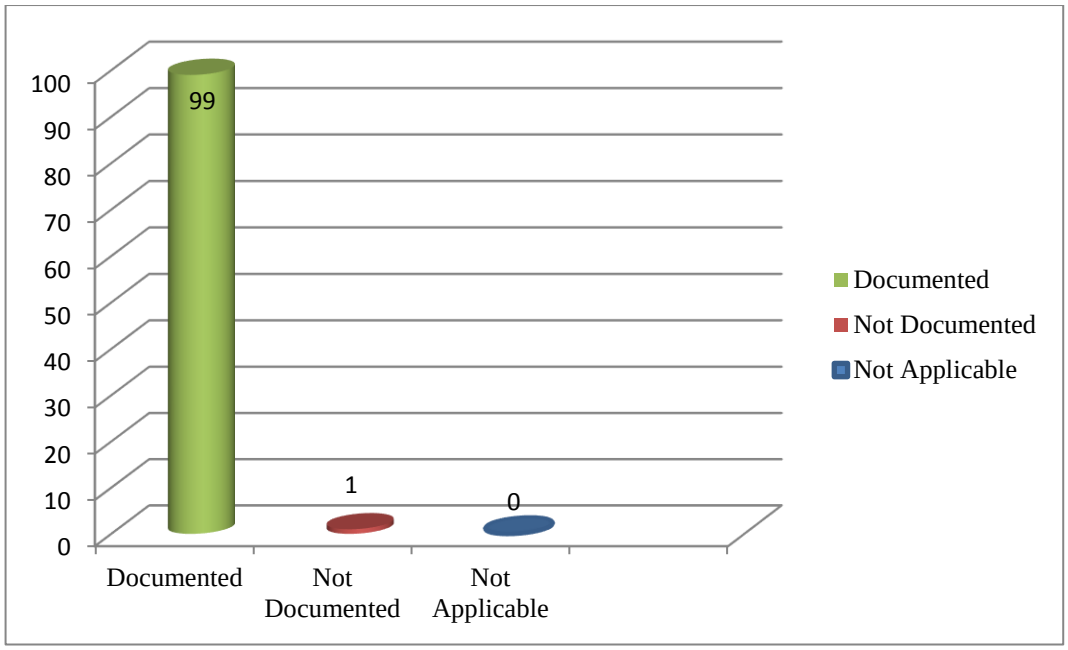

Figure 5.7: Nursing Initial Assessment

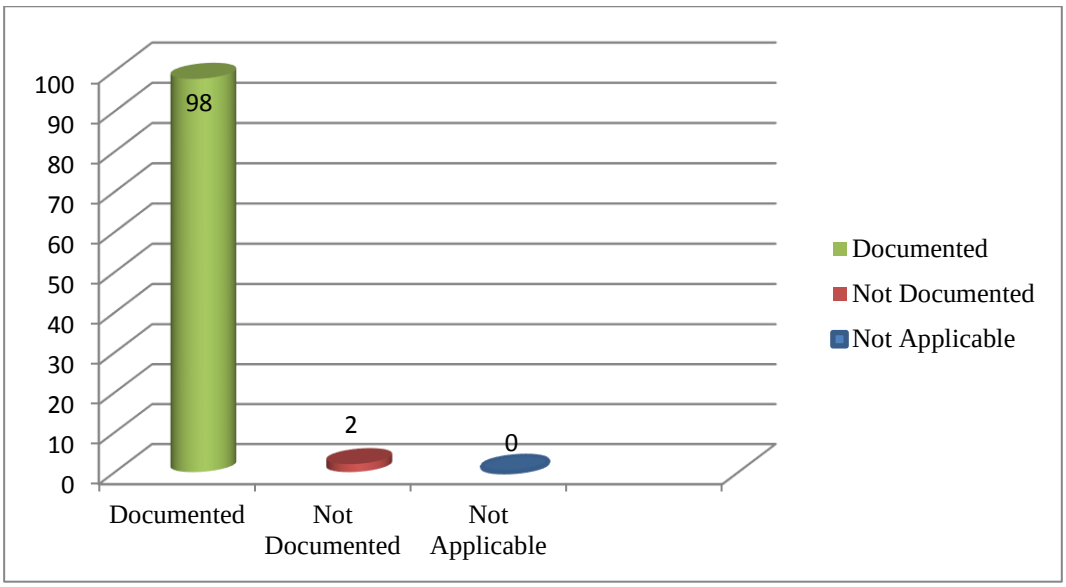

Figure 5. 8: Nursing Initial Assessment Validation

66. **Clinical Progress and Handover Notes.** The Clinical Progress Notes (Doc's CP) was documented in 97% of the documents **(Figure 5.9),** however, in a 28.0% of cases the signature of the primary consultant was not endorsed **(Figure 5.10).** It was difficult to ascertain the signature of the consultant in the documents especially where patient was attended to by doctors from various specialties. There were certain places were the resident doctors had signed on the behalf of the consultant. As per NABH requirements too, following needs to be followed:

(a) The endorsement by the Consultant at least once in a day.

(b) The use of personal stamp of the doctor along with the signatures.

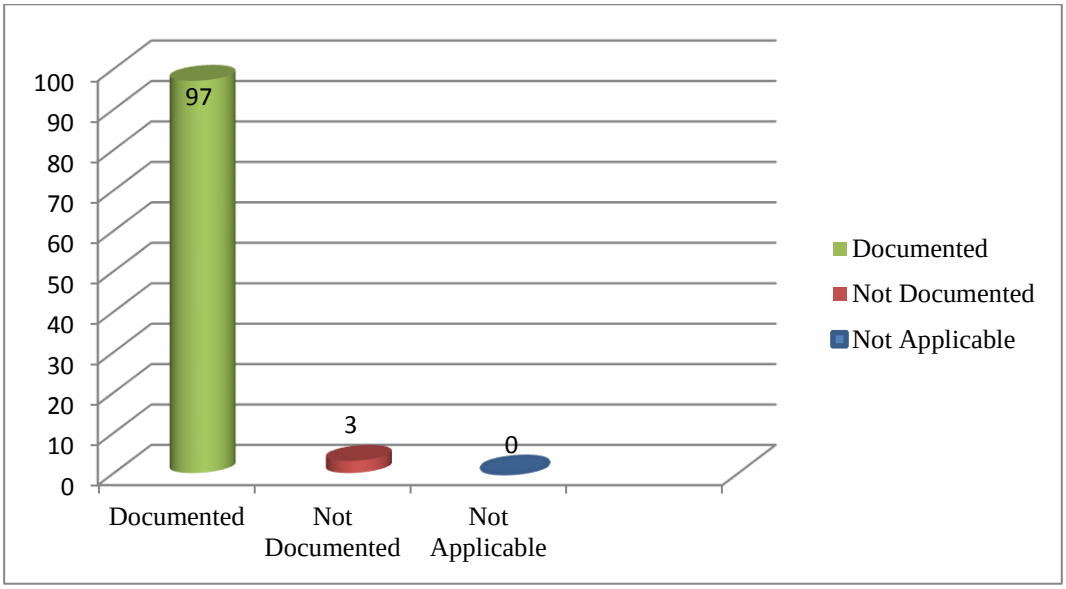

Figure 5.9: Clinical Progress Notes (Doctors' Care Plan)

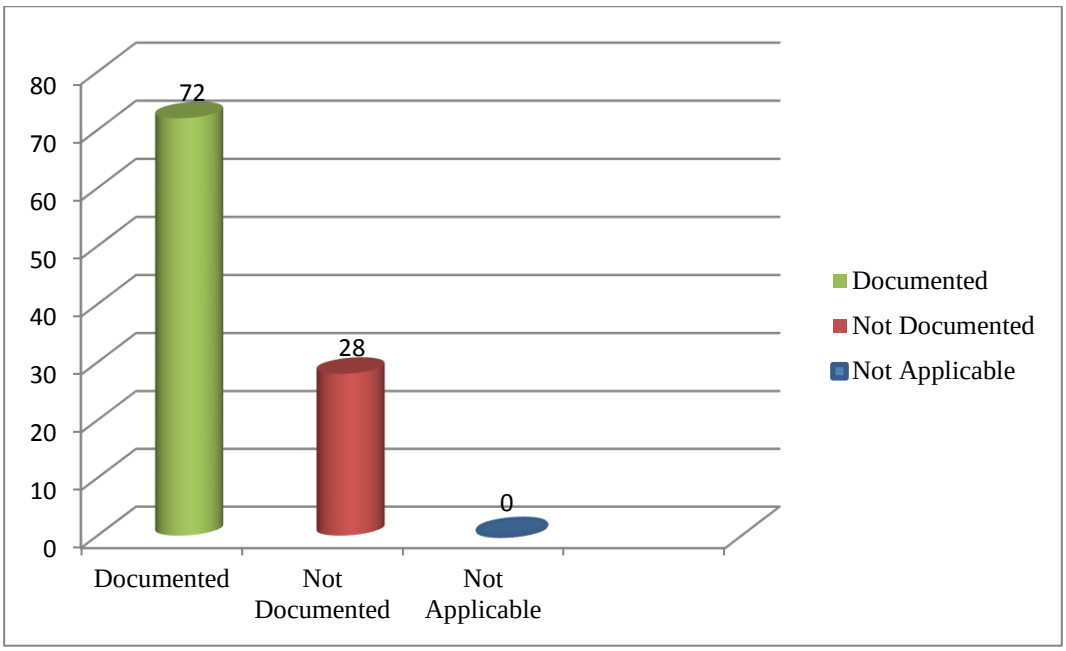

Figure 5.10: Authentication by Consultant in Doctor's Care Plan

67. **Nursing Needs, Care and Hand over Plan (NCP)**. The NCP is quite exhaustive in details and contains a lot of documented procedures and readings which are relevant for the treatment of patients. It was found that 89.0 % of the NCP were complete **(Figure 5.11)** and same percentages of document were authenticated too. The major shortcomings in the documentation of the NCP were:

(a) Entries in the NCP were left blank at certain places.

(b) The one or more column (morning, evening or night) for the planning of nursing were left blank.

(c) Signature of Duty/ Floor Managers was missing in few of the documents.

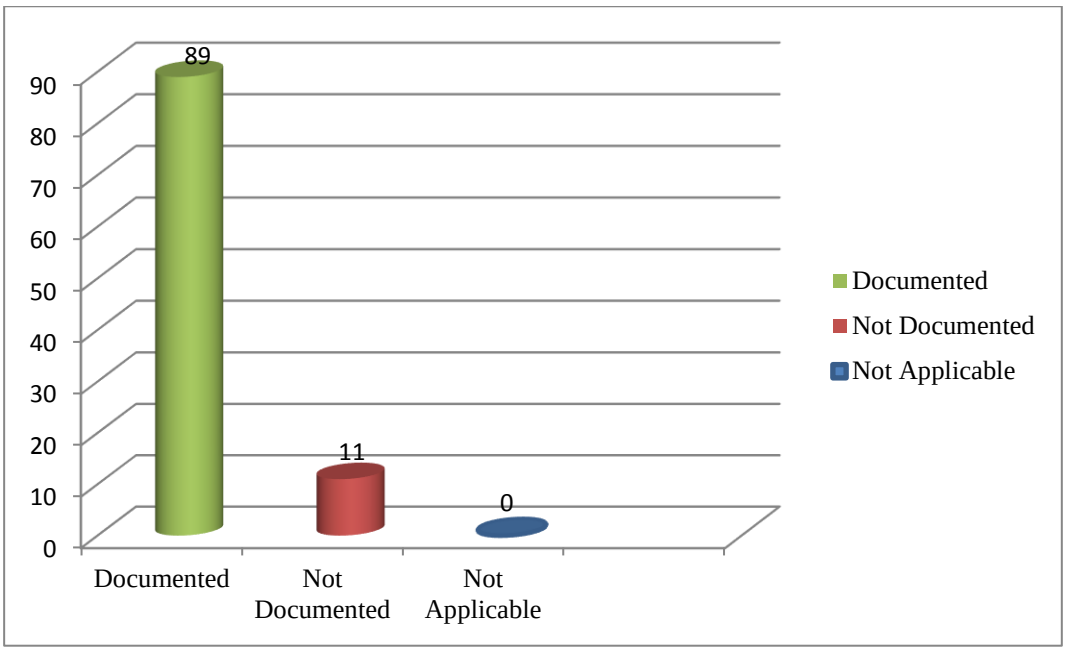

Figure 5.11: Daily Nursing Needs, Care & Hand over Plan

68. **Admission Request Form**. Endorsement of Date and Time of initial inspection in the Admission Request Form by the doctor indicates the actual time taken for the doctors to attend to the patient after admission. It was found that 88.0% of the documents had the necessary endorsement and balance 12.0% did not have it **(Figure 5.12).**

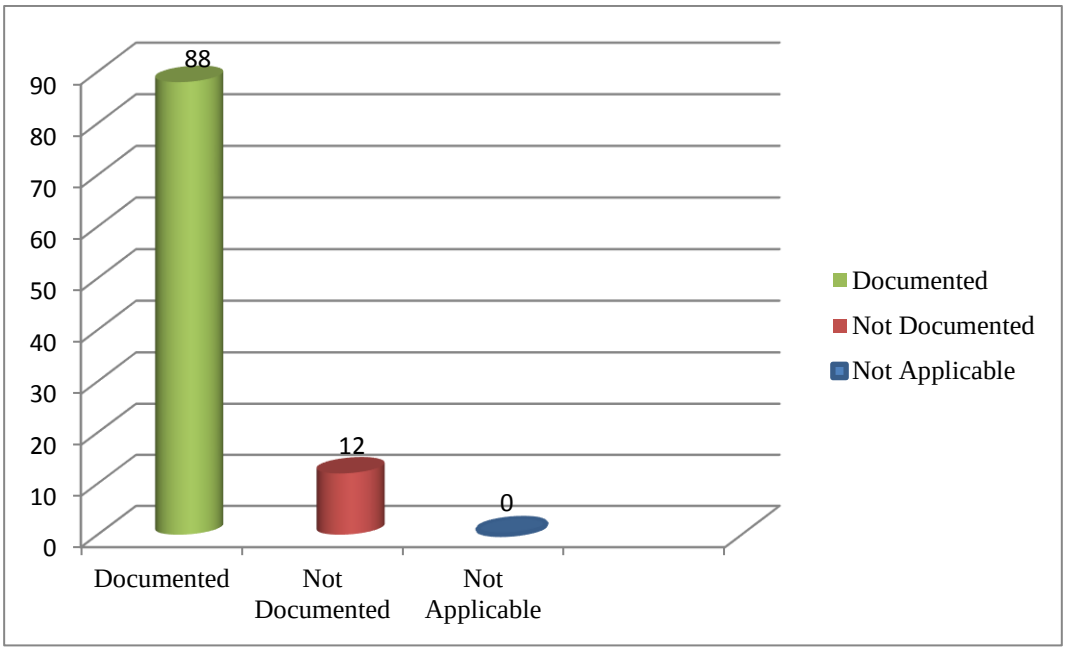

Figure 5.12: Date and Time of Inspection in Admission Request Form

69. Name & Signature of physician was not endorsed in 10.0% of admission request form **(Figure 5.13)** thereby making the subsequent assessment difficult since in modern medical care where there is involvement of variety of people, a lot is communicated by the knowing the person endorsing on the document.

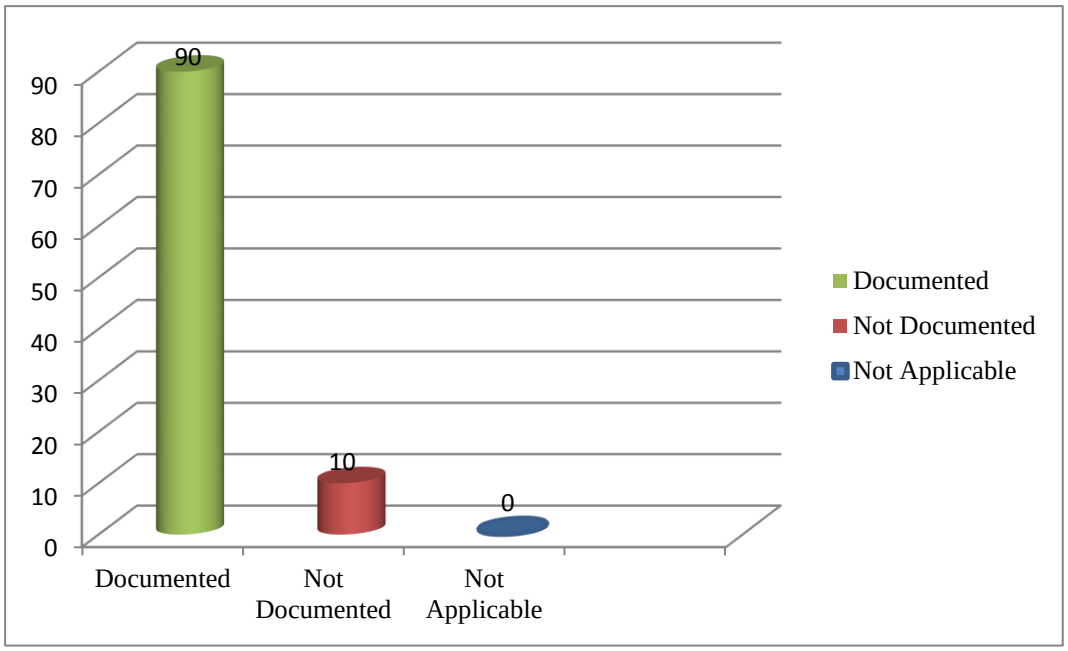

Figure 5.13: Name & Sign of Physician in Admission Request Form

70. 17 % of the signatures of doctor are not legible in Doctors‘ Note **(Figure5.14).** In the absence of use of stamps by 94 % of the doctor‘s **(Figure 5.15)**, in case of emergency, crucial time may be lost in giving feedback to the concerned doctor and thereby delaying in soliciting the urgent medical advice which eventually affects the patient safety.

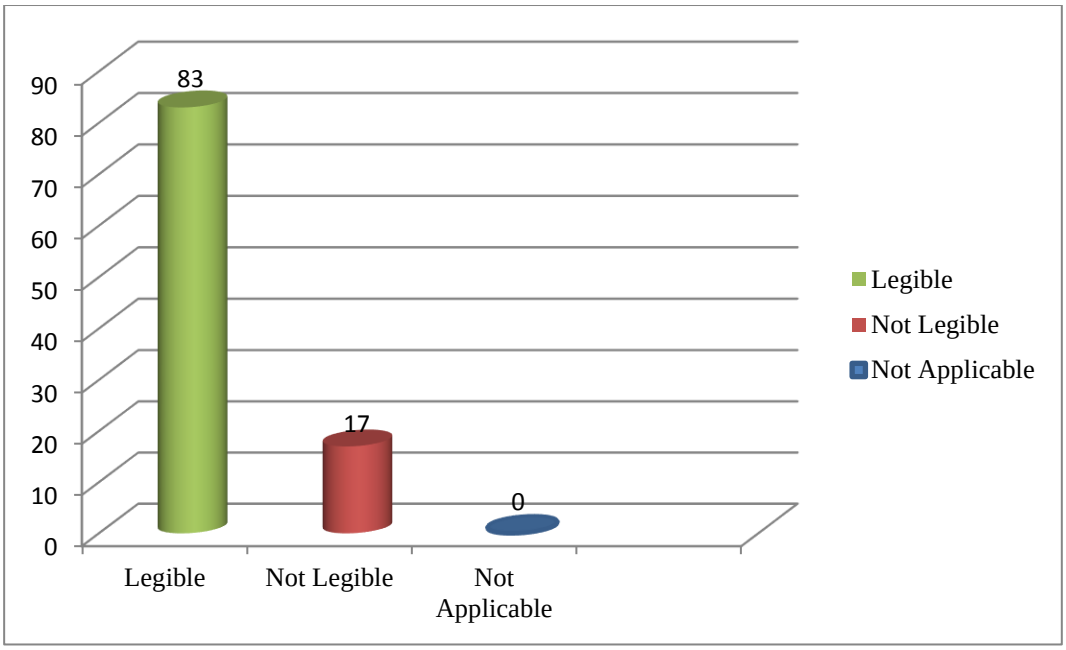

Figure 5.14: Legibility of Signature of Doctor in Doctors' Note

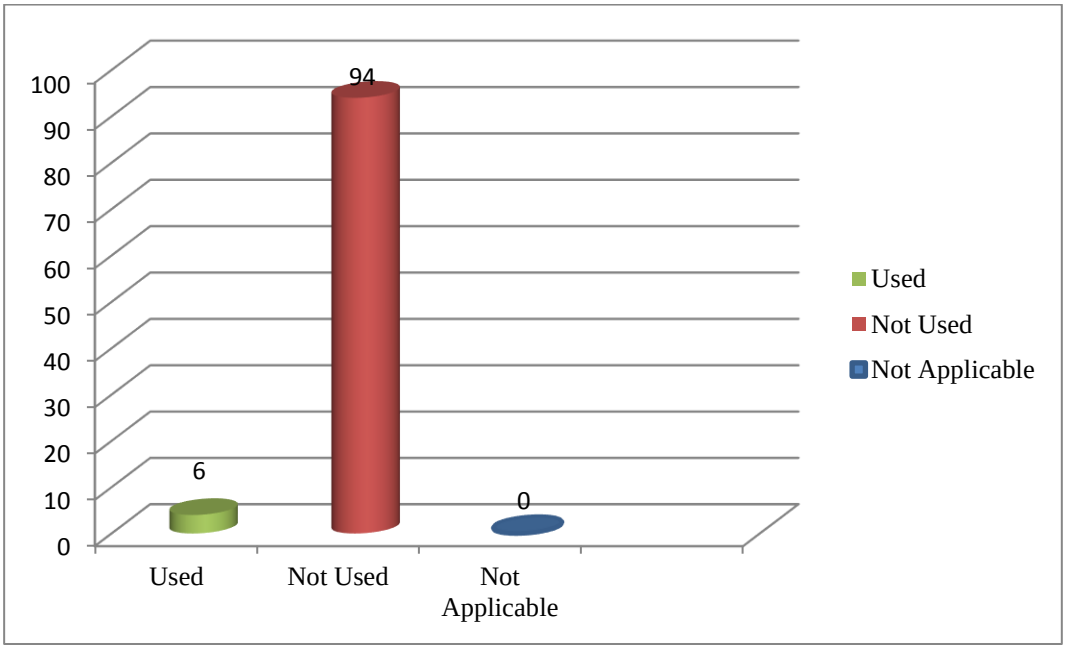

Figure 5.15: Stamp Used by Doctor's

71. **Medication Administration Chart**. The Medication Administration Chart is the record of one of the major intervention by the healthcare professionals. It is made as per NABH standards to root out all the reasons for adverse drug event. The results of the audit are as under:

(a) Prescription of Medication in BLOCK LETTERS has not been done in 11 % of Medication Administration Charts **(Figure 5.16)**.

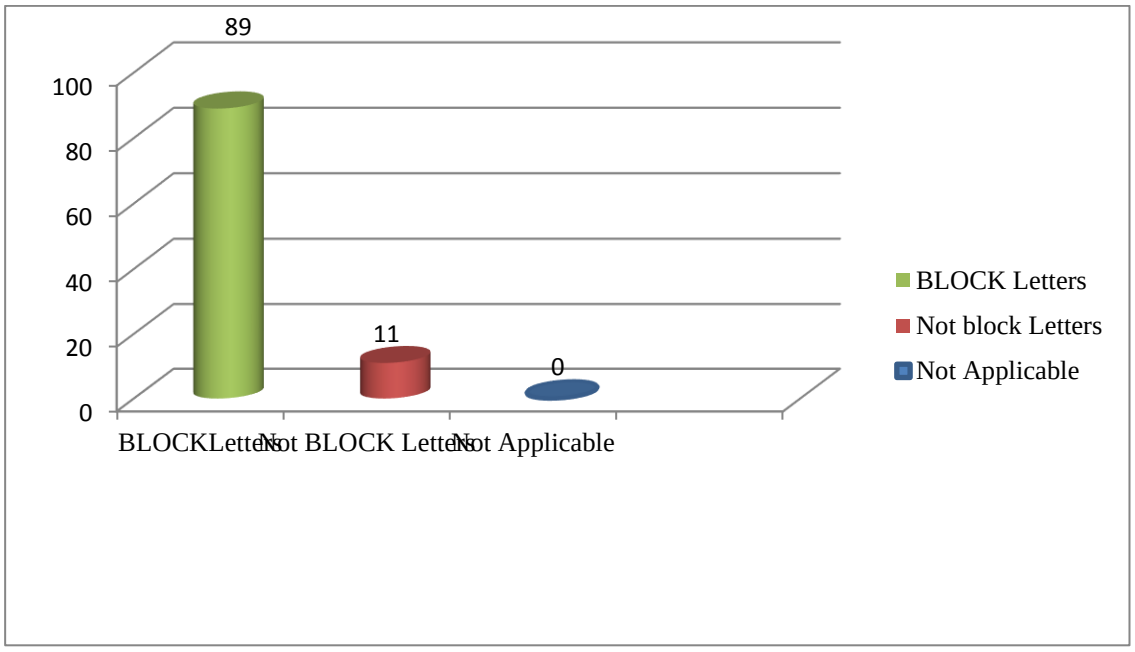

Figure 5. 16: Medications not in BLOCK LETTERS

(b) The signature of doctor is not legible in 28.0% of Medication Administration Charts **(Figure 5.17).**

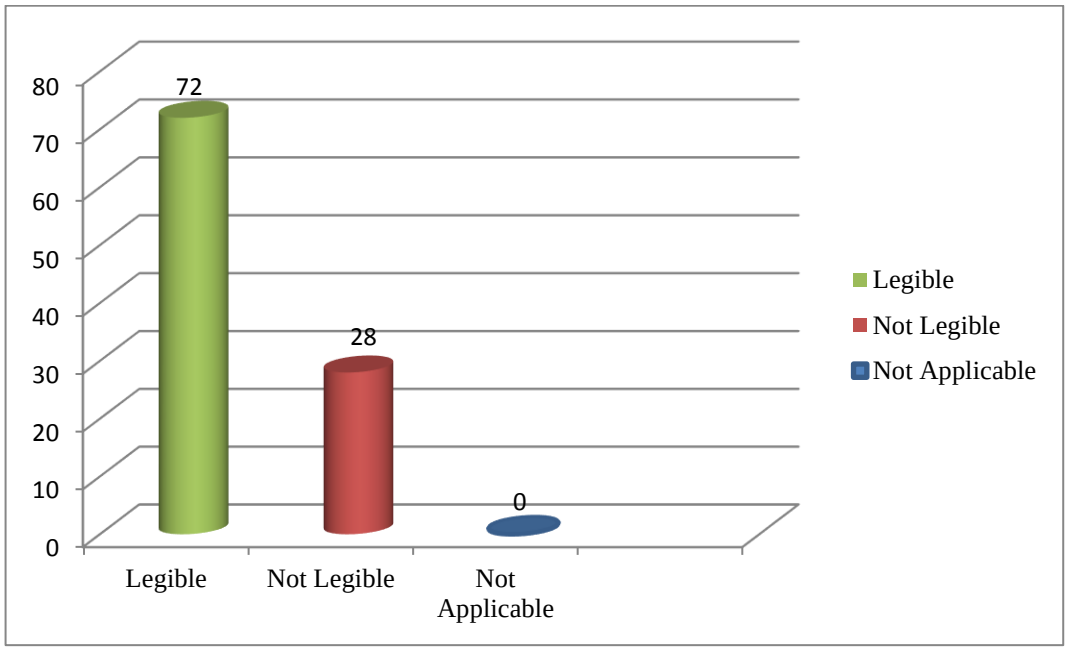

Figure 5.17: Legibility of Doctor's Signature in the Medication Administration Chart

(c) Medications are stopped but not validated by the doctor in 6 % of Medication Administration Charts **(Figure5.18).**

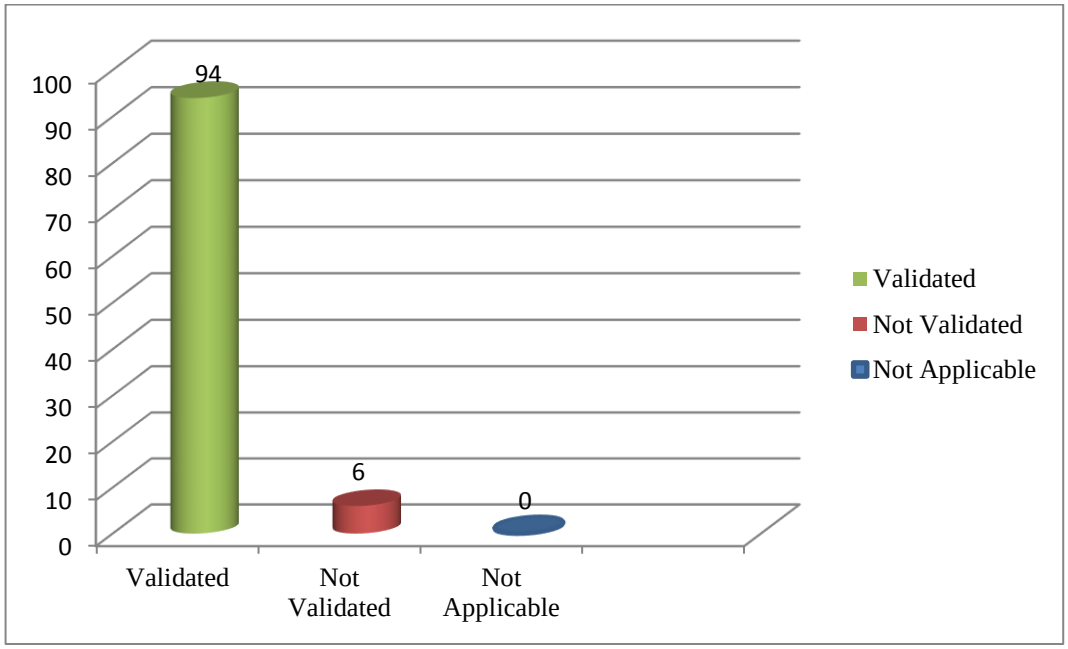

Figure 5.18: Stopping of Medication not Validated by Doctor

(d) Time of administration of medication is not mentioned in 7.0% of the Charts **(Figure 5.19).**

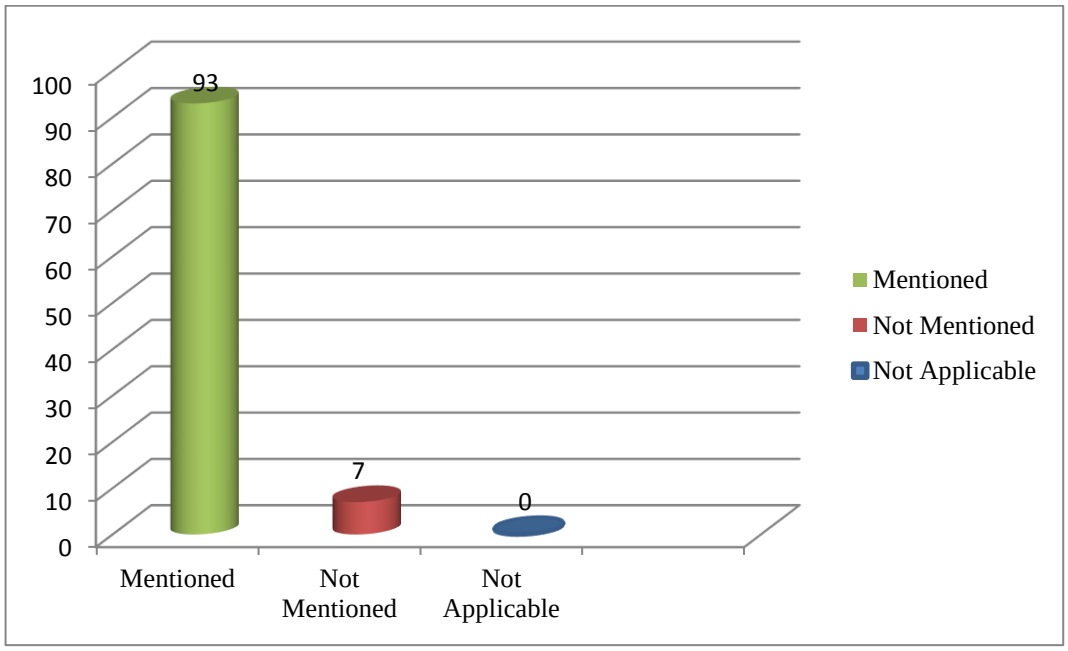

Figure 5.19: Time of Administration of Medicine in Medication Adm Chart

(e) Date of prescription is not mentioned in 12% of Medication Administration Chart **(Figure 5. 20).**

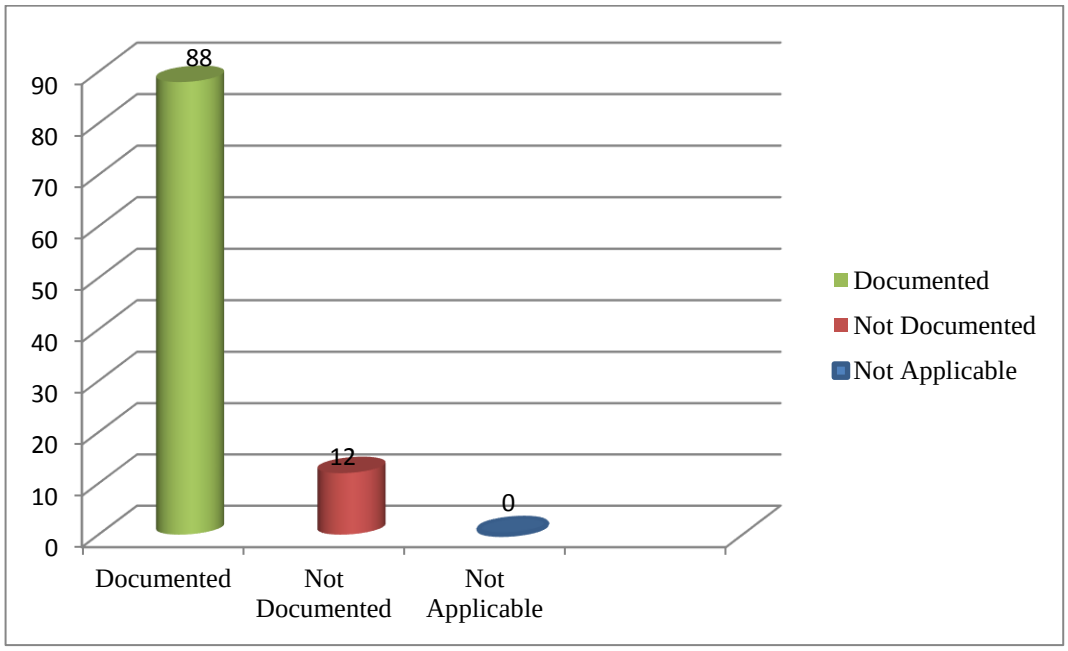

Figure 5.20 : Date not Mentioned in Medication Administration Chart

72. **Nutritional Assessment**. Nutritional Assessment of all patients needs to be done within 24 hrs. Overall Nutritional Assessment was done in all cases as applicable. However, it was found to be not carried out in 25.0% of the cases within 24 hrs **(Figure 5. 21).**

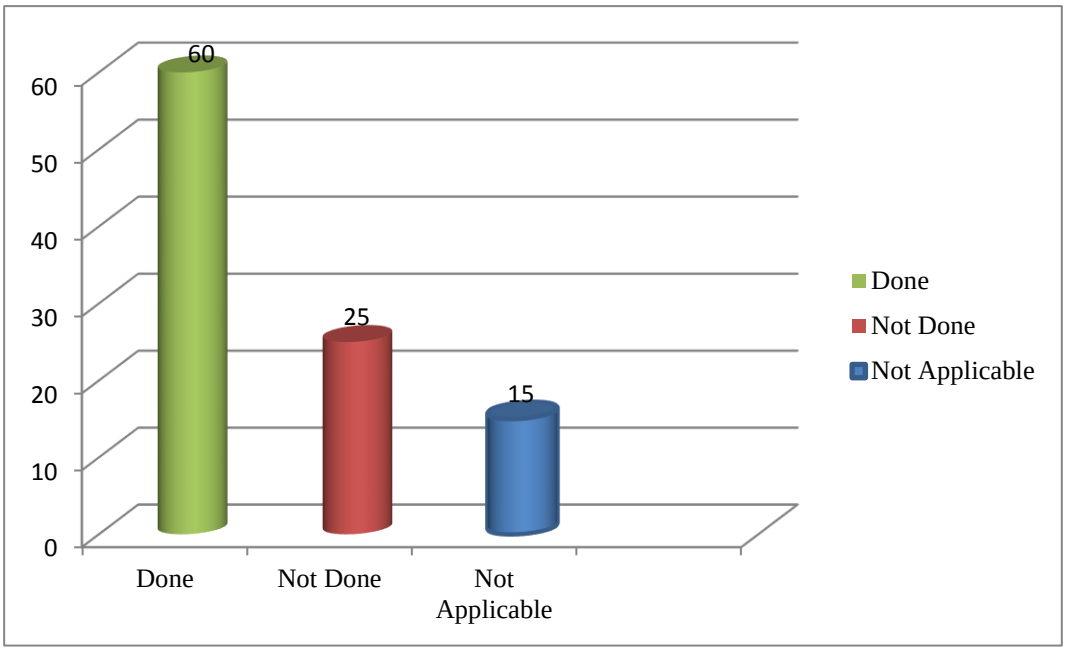

Figure 5.21: Nutritional Assessment

73. **Variation in Pain Rating**. The hospitalization of a patient is done with a view to cure the patient and to relieve the pain. The pain scores are reliable indicators to assess the effect of the treatment. However, during the audit it was found that there was variation in the Pain Ratings endorsed at different places for the same duration in 10% of cases **(Figure 5. 22)**.

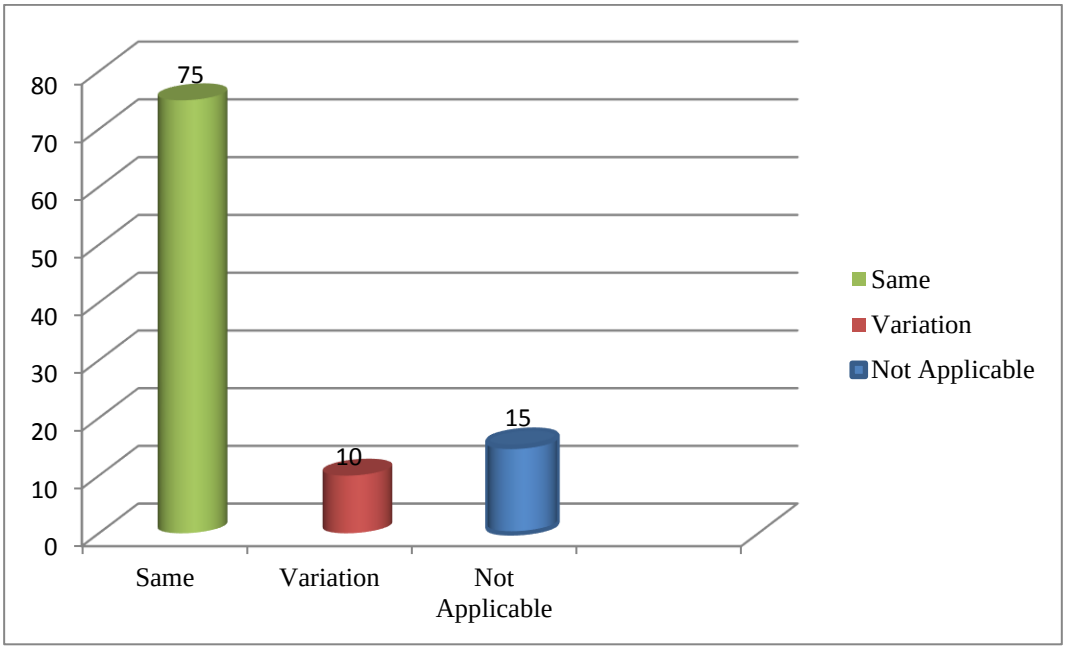

Figure 5. 22: Variation in Pain Rating Scale at Different Places

74. **General Consent Form.** All the medical records had general consent form. However it was noted that 83% of them did not have the details and signature of witness. The same has been reflected in the **(Figure 5.23):**

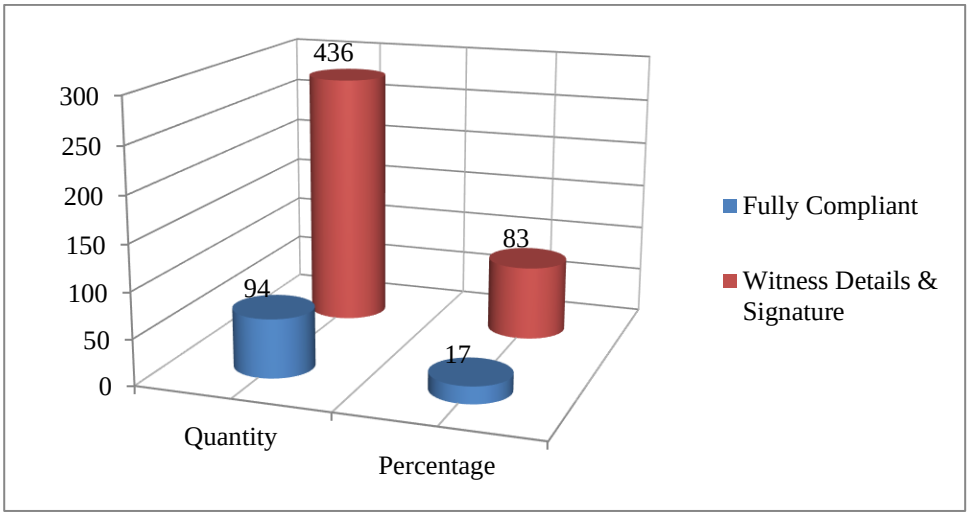

Figure 5.23: Non Compliance in General Consent Form

75. **Informed Consent Form.** There were a total of 324 medical records with informed consent. Of these, 298 were completed with all details. However, 42 forms i.e. approx 08 %, were noted to be with deficiencies. The details of the same are reflected in **(Figure 5.24).**

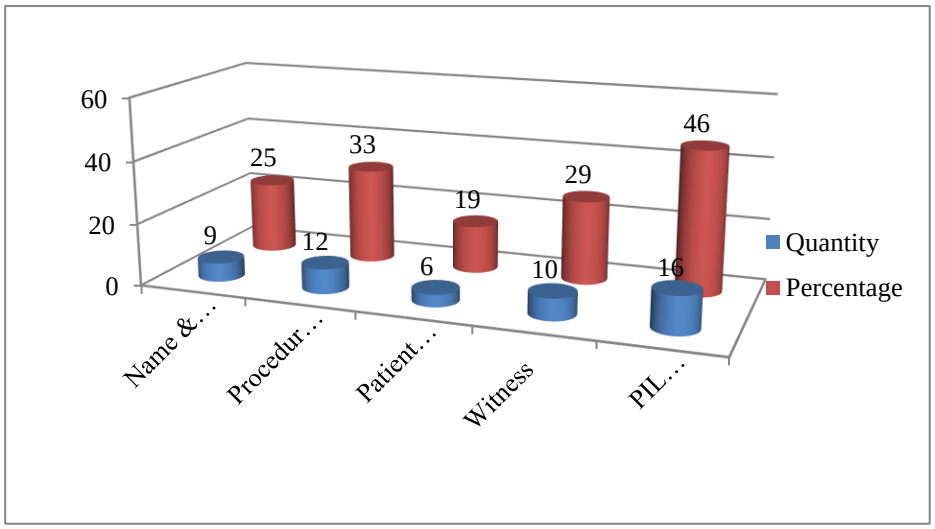

Figure 5.24: Informed Consent Form: Non Compliance

76. **Pre-Operative Check List.** There were in total 96 surgical case file forms audited. Of these, all the patient files had pre operative check list, though 18 of the forms ie. 19% were found deficient in some aspects. The details are as given in **(Figure 5.25):**

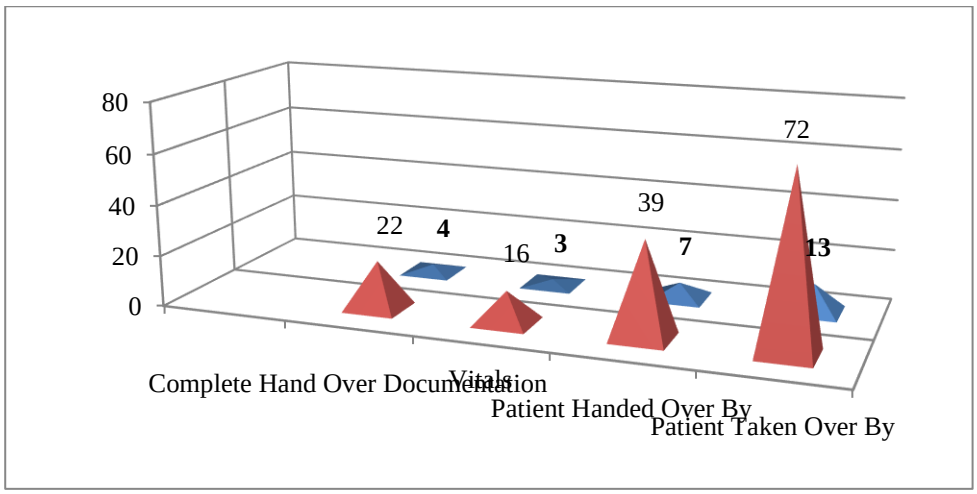

Figure 5.25 : Deficiencies in Pre Operative Check List

77. **<u>Pre Anesthesia Checkup Form</u>.** There were in total 96 surgical case file forms audited. There was no case of non compliance. A total of 15 forms i.e.16.0% of the forms were found to be partially compliant. The details of non compliance fields are given in **(Figure 5.26):**

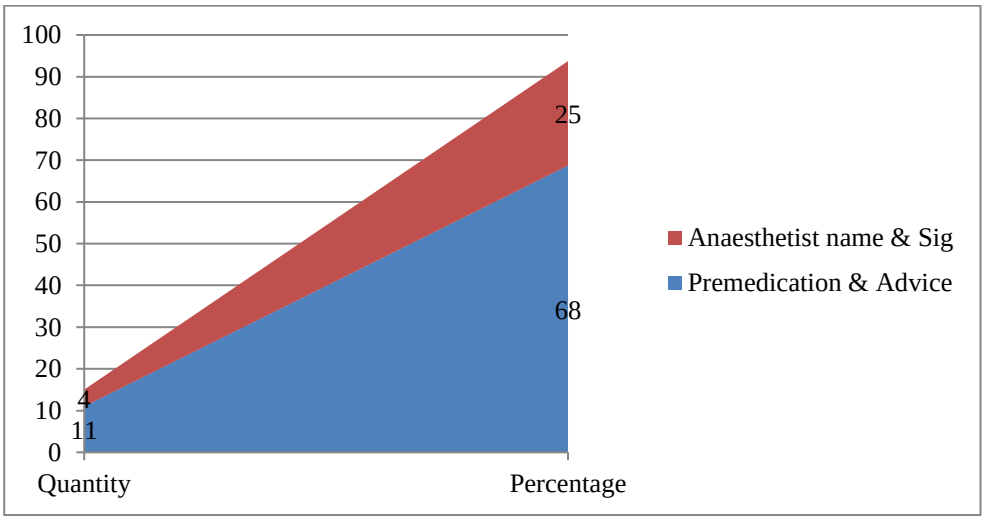

Figure 5.26: Deficiencies Noted in Pre Anesthesia Checkup Forms

Eleven forms were found to be without premedication and advice and four forms were found without anesthetist name and signature.

78. **<u>Pre Induction Evaluation and Monitoring Form.</u>** A total of 71 surgical related patient files were fully compliant. Partial compliance was in 25 files while no files were found without this form. This works out to 75 % compliance and balance 25 % were found to be partial compliant. The details which were partial compliant are given in **(Figure 5.27)** below:

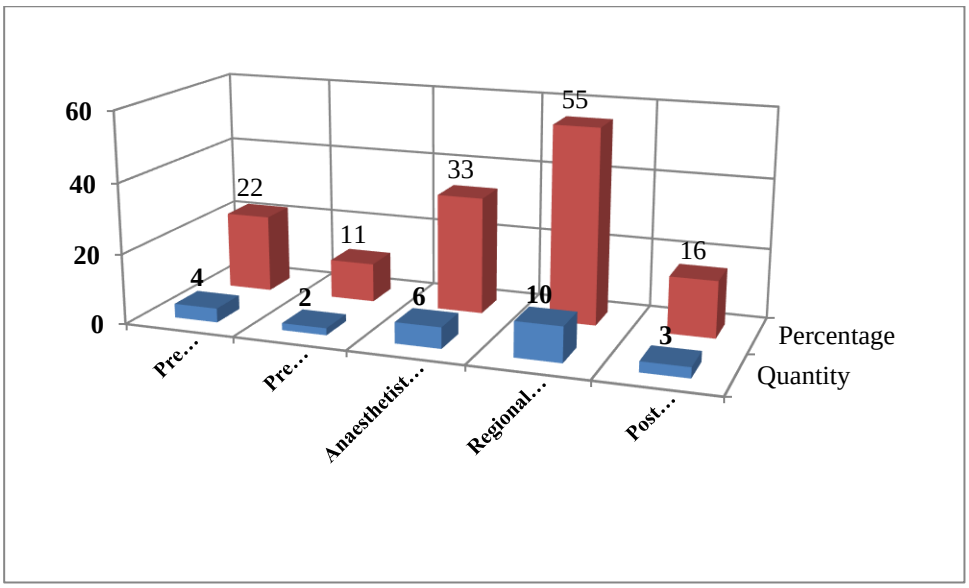

Figure 5.27: Shortcomings Observed in Pre Induction Evaluation & Monitoring Form

In six of the forms, anesthetists missed out to sign the ibid form. Other aspects noted were with pre induction check list and pre induction clinical evaluation, where certain fields were not filled in the forms.

79. **<u>OT Surgery & Post Surgery Notes</u>.** All 96 surgical cases had surgery and post surgery notes. However 22 of the notes were not complete in all respects as per the checklist developed for audit. Major observations were related to fields as reflected in **(Figure5.28)** below:

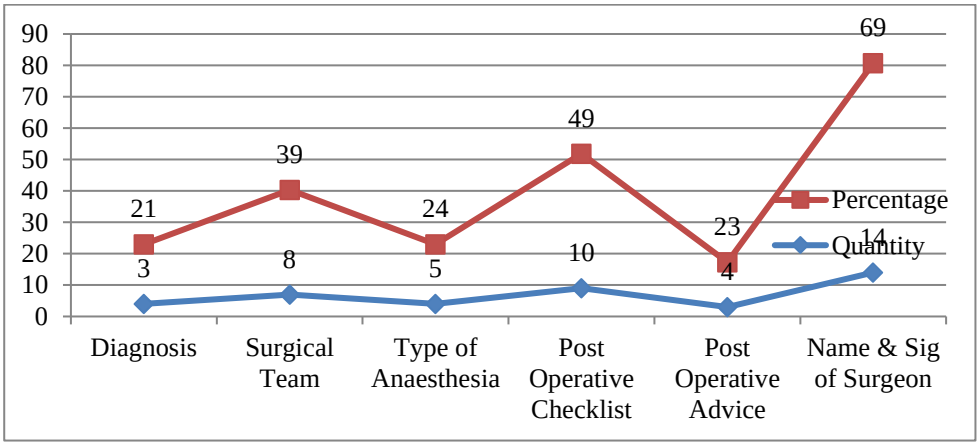

Figure 5.28: Observations on OT Surgery & Post Surgery Notes

It was noticed that 14 forms of the partially compliant forms were without the name and signature of the Surgeon, followed by post operative checklist, wherein 10 forms were found to be partially filled post operative checklist.

80. **Monitoring Form for PACU.** It was noted that all the 96 concerned medical records had the monitoring form for PACU. Of the 96 ibid forms, 83 forms were fully compliant as per the checklist. However, 19 of them were not filled completely. The details of the partially compliant forms are as per **(Figure 5.29)** as under:

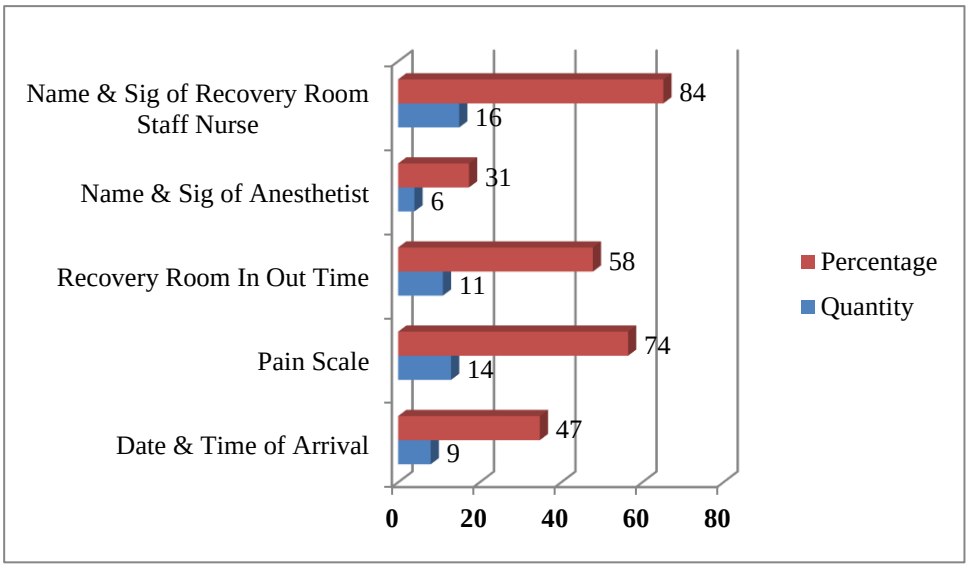

Figure 5.29: Deficiencies Noted in Monitoring Form for PACU

As it is evident from the above figure, pain scale was not marked in approx 74 % of the partially compliant forms. Recovery room in out time was also not reflected in about 58 % of the forms.

81. **OT Recovery Nursing Record.** All 96 concerned files had the OT recovery nursing records. Out of these records, 73 files were found to be complete in all aspects. 23 of the records were found to have some fields which were not filled. The details of incomplete fields of these 11 patient files are as per **(Figure 5.30)** below:

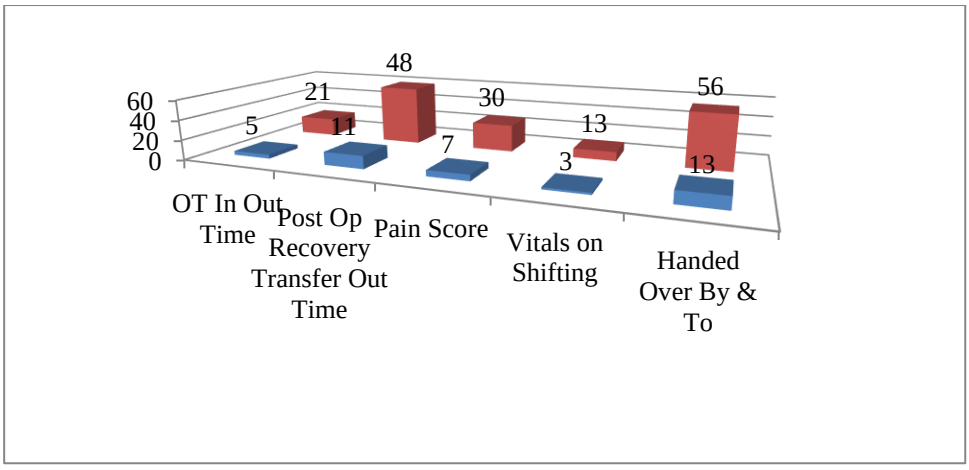

Figure 5.30: Deficiencies in OT Recovery Nursing Record

It was noted that post op recovery transfer out time was not mentioned in 11 records, where as in 13 records signature and particulars of 'handed over to or by' was not found.

82. **Swab/Needle/Instrument Count Checklist.** In all there were 96 surgical case files audited, of which the checklist was found in 88 files. Further, 78 checklist were complete and 10 of them were partially completed. The same in depicted in **(Figure 5.31)** below:

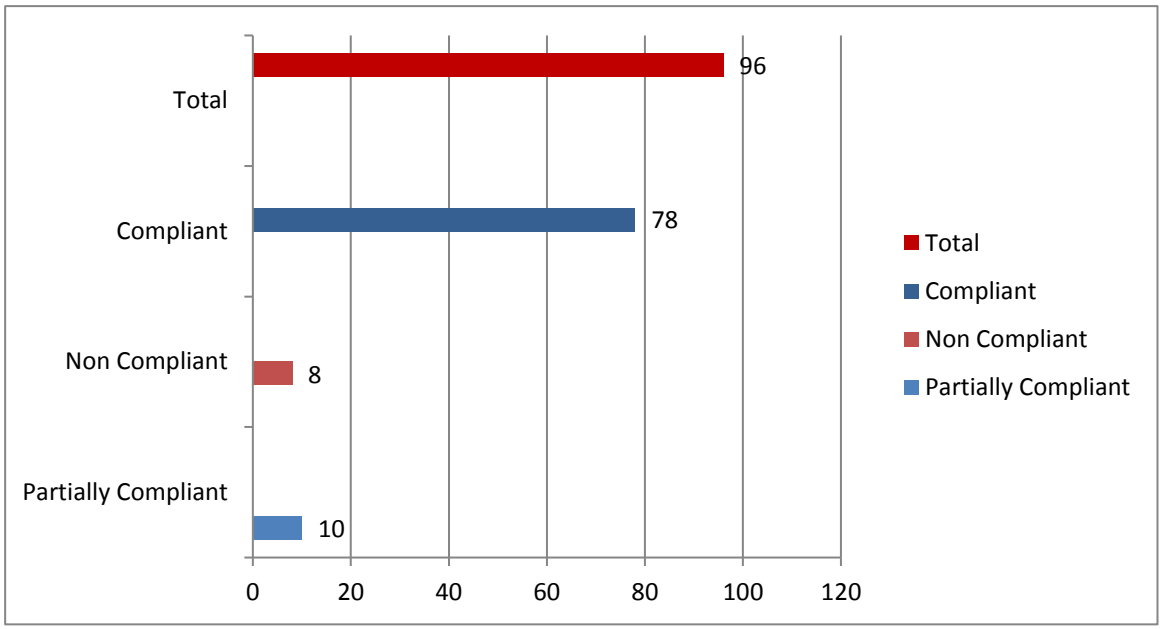

Figure 5.31: Deficiencies in Swab/Needle/Instrument Count Checklist

CHAPTER 6: DISCUSSION AND RECOMMENDATIONS

83. The use of audit for assessing nature of errors and establishing standards may be one viable solution for improving the documentation and contribute towards patient safety. Even though there is a need to improve the Patient Medical Documentation as a means to improve patient safety in India, one study could be found on the related subject published in Indian J Medical Science, Vol. 62, No. 11, November 2008. In a study done to assess adverse drug events by Bates et al. found 28% of adverse drug events to be preventable in their study and concluded that 56% of those preventable adverse events occurred at the stage of ordering[xvii]. The data for India in this regards is not available, however, it can be assumed that the results of studies by Bates would be more than relevant.

84. The major findings from the observations and analysis are as under:

(a) **IP Initial Assessment.** The statistics of Doc's IA seems to be satisfactory as per the audit however shortcomings like non-use of stamps, illegible signatures, not mentioning the time and plan of treatment and other deficiencies reduced the adequacy of the Doc's IA substantially to 78% **(Figure5.6).** This aspect makes the task of fixing the accountability for any delay in the subsequent treatment and faulty treatment due to error in initial assessment very difficult especially if the event was a near miss and not reported. As such issues like this may not get audited at the MRD stage and hence auditing at the documentation stage may help in identifying the defaulting doctor and undertaking necessary timely measures in terms of training and counseling to bring in behavioural change.

(b) **Progress/Handover Notes and Care Plan.** The progress notes and care plan was complete in 97% documents **(Figure5.9).** However, it was difficult to verify the signature of the primary consultant among so many signatures in the Doc's CP. As such NABH standards specify that a consultant should visit the patient at least once a day. The statistics of 17 % of the signatures of doctor being illegible in Doctors' Note **(Figure 5.14)** and the absence of use of stamps by 94 % of the doctor's **(Figure 5.15)** indicates something but the benefit of doubt was given to the Doctors initially by the audit which continued throughout to maintain standard. It has led to the high figure of 72% for the Authentication by Consultant in the Doc's CP **(Figure5.10).**This aspect if seen in retrospect is reflective of the feeling of

supremacy amongst doctors especially the seniors. In case there are many doctors/specialists visiting the patient, each doctor making observation in Doc's CP should be identifiable and putting the stamp along with signature should be the norm to not only maintain the legal sanctity of the record but to contribute to Patient Safety by correct documentation.

(c) **Nursing Documentation.** The Nursing IA (documented 99%) and Nursing Plan seems to give a sense that the nursing is generally close to the standard of 100% however, there is a dichotomy noticed by the Audit in terms of variation in Pain Rating of 10% **(Figure 5.22).** The high rate of Nursing Documentation indicates that due to the presence of adequate nursing staff in the wards and ICUs there is a lot of time devoted to Nursing Documentation. However the variation in the pain score of 10% indicates that the events are being documented clerically with a view to fill the column. This aspect brings the other statistics of better documentation also under doubt. The hospitalization of a patient is done with a view to cure the patient and to relieve the pain. The pain scores are reliable indicators to assess the effect of the treatment. It may also suggest that more time is required for the documentation due to the repetitive entries at the cost of patient care. Hence there may be a separate audit carried out to simplify the documents so that the nursing staff to devote more time for the patient care and thus improve patient safety.

(d) **Medication Administration Chart**. The adverse drug events are direct consequence of not being able to ensure five Rights: Drug, Route, Time, Dose and Patient**.** The standards for these parameters have to be 100% always and every time, however, the statistics indicates the following:

(i) Prescription of Medication in BLOCK LETTERS has not been done in 11 % of Medication Administration Charts **(Figure 5.16)**. This is one of the major causes of the adverse event and not resorting to writing the drug in CAPITAL letters can lead to administration of wrong drug. The defaulting in this regards needs to be addressed urgently by training and counseling.

(ii) The signature of doctor is not legible in 28% of Medication Administration Charts **(Figure 5.17)**. And to read this in conjunction with non

use of rubberstamp by 94% doctor **(Figure 5.15)** can lead to alarming situations. Especially during emergency if the medicine is not written in CAPITALS and signature of the doctor is illegible then crucial time may be wasted in consulting the concerned doctor and administering the appropriate medicine.

(iii) Medications are stopped but not validated by the doctor in 6% of Medication Administration Charts **(Figure 5.18).** This aspect can be critical to the patient with multiple ailments and being attended to by many doctors. In this case, more than one doctor might want to prescribe a particular medicine and stopping the medicine without validation by one may induce error in judgment of the other.

(iv) Not mentioning the Time of Administration of medication in 7% cases (**Figure 5.19)** may cause over or under-administration of drug and is a threat to patient safety due to the right-drug.

(v) Date of prescription is not mentioned in 12% of Medication Administration Chart **(Figure 5.20).** This may cause errors in judgment during review. As such date and time of medication sets a starting point for beginning of the treatment and are important at the time of review to assess the treatment. The drugs have side effects too and hence over-dosage due to not knowing the details of beginning of medication is a potential risk to the patient.

(e) **Nutritional Assessment**. Nutritional Assessment of all patients needs to be done within 24 hrs. However, it was not carried-out in 25 % of cases **(Figure5.21)**. Nutritional Assessment is a mandatory requirement as per NABH criteria too. Upto 40% patients are found to be malnourished and these patients stay in hospital longer, are three times as likely to develop complications during surgery, and have a higher mortality rate. [xviii]**.** Apart from malnutrition a patient may be diabetic, have high/low BP, may be on high protein diet or low fat diet etc and there may be requirement of meeting the nutritional needs differently. This issue requires a separate audit to find out specific deficiencies even though the internal audit showed a marked improvement in this parameter.[xix]

(f) **Admission Request Form**. Endorsement of Date and Time of initial inspection in the Admission Request Form by the doctor indicates the actual time taken for the doctors to attend to the patient after admission. This time should not be more than 30 minutes.[xx] It was found that 12% of Admission Request Forms didn't have it **(Figure 5.12)**. Name & Sign of physician was not endorsed in 10% of admission request form **(Figure 5.13)** thereby making the subsequent assessment difficult since in modern medical care, where there is involvement of variety of people, a lot is communicated about the thought process likely to be taken by a doctor endorsing the document. Absence of authentication in the Admission Request Form denies the subsequent assessment an insight into the vital initial thought process which would itself be based on evidence.

(g) **Forms Related to Surgical Case Files**

(i) **Pre Operative Checklist** – Out of total 96 surgical case files audited, 18 forms were found incomplete and having deficiencies **(Figure 5.25).** Checklist being a very important document needs to be complete in all respects to ensure patient safety.

(ii) **Pre Anesthesia Check up Form** Total 19 forms were found incomplete and having deficiencies **(Figure 5.26).** Needs to be deficiency free to ensure patient safety.

(iii) **OT Surgery and Post Surgery Notes** Out of total 96 surgical case files audited, 22 forms were found incomplete and having deficiencies **(Figure 5.28).** Major observations related to aspects of name and signature of surgeon, post op check list not complete etc which are all linked to aspects of patient safety.

(iv) **Swab / Needle/ Instrument Count Check List** Out of total 96 surgical case files audited, 88 files found to have the ibid form. 78 forms were fully complete and 10 forms found partially complete. **(Figure 5.31).**

85. **Effect of Internal Audit**. To assess the effect of Internal Audit of Patient Medical Documentation, the sample data, which was updated progressively, was divided into five parts. The analysis of the IP Initial Assessment (Doc's IA) and Nutrition Assessment was found to be distinct and has been elaborated in succeeding paragraphs:

(a) **Progress of IP Initial Assessment (Doctor's IA) (Figure 5.6)**.

(i) Average of 93% was achieved for IP Initial Assessment (Doc's IA) for initial 230 patient medical documentation folders audited in MRD Section. Though overall adequacy stood at 78 % due to deficiencies as brought out above.

(ii) For the next 70 samples, it improved to 100%, probably due to the Hawthorne (observer) Effect ie. improving their way of functioning by knowing of the fact that they are being observed and watched.

(iii) For the sample patient files 301- 400, it was 97%. The dip was likely to be due to the staff getting used to seeing the audit continuing and becoming complacent. However, the result was better than the initial 230 results indicating positive change in the basic behavior.

(iv) For the sample patient files 401 - 500, IP Initial Assessment(Doc's IA) improved to 98% and further improvement in the audit of balance of record from 501 - 530 to 99% shows positive trend in the improvement of the behavior of Doctors carrying out the initial assessment. It thereby indicates that the doctors are adapting to the guidelines and there is improvement in understanding of the perceived non-medical aspects of documentation as per the laid down standards.

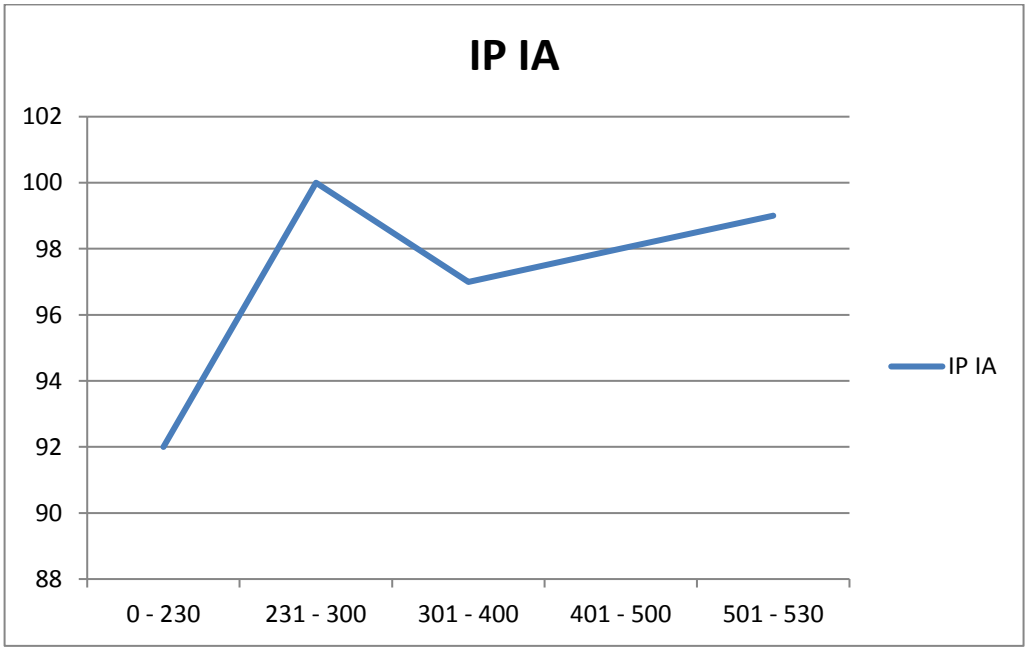

Figure 6.1: Effect of Internal Audit- IP Initial Assessment(Doc's IA)

(b) **<u>Progress of Nutritional Assessment (Figure 5.21)</u>**.

(i) Average of 88% was achieved for Nutritional Assessment for initial 230 patient medical documentation folders in MRD Section. Though overall in 25 % cases the assessment was not done within 24 hrs.

(ii) For the next sample files from 231 -400, it further improved to 94%. The improvement was likely to be due to improvement in the availability of the staff, awareness of internal audit and since the hospital shifted to 100% computer entry of the ibid form using computer on wheels.

(iii) For the patient 401-500, Nutritional Assessment improved to 97.5% and further improvement in the audit of balance of record from sample 501 – 530 to 99% which shows positive trend in the likely improvement of the behavior of Nutritionists for carrying out the Nutritional Assessment. It thereby indicates that the Nutritionist started adapting to the guidelines and there was an improvement in understanding of the relevance of non-medical aspects of documentation as per the laid down standards.

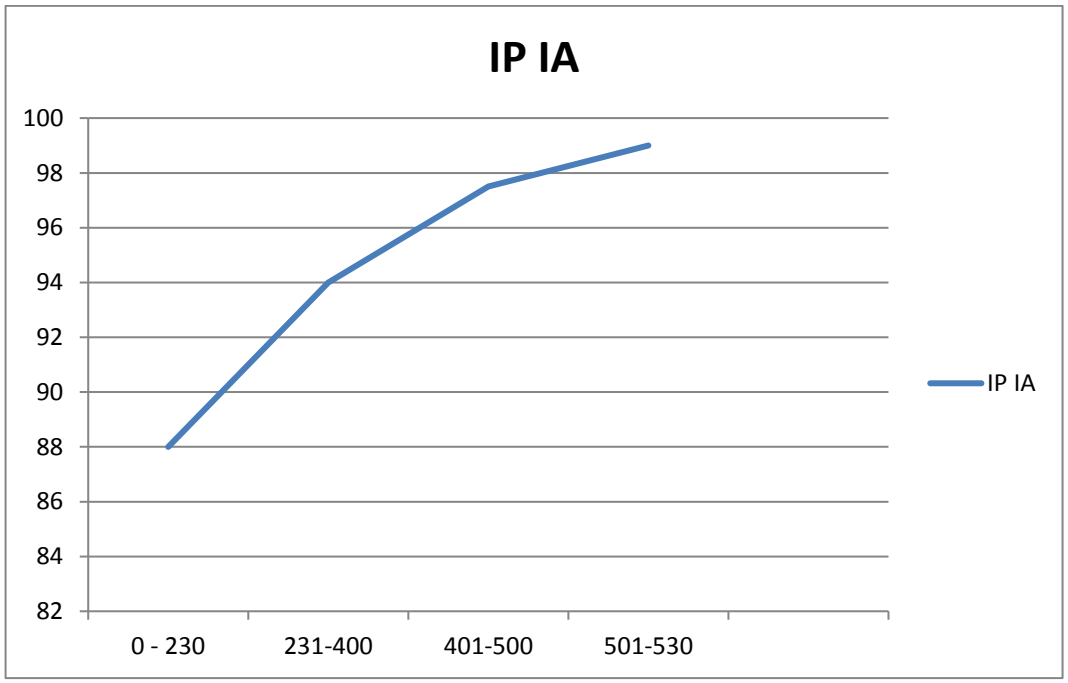

Figure 6.2: Effect of Internal Audit -Nutritional Assessment

86. Patient Safety should be the reason of all activity in any hospital and there should be constant endeavour by all to achieve this. The ultimate aim of any healthcare organization should be to have zero tolerance towards patient safety. This is an emerging field even in the developed countries and hence has been talked about in the recent few decades only.[xxi] In countries like India, following the accreditation process interjects any hospital on the fast road to achievement of patient safety through standardization which is mainly dependent on Patient Documentation. However the hospitals can evolve their own processes keeping the resources in mind to achieve highest standards of patient safety. The basic deterrent to patient safety in our healthcare and recommended remedies are as follows:

(a) Standardization of the training of doctors and nurses at the time of basic educational training is imperative. This was observed in the variation in the standards of parameters in MRD Section, Wards and ICUs(**Appendices 'D' to 'F').** Internal Audit to find gaps and training in the Patient Safety can bring in standardization within a healthcare organization.

(b) The basic medical education does not impart specialized training on patient safety and whatever little is taught is only theoretical. Hence there is a tendency to fill columns in the forms as seen from the statistics of Pain Score variation **(Figure5.22)**. Specialized training of nurses will help in improving the awareness on Patient Safety.

(c) The abrupt adaptation of accreditation in our country by healthcare set-ups without being part of evolution of patient safety has brought a gap between thinking and action. The accreditation route through documentation is easiest however there is requirement of developing willing compliance of all since the aim of healthcare should be to achieve 100% patient safety. Compliance above 90% in any parameter may seem to be decent, however, for the patient who falls within the last 10% it may put them in a critical situation. Hence efforts to accept the standard at 100% should be the goal laid down by the management.

87. The issues highlighted by the study regarding our healthcare organizations that were missed out during the process of evolution of patient safety in India as compared to the developed world are:

(a) Our organizations are still in the situation of traditional approach where it is assumed that well-trained, conscientious practitioners do not make errors and equated rror with incompetence and regarded punishment as both appropriate and effective in motivating individuals to be more careful. This has led to practitioners rarely revealing mistakes, and patients and supervisors are frequently kept in the dark. This aspect has been highlighted by the non-use of rubber stamp by 94% of the doctors **(Figure5.15).**

(b) A very few healthcare organizations have now started considering that errors could be reduced by redesigning systems and processes using human factors principles. The audit of Patient Medical Documentation in the present study is an effort to do the same in an super specialty tertiary care hospital.

(c) In an improving system concepts from other established and successful fields are adopted. The internal audits are established norms in the Armed Forces and adoption of this important self improvement tool will definitely improve patient safety.

(d) Due to high quality of education in the developed nations, the route to the reduction of mistakes through document standardization is a viable alternative to achieve patient safety. However, in our context continuous training guided by the deficiencies detected during the audit can provide a workable solution to fill the gaps in the initial medical education. This aspect has been validated by the improvement in the IP Initial Assessment(Doc's IA) **(Figure 6.1)** and Nutritional Assessment within 24 hrs **(Figure 6.2).**

(e) The concept of limiting the blame and avoid finger pointing had brought in the transparency in healthcare organizations and developed team spirit. The present audit limiting to the non-medical aspects seem to have positive effect in the present study and has led to the improvement in the documentation and likely to have positive impact on patient safety.

(f) Culture and Professionalism. There was a collective evolution of culture and professionalism. This assisted in building an overall high-reliability organization. The effort of Patient Medical Documentation Audit was to not blame the

medical aspects of treatment thereby reducing the gap between the management and the sharp-end, thereby forging continuity in culture and professionalism. However, to establish seamless integration and overlap of all in the patient safety mechanism there can be a monthly Board of Officers (BOO) detailed by Quality Department which can carry out deeper audit of Patient Medical Documentation to ensure patient safety. This BOO can act as a mirror to the sharp-end for self correction. To insulate the doctors and nurses from getting blamed and bring in internal transparency, the BOO can include the following:

(i) Presiding Officer- Any Consultant.

(ii) Members:

(aa) One Resident Doctor

(ab) One Nursing Staff

(ac) One member from any of the non-medical staff

(g) The law of torts forced the medical professional to be accountable for safe delivery of patient care. However, due to the poor implementation of law in our context, there is requirement of conscious effort to improve patient safety up to the desired levels. The illegible signatures and non-use of the personal stamp seem to be manifestation of this issue. Even though the better results for filling of the forms shows that awareness amongst the doctors and nurses to be legally recording in the patient medical documentation is there and may be more so in the super specialty tertiary care hospitals the efforts should be undertaken to link the issue to Patient Safety.

(h) The standards and accreditation systems were developed for the hospitals in the developed countries over a period of time. NABH in our context came up taking inspiration from the advanced countries. So to fill in this void the internal audit mechanism is a good tool as established by positive changes in the study.

CHAPTER 7: CONCLUSION

88. It is recommended to consider the audit process as a method for improving standards of medical care. There is an urgent requirement to spread awareness in trainees towards legibility and correctness of spelling of drug as well as review of treatment and stating the name of prescribing doctor.

89. The present efforts in our country towards Make in India have highlighted the mismatch in the thoughts and the adapted growth, mismanagement of resources, poor implementation of policies, etc. The same is relevant in the medical field too where the mismatch between the basic learning during formative stages and the growing national expectations as per the evolving standards of Developed World has manifested into incoherent advancement. In fact, due to deteriorating education system in our country there is an ever increasing gap between the expectations as per benchmarks, which are taking the Developed World as the reference point, and the ground situation. As part of Make in India initiative, there is need to start looking inwards in healthcare too by setting our own standards which evolve based on holistic indigenous approach.[xxii]

90. The shifting of gears in the private healthcare sector in our country to woo business from developed countries has led to abrupt adaptation of the accreditation standards which were evolved in the developed countries after due research. This has led to an accreditation system in healthcare sector in our country which is not evolved indigenously and is largely based on the developed countries. Nevertheless, the accreditation has by and large led to the standardization of medical care in our country also. The way to the accreditation is through following standardized procedures which are implemented by evolving various forms and documents. These documents are subjected to internal and external audit as per accreditation guidelines. However, the purpose of the documentation should be Patient Safety and physician defensibility rather than being just be guided by the requirement of accreditation and legal framework only. After the study, it has emerged that the internal audit of the Patient Medical Documentation can assist in positively influencing the behavior of the doctors and nurses towards documentation and hence patient safety and physician defensibility in a hospital. This type of internal audit of the Patient Medical Documentation should be strengthened to bring back the focus of a hospital to patient safety which otherwise has shifted to the completion of documents from the point of view of fulfilling the legal requirement only.

91. The present study addressed the issue of patient safety and physician defensibility through the improvement in the Patient Medical Documentation by trying to influence the behavior of the sharp end. This aspect requires further validation by comparing the more direct patient safety indicators which may be possible in an older set-up where comparative data of longer duration would be available

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