

# **Summer Internship Report**

**Conducted at**

**BLK-MAX SUPER SPECIALITY HOSPITAL, NEW  
DELHI**

**May 2<sup>nd</sup> to July 5<sup>th</sup>**

## **REPORT ON**

**A study to assess the compliance of Medical Records of  
IPD and Emergency Department in a tertiary care  
hospital**

**By Mohd. Kavish Amin**

**PGDM (Hospital and Health Management)  
(2023-2025)**



**International Institute of Health Management Research, New Delhi**

Dated: 05-07-2024

TO WHOMSOEVER IT MAY CONCERN

Sub: Internship Completion Letter

This is to certify that **Mohd. Kavish Amin** has completed Internship at BLK-Max Super Speciality Hospital from **2<sup>nd</sup> May 2024** till **06<sup>th</sup> July 2024** in the Department of **Quality**.

During his tenure, his conduct was found to be excellent.

We wish him all the best for his future.

Yours Sincerely,  
For Dr. B.L. Kapur Memorial Hospital,  
A Unit of Lahore Hospital Society



Antra Pandita  
Deputy Manager - Training & Development  
Human Resources



# Completion of Summer Internship from respective organization

The certificate is awarded to

**Mohd. Kavish Amin**

In recognition of having successfully completed his/her  
Internship in the department of **Quality**

And has successfully completed his Project on

**A Study to Assess the Compliance of Medical  
Records of IPD Tertiary Care Hospital**

**Date : 6-07-2024**

**BLK MAX Super Speciality Hospital  
Pusa Road , New Delhi -110005**

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

We wish him all the best for future endeavours

Organization Supervisor



Head-HR/Department Head

## FEEDBACK FORM

(IIHMR MENTOR)

Name of the Student: Mohd. Kavish Amin.

Summer Internship Institution: BLK - Max Hospital

Area of Summer Internship: Quality Department

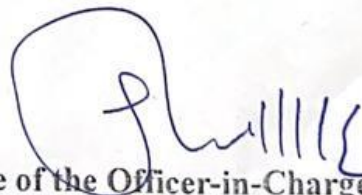
Attendance: 100%

Objectives met: Yes.

Deliverables: Yes.

Strengths:

Suggestions for Improvement:



Signature of the Officer-in-Charge (Internship)

Date:

Place:

## FEEDBACK FORM

(Organization Supervisor)

Name of the Student: Mohd. Kavish Amin

Summer Internship Institution: BLK - MAX SUPER SPECIALITY HOSPITAL

Area of Summer Internship: Quality Department

Attendance: 100%

Objectives met:

1. Internal audits to ensure compliance with hospital quality standards as per JCI.

2. Analysis & improvement of pt. care processes.

Deliverables:

1. Prepared audit reports summarizing findings & recommendations

2. Medical documentation tracer audit

3. IPSG audit

Strengths:

1. effective communication

2. Proactive & detailed oriented in executing every task (5@ making)

Suggestions for Improvement:

NA

Signature of the Officer-in-Charge (Internship)

Date: 06.07.2024

Place: BLK - MAX SUPER SPECIALITY HOSPITAL

## Mohd kavish Amin ST report

### ORIGINALITY REPORT

14%

SIMILARITY INDEX

11%

INTERNET SOURCES

3%

PUBLICATIONS

4%

STUDENT PAPERS

### PRIMARY SOURCES

1

[www.blkmaxhospital.com](http://www.blkmaxhospital.com)

Internet Source

5%

2

[aafiyaindia.com](http://aafiyaindia.com)

Internet Source

2%

3

[www.coursehero.com](http://www.coursehero.com)

Internet Source

1%

4

Submitted to Liberty University

Student Paper

<1%

5

[mamedicallaw.com](http://mamedicallaw.com)

Internet Source

<1%

6

Submitted to Temple University

Student Paper

<1%

7

Submitted to Buckinghamshire Chilterns  
University College

Student Paper

<1%

8

Kylie Porritt, Alexa McArthur, Craig Lockwood,  
Zachary Munn. "JBI's approach to evidence  
implementation: a 7-phase process model to

<1%

## **ABSTRACT**

The study reflects the importance of enhancing medical documentation in a multi-specialty hospital setting. It plays a very crucial role for accurate and comprehensive records in patient care, safety, and overall healthcare quality. The aim of the study is to investigate and implement strategies for improving the quality of medical records/documentation in a multi-specialty hospital. The primary goal is to enhance patient care, make sure a proper communication is dealt, and ensure compliance with legal and regulatory requirements. To assess the compliance rate of medical records/documents of ER and IPD. To determine the causes responsible for low compliance rate. To formulate and implement interventions to improve compliance rate of medical records in ER and IPD. To minimize errors in medical records and promote a safer healthcare environment. The methods section looks forward to the approach taken to achieve the study's objectives. It involves data collection, data analysis, data study, audits, training programs, and the implementation of technology solutions to improve documentation efficiency. Accurate documentation of a patient's healthcare records is crucial for information flow between providers and specialists. Compliance with clinical documentation guidelines can be improved through education, training, audits, and standardized tools. Electronic medical records can improve quality, but challenges persist with accessing clinical notes. Causes of incomplete or inaccurate documentation include workflow, physical documents, human resources, and human factors. Corrective actions include strengthening doctor training and collaborating with department heads. The study concludes by summarizing the key findings and focusing the importance of ongoing efforts to maintain and further improve medical documentation. It also considers aspect of positive outcomes achieved and the benefits to patient care and healthcare overall.

# **INTRODUCTION**

## **1.1 About the topic:**

Medical Records, as stated in the source (*Kumar, R., & Gupta, R., 2020*), are described as comprehensive and precise accounts of a patient's life and medical condition, presented from a medical perspective. Medical documentation holds a necessary position within the healthcare ecosystem, functioning as a comprehensive account of patient interactions, therapies, and results. Precision and thoroughness in documentation stand as the primary importance in delivering best patient care, considering efficient communication within the healthcare community, adhering to legal and regulatory requirements, and enhancing patient safety protocols. This record-keeping or documentation provides insight to the healthcare providers to strategize and evaluate a patient's treatment plan, promising a better excellence in care across multiple healthcare providers (*Chandrashekar, R., & Sidhartha, S. (2009)*).

Hospitals want to make medical records better to always have the right information about patients. This helps doctors and nurses work together better and make smart decisions about treatment. It also helps with research. When hospitals do this well, it can make patients healthier, prevent mistakes, protect doctors legally, and make sure they get paid properly.

### **1.1.1 Strategies for improving medical documentation:**

Improving medical documentation in hospitals involves several key strategies. First, education and training programs are essential to enhance the documentation skills of healthcare professionals. These programs focus on the importance of accurate and clear record-keeping in the medical field. Second, standardized documentation templates and guidelines are taken as a reference to ensure consistency and completeness in patient records. These templates help healthcare providers follow uniform rules for documenting patient information.

Integrating technology, particularly electronic health records (EHRs), is another critical strategy. EHRs ease documentation workflows, reducing the paperwork burden on healthcare providers and enabling them to allocate more time to patient care. Finally, cultivating a culture of documentation excellence is essential. This is achieved through regular audits and feedback on documentation quality, ensuring that records are comprehensive and accurate.

These initiatives collectively address common documentation shortcomings, such as incomplete or inconsistent information, excessive paperwork, and inadequate understanding of legal and regulatory requirements. By improving medical documentation, hospitals aim to enhance patient care, reduce errors, and improve compliance with healthcare standards.

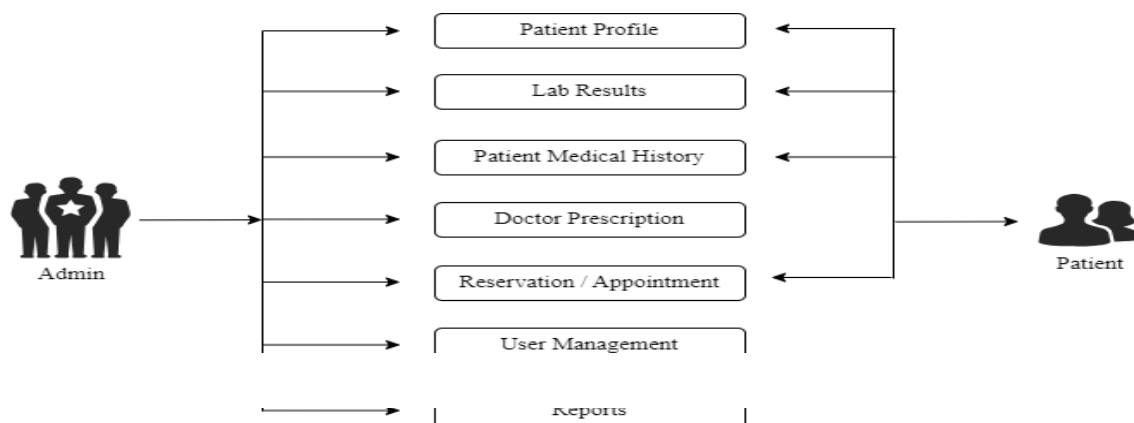


## Audits in Healthcare:

Healthcare audits are like thorough check-ups. They help make sure that healthcare services are of good quality by checking them against certain standards. Audits involve looking at medical records and services to find areas where things can be better and to make sure that patients receive high-quality care. High-quality records should be readily accessible, contain accurate information, and be presented in a clear and understandable manner (*P Esposito (2014)*). Such records not only enhance patient care by reducing errors but also considers effective collaboration among diverse healthcare professionals.

Medical audits play a dual role. These audits help hospitals and healthcare providers see how well they are doing in terms of keeping records accurate and following the rules. These audits provide useful information not just for patients but also for healthcare organizations. (*P Esposito (2014)*). Regular checks help identify and rectify issues early, minimizing the risk of legal complications. The main goal of these audits is to make healthcare better. They help improve how patients are taken care of, make it easier for healthcare teams to talk to each other, and keep patients safe. Audits also make sure that hospitals follow the rules and make the paperwork part of healthcare more organized, so everything works better. It is important to understand that making medical records better is something that keeps happening over time. Healthcare is always changing with new technologies, rules, and needs. So, doctors, managers, and tech experts need to keep working together to make sure the records stay up-to-date and useful.

When hospitals work on making their medical records better, it brings many good things. Patients get better care, doctors and staff can talk to each other more easily, and things are safer. It also means the hospital follows the rules, and paperwork becomes simpler. By using the right methods, technology, teamwork, and always trying to do better, hospitals can make sure their medical records are really good. This helps patients get better and makes the hospital work better too.



**Fig 1: Medical documentation system use case diagram (Source: Li, Y., & Zhang, Y. (2021))**

## **About the hospital:**

Dr. B L Kapur, an eminent Obstetrician and Gynecologist, set up a Charitable Hospital in 1930 at Lahore. In 1947, he moved to post-partition India and set up a Maternity Hospital at Ludhiana. In 1956 on the invitation of the then Prime Minister, Dr. B L Kapur initiated the project for setting up a 200bed hospital in Delhi. The hospital was inaugurated by the Prime Minister, Pt. Jawahar Lal Nehru on 2nd January 1959.

In 1984, at the time of its Silver Jubilee, it was an expanding on its way to become Delhi's premier multispecialty institute. Services offered included General Surgery, Ophthalmology, ENT, Dentistry, Pulmonology, Intensive Care and Orthopedics, apart from mother & child care.

In the late 1990s, the Trustees of the hospital felt the need to upgrade it to a tertiary care hospital and tied up with Radiant Life Care Private Limited to re-develop and manage the facility. Today, a modern state-of-the-art tertiary care hospital has come up in place of the old hospital. It is one of the biggest standalone private Hospitals in the National Capital Region today.

## **Highlights about the hospital:**

- Largest private sector hospital in Delhi, India
- Spread over 6,50,000 sq. ft.
- 650-bed capacity | 125 critical care beds | 17 state-of-the-art modular operation theatres
- 1500 healthcare providers | 150 globally renowned super specialists | 300 medical experts
- One of Asia's largest Bone Marrow Transplant Centre
- Advanced Robotic Surgery Systems
- Liver Transplant | Kidney Transplant | Heart Transplant | Centre for Bone Marrow Transplant | Cancer Centre | Centre for Chest and Respiratory Diseases | Centre for Child Health | Centre for Critical Care | Institute for Digestive & Liver Diseases | Heart Centre | Centre for Neurosciences | Institute for Bone, Joint Replacement, Orthopedics Spine and Sports Medicine | Centre for Plastic & Cosmetic Surgery | Centre for Renal Sciences & Kidney Transplant | Radiology & Imaging Institute.
- BLK Super Specialty Hospital has a unique combination of the best-in-class technology, put to use by the best names in the professional circles to ensure world-class health care to all patients. Spread on five acres of land, with a capacity of 650 beds, BLK Super Specialty Hospital is one of the largest tertiary care private hospitals in the country; BLK has consistently ranked amongst the Top 10 Multi Super Specialty Hospitals in Delhi NCR. The outpatient services are spread on two floors with 80 consultation rooms. All ambulatory services have been designed with intent to create dedicated aides for all specialties, with their interventional services in close vicinity. Therefore, whether it is the proximity of diagnostic services and blood bank to the emergency or one of the best Endoscopy suites to ensure timely and efficient services, the infrastructure speaks volumes about BLK's commitment to 'PASSION FOR HEALING'.

- The hospital has 17 state-of-the-art well-equipped modular operation theatres with three stage air filtration and gas scavenging system to ensure patient safety. All the Operation Theatres are fitted with best-in-class pendants, operating lights, anesthesia work stations and advanced information management system.
- The Hospital has one of the biggest critical care programmes in the region with 125 beds in different intensive care units viz Medical, Surgical, Cardiac, Paediatrics, Neonatology, Neurosciences and Organ Transplant. All critical care beds are in the close vicinity of the Operation Theatre complex for easy accessibility and continuity of care. Each Critical care unit is equipped with high end patient monitoring devices, ventilators and dedicated isolation rooms. Facilities for haemodialysis, CRRT, SLED, endoscopy and bronchoscopy are available 24X7 by the bedside.
- Liver and Renal Transplant Centres have been equipped with dedicated ICUs with individual hepatic filters, specialized instruments and equipment's, Veno-venous bypass system and dedicated anaesthesia equipment.

The Hospital has specialized birthing suites with telemetric foetal monitors to follow the progression of labour, and the facility for the family to stay with the patient during the labor. A dedicated operation theatre adjacent to the labour room helps in shortening the response time in case there is a need to conduct the delivery through surgical means.

## **1.2 Significance of study:**

Complete patient records include vital information like medical history, allergies, and current medications. In emergencies, having this data readily accessible can prevent adverse drug interactions or incorrect treatments. Detailed documentation of a patient's condition and care plan helps prevent misdiagnoses and medical errors.

Hospitals are subject to laws like the Indian Medical Council Act, Consumer Protection Act, IPSC, Drugs and Cosmetics Act etc. in India, which mandate the protection of patient information. Proper documentation is often necessary for complying with the standards set by healthcare accreditation organizations such as The Joint Commission.

Inpatient records provide a seamless history of a patient's journey, ensuring that care transitions are smooth and consistent. Accurate documentation during admissions and discharges is essential for effective continuity of care.

Healthcare professionals rely on each other's notes and records to coordinate care. Detailed documentation enhances collaboration and ensures that everyone is informed. In an IPD, notes from different specialists can provide a comprehensive understanding of the patient's overall health.

Detailed records support data-driven decision-making for hospital administrators. It can help identify areas where improvement is needed. This data can be used for research into patient outcomes, treatment effectiveness, and the identification of best practices.

Proper documentation of services provided is essential for accurate billing. Incorrect or incomplete records can lead to financial losses for the hospital. Compliance with coding and billing standards (e.g., ICD-10) ensures that insurance claims are processed efficiently.

Robust documentation aids in the identification and mitigation of potential risks. It helps in tracking and analyzing adverse events, allowing the hospital to take proactive steps to prevent complications. Detailed records can be crucial in the event of legal disputes or malpractice claims.

Comprehensive records can be a valuable resource for medical professionals and students for educational purposes. Hospitals can also contribute to medical research by anonymizing patient data and sharing it with researchers, supporting the advancement of medical knowledge.

Maintaining proper documentation is often a requirement for achieving and retaining hospital accreditation from organizations like The Joint Commission. Compliance demonstrates a commitment to quality care. Many certification programs for healthcare professionals, such as nursing certifications, require understanding and adherence to documentation standards.

Proper documentation ensures that patients have given informed consent for treatments or procedures, safeguarding their rights and choices. In the event of disputes or legal issues, these records can demonstrate that the patient's rights and choices were respected.

# **REVIEW OF LITERATURE**

## **Basics of Medical Documentation:**

With reference to the hospital's Quality Department, medical documentation refers to the critical process of recording, maintaining, and managing patient-related information and activities. This documentation serves as a comprehensive and organized record of a patient's medical history, diagnoses, treatment plans, interventions, and outcomes. It encompasses various forms of records, including electronic health records (EHRs), handwritten notes, medical charts, and reports (*Committee of AJUMS. (2021)*).

Medical documentation, in a broader sense, can be defined as the systematic and detailed recording of all aspects of a patient's medical care and their past medical history (*Donabedian, A. (2005)*). This includes:

- **Patient Information:** This involves noting essential patient details such as name, age, contact information, and medical history.
- **Clinical Observations:** Recording observations made during physical examinations, vital signs, and any symptoms or complaints reported by the patient.
- **Diagnosis and Treatment:** Documenting the diagnosis made by healthcare professionals, treatment plans, prescribed medications, and procedures performed.
- **Progress Notes:** Regularly updating patient charts with progress notes, which include information about the patient's response to treatment, any complications, and changes in their condition.
- **Orders and Instructions:** Documenting orders for tests, referrals to specialists, and instructions for patients regarding follow-up care, medications, or lifestyle changes.
- **Legal and Regulatory Compliance:** Ensuring that medical documentation adheres to legal and regulatory requirements, including patient privacy laws (e.g., Article 21, Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002; The Consumer Protection Act 1986; Drugs and Cosmetic Act 1940 etc.
- **Communication:** Facilitating effective communication among healthcare providers, enabling them to collaborate on patient care and make informed decisions.
- **Research and Analysis:** Supporting medical research, quality improvement initiatives, and risk management efforts by providing a comprehensive dataset for analysis.

Medical documentation plays a pivotal role in patient care, as it ensures continuity, accuracy, and accountability in healthcare delivery. It is essential for tracking a patient's journey through the healthcare system, facilitating communication among providers, and ultimately contributing to the overall quality of care provided. In the Quality Department, our focus is on optimizing these documentation practices to enhance patient safety and the quality of healthcare services delivered within the hospital.

## **Optimizing Medical Documentation Practices for Quality Healthcare and risk management:**

In my role within the Quality Department at Super-Specialty Hospital, I was deeply involved in the management and maintenance of medical documentation in order to maintain the quality. One piece of advice that we frequently encounter in our efforts to balance risks related to the need for administrative staff to enhance their documentation practices. However, my experience within this department has shaped a different perspective.

From my standpoint, advocating for administrative personnel to increase their documentation efforts is not always the most effective approach, and it can sometimes lead to counterproductive outcomes. Here are some reasons behind this perspective (*Kuhn, T. H. (2010)*).

- **Balancing Documentation Demands:** One of our primary concerns revolves around ensuring that our documentation practices align with the hospital's quality and risk management objectives. Encouraging administrative staff to generate more documentation can inadvertently result in an excessive paperwork burden. This, in turn, can overwhelm our already busy healthcare workforce who are deeply involved in patient care responsibilities.
- **Resisting Documentation Pressure:** I have observed that when healthcare providers, including administrative personnel, are faced with an overwhelming demand for documentation, they may become resistant to the idea. Some may choose to keep their documentation minimal, while in certain cases, they might even omit crucial information that should be documented.
- **Quality-Focused Documentation:** Our department places a strong emphasis on the importance of quality over quantity when it comes to documentation. We urge healthcare professionals to prioritize the accurate capture of essential and pertinent patient information. Effective documentation entails thorough details such as patient history, diagnoses, treatment plans, and significant interactions.
- **Collaborative Communication:** Communication and collaboration among healthcare teams are pivotal elements in delivering high-quality patient care. An excessive focus on documentation can, at times, hinder these critical interactions. We firmly believe that healthcare professionals, including administrative staff, should maintain a balance between comprehensive documentation and maintaining open communication with their colleagues to ensure the best possible patient outcomes.

### **Effective Medical Documentation Practices:**

Writing more is not the solution; instead, writing more efficiently can significantly reduce the time spent on documentation. The key to this approach is to keep in mind three crucial principles of documentation, which also closely align with the principles of medical decision analysis (*Gutheil, T. G. (1998)*)

**Risk-Benefit Analysis:** The first principle revolves around recording a thorough risk-benefit analysis for important decisions made in the clinical care of the patient. This analysis should focus on both the potential risks and the benefits, even if some of these benefits may seem obvious or given. It is important to note that many professionals tend to focus primarily on the risks, especially when they are risk-averse, while not giving equal attention to the potential benefits of a decision. For instance, when prescribing a particular medication, there are associated risks like allergic reactions or adverse effects. Professionals often document these risks extensively in their progress notes. However, they may not equally highlight the benefits of the medication or, sometimes, even omit discussing the risks of not receiving the medication. A comprehensive discussion that considers both the risks and benefits of each course of action, such as whether to prescribe or not, is viewed as more reasonable and balanced (*P. Oermann & K. Gaberson(2007)*).

- I. **Clinical Judgment:** The second crucial aspect of documentation involves the application of clinical judgment at critical decision points. Clinical judgment, in this context, refers to an assessment of the clinical situation and a response that aligns with that assessment. It is the ability to make well-informed decisions based on a deep understanding of the patient's condition, available evidence, and clinical experience. Documenting the thought process behind these judgments is vital for transparency and accountability (*American Association of Colleges of Nursing. (2021)*).
- II. **Patient Participation:** The primary principle of documentation is related to the patient's capacity to participate in their own care. This includes ensuring that patients understand the purposes of the medications prescribed, are aware of the symptoms indicating worsening of their condition, and recognize when certain symptoms or mental states require immediate attention as an emergency. Empowering patients with this knowledge enhance their ability to actively engage in their healthcare decisions and contributes to better overall care outcomes (*National Center for Biotechnology Information (2020)*).

### **Writing Medical Records: Sensitivity of Documents**

When doctors or healthcare professionals write down information in a patient's medical record, they need to think about who might read it later. This is important because it ensures that the information is clear and not confusing. In the medical field, there are various people who might read these records, such as other doctors, emergency staff, or nurses who review the records for different reasons, like insurance companies or quality assurance teams. In some cases, even lawyers or the patients themselves might want to see what is in the records.

This means that when healthcare professionals write in these records, they not only need to show that they provided good medical care but also be careful about what they say. For example, instead of using words that might sound mean or negative when describing a patient with a history of behavioral problems, it is better to use neutral words like "the patient has a history of antisocial activity and has been in jail."

One of the best ways to keep records respectful is to use objective language. This means sticking to the facts and not using words that might sound judgmental or unkind. Even when discussing sensitive topics, using objective language helps ensure that the records remain respectful and professional (*Committee of AJUMS. (2021)*).

## Improving Healthcare through Better Records

Medical record documentation is the backbone of healthcare delivery. It serves as a comprehensive account of a patient's medical journey. These records capture essential information, including the patient's medical history, diagnoses, prescribed treatments, laboratory results, and interactions with healthcare providers. This detailed documentation not only ensures continuity of care but also plays a crucial role in quality assessment, medical research, and legal and regulatory compliance. Healthcare centres play a big role in making a country healthier. They need to collect and handle information properly, share it with decision-makers and hospital managers, and make sure it is organized and used at the right times. Accreditation programs for health services are an important way to control and improve Healthcare providers (*Moradi, G. H., & Ghazisaeidi, M. (2011)*).

One important part of this quality program is hospital medical records. These records look at how well doctors and nurses keep track of patient information. Good medical records give a clear picture of the care a patient gets, and they also help make sure the patient is charged the right amount for their treatment (*Abbasi, S. H., Tavakoli, N., & Moslehi, M. (2012)*).

## The Role of Medical Records in Accreditation

Hospitals Quality Policies centres on fulfilling the hospital's vision and missions, adapting to evolving patient requirements, and maintaining quality across services. This commitment includes achieving national and international accreditations for ongoing quality enhancement.

Medical records stand at the front of accreditation evaluations. They are subjected to thorough scrutiny to assess the quality and accuracy of documentation. Accreditation standards often focus on several key aspects of medical records, including:

- a) **Completeness and Accuracy:** Accreditation requires that medical records are complete, accurate, and up-to-date. This ensures that patient information is readily available and reliable for decision-making.
- b) **Compliance with Standards:** Accreditation bodies set standards for medical record documentation, covering areas such as record-keeping policies, data security, etc.
- c) **Quality Improvement:** Accreditation promotes a culture of continuous quality improvement. Hospitals are encouraged to use medical records not only for billing but also for enhancing patient care, tracking outcomes, and identifying areas for improvement.
- d) **Patient Safety:** Proper documentation contributes to patient safety by reducing errors, ensuring medication accuracy, and providing a clear record of patient care.



## **RESEARCH GAPS**

### **Effectiveness of Compliance Measures:**

Investigate the effectiveness of current compliance measures in ensuring accurate and complete medical record documentation, particularly in the inpatient department (IPD) and emergency department (ED). This could involve assessing the frequency of non-compliance and the reasons behind it.

### **Impact of Compliance on Patient Outcomes:**

Explore the relationship between medical record compliance and patient outcomes, such as readmission rates, length of stay, and mortality. This could help understand the extent to which compliance with medical record documentation protocols influences patient care quality and safety.

### **Barriers to Compliance:**

Identify the specific barriers that healthcare providers face in maintaining compliance with medical record documentation requirements. This could include factors such as time constraints, inadequate training, or cumbersome documentation systems.

### **Technology and Compliance:**

Evaluate the role of technology, such as electronic health records (EHR) systems, in facilitating or hindering compliance with medical record documentation standards. Assess whether the implementation of certain technological solutions improves compliance rates and overall record accuracy.

### **Documentation Discrepancies between IPD and ER:**

Investigate any discrepancies in compliance with medical record documentation standards between the inpatient department and the emergency department. Understanding the differences in documentation practices between these settings could help target interventions more effectively.

### **Legal and Regulatory Implications:**

Examine the legal and regulatory implications of non-compliance with medical record documentation standards. This could involve assessing the risk of litigation, regulatory penalties, or accreditation challenges associated with incomplete or inaccurate medical records.

### **Provider Education and Training:**

Assess the effectiveness of educational interventions and training programs aimed at improving healthcare providers' compliance with medical record documentation standards. This could involve implementing targeted educational initiatives and evaluating their impact on compliance rates over time.

### **Patient Involvement and Documentation Accuracy:**

Explore the role of patients in ensuring the accuracy and completeness of their medical records. Investigate strategies for engaging patients in the documentation process and assess whether patient involvement leads to more accurate and reliable medical records.

**Longitudinal Analysis:**

Conduct a longitudinal analysis to track changes in medical record compliance rates over time. This could involve assessing the impact of organizational initiatives, policy changes, or quality improvement efforts on compliance with documentation standards.

**Cost-Benefit Analysis of Compliance Efforts:**

Conduct a cost-benefit analysis to evaluate the financial implications of investing in initiatives to improve medical record compliance. This could involve comparing the costs associated with implementing compliance measures against potential savings from improved efficiency and reduced adverse events.

## **AIM & OBJECTIVES**

### **Aim of the study:**

To assess and improve the compliance rate of medical records/documents in Emergency and In-Patient departments in a tertiary care hospital.

### **Objectives of the study:**

1. To assess the compliance rate of medical records/documents of ER and IPD
2. To determine the causes responsible for low compliance rate
3. To formulate and implement interventions to improve compliance rate of medical records in ER and IPD
4. To minimize errors in medical records and promote a safer healthcare environment

## **LIMITATIONS**

**Data Entry Errors:** Healthcare professionals, while transitioning to electronic records or handling a high volume of patient cases, may inadvertently introduce data entry errors or omissions.

**Training and Education:** Adequate training for healthcare providers on proper documentation practices is essential but can be lacking in some settings. Healthcare staff may not always receive comprehensive education on the importance of clear, accurate, and standardized documentation.

**Checklist-Based Assessment:** The study primarily assesses compliance using a specific checklist. While checklists are valuable tools, they may not capture all essential aspects of medical documentation and patient care. Factors not covered by the checklist could also be critical in ensuring comprehensive and accurate records.

**Technological Challenges:** Transitioning from paper-based to electronic health records (EHRs) or optimizing EHR systems can be technically challenging and may require significant financial investments, which not all healthcare organizations can afford.

**Lack of Sustainability Assessment:** The study evaluates compliance before and after an audit but does not provide insights into the sustainability of the improvements over time. Long-term sustainability is crucial in ensuring continued high-quality medical documentation and patient care.

**Human Error:** Despite improvements in technology, human error in documentation remains a significant challenge, as healthcare professionals may still make mistakes or omissions in patient records.

Addressing these limitations requires hospitals to adopt a proactive approach to standardization, staff training, workflow management, and resource allocation while staying adaptable to changing regulatory landscapes.

## **SCOPE OF STUDY**

The study of Emergency and IPD (Inpatient Department) documentation compliance holds several significant future prospects that can positively impact healthcare, patient outcomes, and the healthcare industry as a whole. Here are some potential future prospects for this field of study:

**Enhanced Patient Safety and Quality of Care:** Improved documentation compliance can lead to enhanced patient safety by reducing the risk of medical errors, misdiagnoses, and adverse events. Quality of care will likely improve as healthcare providers have access to accurate and up-to-date patient information, allowing for more informed decision-making.

**Digital Transformation and Health Information Technology (HIT):** The healthcare industry is rapidly embracing digital health records and health information technology (HIT) systems. Future studies in this area can explore the impact of HIT on documentation compliance. The use of electronic health records (EHRs) and data analytics can streamline documentation, making it more efficient and comprehensive.

**Artificial Intelligence and Automation:** AI and automation technologies are being integrated into healthcare for tasks like data entry and record review. Future research can investigate how AI can assist healthcare professionals in ensuring documentation compliance and accuracy.

**Data Analytics and Predictive Modelling:** Analyzing large datasets can help identify trends, predict patient outcomes, and improve decision support systems. Research in this field can lead to the development of predictive models that can anticipate documentation errors or areas of non-compliance.

**Interoperability and Information Exchange:** Studies may focus on interoperability standards and data exchange protocols, ensuring that patient information can seamlessly flow between different healthcare systems and providers. This can lead to more comprehensive and holistic patient records.

**Patient Engagement and Empowerment:** Future research can explore how patient engagement in the documentation process can improve compliance. Patients who actively participate in their healthcare may provide more accurate information, which can lead to better documentation.

**Regulatory and Policy Changes:** Healthcare regulations and policies are continually evolving. Research in documentation compliance can help inform regulatory changes, ensuring that they align with the best practices for patient care.

**Medical Education and Training:** Training healthcare professionals in proper documentation practices is crucial. Future research can contribute to the development of educational curricula and tools for healthcare providers to improve their documentation skills.

**Telemedicine and Remote Monitoring:** As telemedicine and remote monitoring become more prevalent, researchers can investigate how these modalities impact documentation compliance, patient data sharing, and the quality of care.

**Global Healthcare Systems:** Comparative studies across different healthcare systems and countries can provide insights into the impact of documentation compliance on healthcare quality and efficiency on a global scale.

**Patient Privacy and Data Security:** Future studies can delve into how healthcare organizations can maintain robust patient privacy and data security while complying with documentation requirements and sharing information across systems.

## **RESEARCH METHODOLOGY**

In this study, several important parameters were considered to ensure its validity and reliability. The study was conducted at a tertiary care hospital situated in New Delhi, for duration of 60 days (May-July, 2024) providing a diverse patient population for analysis. The focus of the study was on inpatient files, aiming to gain insights into the quality and accuracy of medical documentation within the hospital's inpatient care setting. This prospective, observational study employed a convenience sampling technique, selecting 200 discharge files to represent the hospital's patient population. These files were assessed for completeness of documentation from different department of the hospital using the checklist (*Annexure I*).

The project started with auditing of medical records for first 20 days based on analysis of first audit, & then the training has been given to the respective stakeholders of medical records for 20 days and again the audit of medical records was done to check the effectiveness of training.

### **Type of Study**

The type of study conducted in this research is a prospective, observational study. The data was collected and observed from inpatient files in a super-specialty hospital. This type of study design allows for the systematic collection of data to analyze trends, patterns, and factors influencing the quality of medical documentation in the hospital setting.

### **Study Sampling Technique:**

The study employed a Convenience sampling technique to select its sample size of 150 discharge files from the hospital. Convenience sampling is a qualitative research sampling strategy that involves selecting participants based on their accessibility and availability to the researcher. Participants were picked because they were easily available to the researcher, rather than being drawn at random from a bigger population.

### **Data Analysis Tool:**

The data analysis tool utilized in this study was **Cause Effect Analysis**, also known as Fish Bone Diagram. Cause Effect Analysis is a problem-solving method that helps identify root causes of issues in medical documentation. It categorizes potential causes into key areas like process, material, manpower, environment, and human factors, enabling focused and data-driven improvements. It is essential for systematically addressing documentation challenges and promoting continuous improvement in healthcare.

### **Study Subject:**

The study subject in this context is auditing inpatient files within the hospital. To conduct this audit, a checklist provided by the Quality Department was utilized as a systematic tool. The

auditing process involved visiting various departments within the Inpatient Department (IPD) of the hospital. During these visits, the researchers retrieved inpatient files from each department and performed a thorough cross-checking process. This cross-checking involved comparing the content of the inpatient files with the items listed on the provided checklist

**Phases:**

The study consisted of three phases: Phase-1, Phase-2 and Phase-3.

**I. Phase-1: Problem Analysis**

The first step involved conducting an audit of active files, where the existing medical records are thoroughly evaluated. This assessment helps in determining the extent of the problem and identifying deficiencies in documentation.

**II. Phase-2: Root Cause Analysis & Intervention formulation and implementation**

The second step, known as root cause analysis, goes deeper. It involves a detailed investigation into the problems identified during the audit. By doing so, the underlying causes and contributing factors behind these issues are determined. This process provides valuable insights that guide improvement efforts. Essentially, problem analysis and root cause analysis work together to not only pinpoint where the documentation falls short but also to uncover why these shortcomings exist. This comprehensive understanding forms the basis for developing effective strategies to enhance medical documentation practices, ultimately leading to improved patient care, safety, and overall healthcare quality.

**III. Phase-3: Process Monitoring and Evaluation**

Process monitoring and evaluation are essential components of any quality improvement initiative in healthcare. In the context of improving medical documentation, these steps play a vital role. The monitoring of the process involves regularly assessing how well the implemented actions are progressing and their overall effectiveness. This ongoing assessment ensures that healthcare providers are adhering to the improved documentation practices and helps in identifying and addressing any emerging challenges promptly.

On the other hand, the evaluation of outcomes focuses on measuring the impact of the implemented changes on the quality of medical records. It involves assessing the level of compliance with the recommended documentation practices and collecting feedback from various stakeholders, including healthcare professionals and administrators, regarding the effectiveness of the improvements.

By monitoring the process and evaluating outcomes, healthcare institutions can track their progress, make necessary adjustments, and ensure that the changes they have implemented are achieving the desired results. This iterative approach to quality improvement helps in maintaining and continuously enhancing the standards of medical documentation, ultimately leading to improved patient care and safety.



# **DATA COLLECTION**

## **Data collection method**

The data collection method employed in this study was primary data collection. By using primary data collection, the study could capture real-time and first-hand information about the quality and accuracy of medical records within the hospital's inpatient care setting, enabling a comprehensive evaluation and potential improvement of documentation practices.

## **Data Collection Tool**

The data collection tool utilized in this study was an **Audit checklist** (*Annexure I*). The audit checklist was specifically filtered to evaluate and document various aspects of medical documentation within the inpatient files of a super-specialty hospital. The checklist included items and criteria related to the accuracy, completeness, and adherence to best practices in medical record keeping.

By using an audit checklist, it was ensured that data collection was consistent, standardized, and comprehensive. This approach provided a structured and organized way to gather data, making it easier to analyze and draw conclusions about the state of medical documentation within the hospital. The use of a checklist as a data collection tool contributed to the study's reliability and helped ensure that all relevant aspects of documentation were thoroughly evaluated.

Audit Checklist included:

- **Compliance (C):** This category is assigned when a particular section or field in the medical record is filled out as required. It means that all the necessary information has been accurately documented, leaving no gaps or missing data.
- **Non-Compliance (NC):** Non-compliance is noted when there are blank or missing sections within the medical record. In this case, essential information that should have been documented is absent, which can be a cause for concern as it may lead to incomplete patient records.
- **Partial Compliance (PC):** When some, but not all, of the required information is filled out in a section of the medical record, it falls under partial compliance. This suggests that there is an effort to document, but it may not be complete or comprehensive.
- **Not Applicable (NA):** The "Not Applicable" category is used when certain sections or fields in the medical record are not relevant to the specific case or patient being documented. In such cases, these sections are excluded from the final scoring as they do not apply to the situation.

## **DATA ANALYSIS & INTERPRETATION**

Improving medical documentation in multi-specialty hospitals requires a comprehensive approach that addresses various challenges and opportunities. The literature suggests that the use of technology, adequate training of staff, and the involvement of end-users in the design and implementation process are critical components of this approach. Compliance with clinical nursing documentation guidelines can be improved through interventions such as education and training, audit and feedback, and the use of standardized documentation tools.

### **5.1 Pre-intervention Compliance rate:**

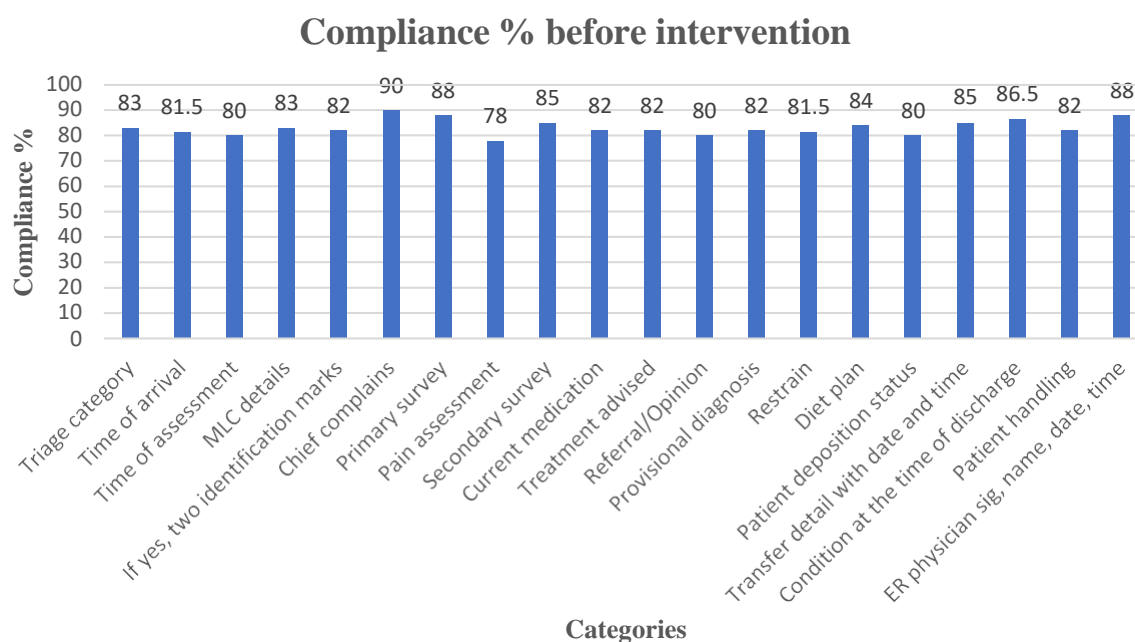
During the audit process in the ER & IPD Department at Hospital, a comprehensive compliance percentage rate table was maintained. The below table served as a crucial tool for tracking and documenting the compliance levels with established standards and guidelines related to medical documentation.

#### **Compliance % of Emergency Department:**

**Table 1: Pre-intervention Compliance percentage table for Emergency Department**

<b>Medical Checklist of Emergency</b>	<b>Compliance % before the Audit</b>
Triage category	85
Time of arrival	81.5
Time of assessment	80
MLC details	83
If yes, two identification marks	82
Chief complains	90
Primary survey	88
Pain assessment	78
Secondary survey	85
Current medication	82
Treatment advised	82
Referral/Opinion	80
Provisional diagnosis	82
Restrain	81.5
Diet plan	84
Patient deposition status	80
Transfer detail with date and time	85
Condition at the time of discharge	86.5
Patient handling	82
ER physician sig, name, date, time	88

The table displays compliance percentages before any intervention implementation in Emergency Department. This table shows how well the department adhered to certain standards or practices before the audit. It offers a comparison to assess the impact of the audit on compliance percentages in the Emergency.



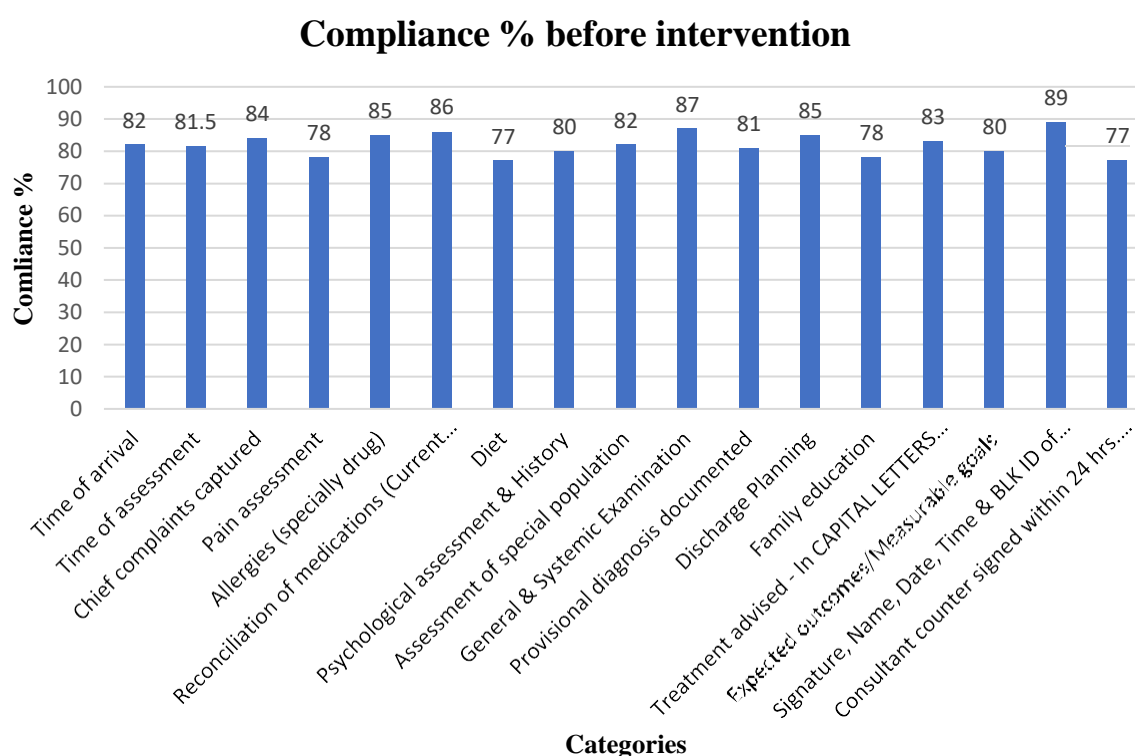
**Fig. 2: Graph representing the compliance percentage before implementation of any intervention in Emergency Department**

#### **Compliance % of In-Patient Department:**

**Table 2: Pre-intervention Compliance percentage table for In-Patient Department**

Medical Checklist of IPD	Compliance % before intervention
Time of arrival	82
Time of assessment	81.5
Chief complaints captured	84
Pain assessment	78
Allergies (specially drug)	85
Reconciliation of medications (Current medication)	86
Diet	77
Psychological assessment & History	80
Assessment of special population	82
General & Systemic Examination	87
Provisional diagnosis documented	81
Discharge Planning	85
Family education	78
Treatment advised - In CAPITAL LETTERS with Dose, route & frequency	83
Expected outcomes/Measurable goals	80
Signature, Name, Date, Time & BLK ID of Resident Doctor	89
Consultant counter signed within 24 hrs. of the admission (Signature, Name, Date, Time & BLK ID)	77

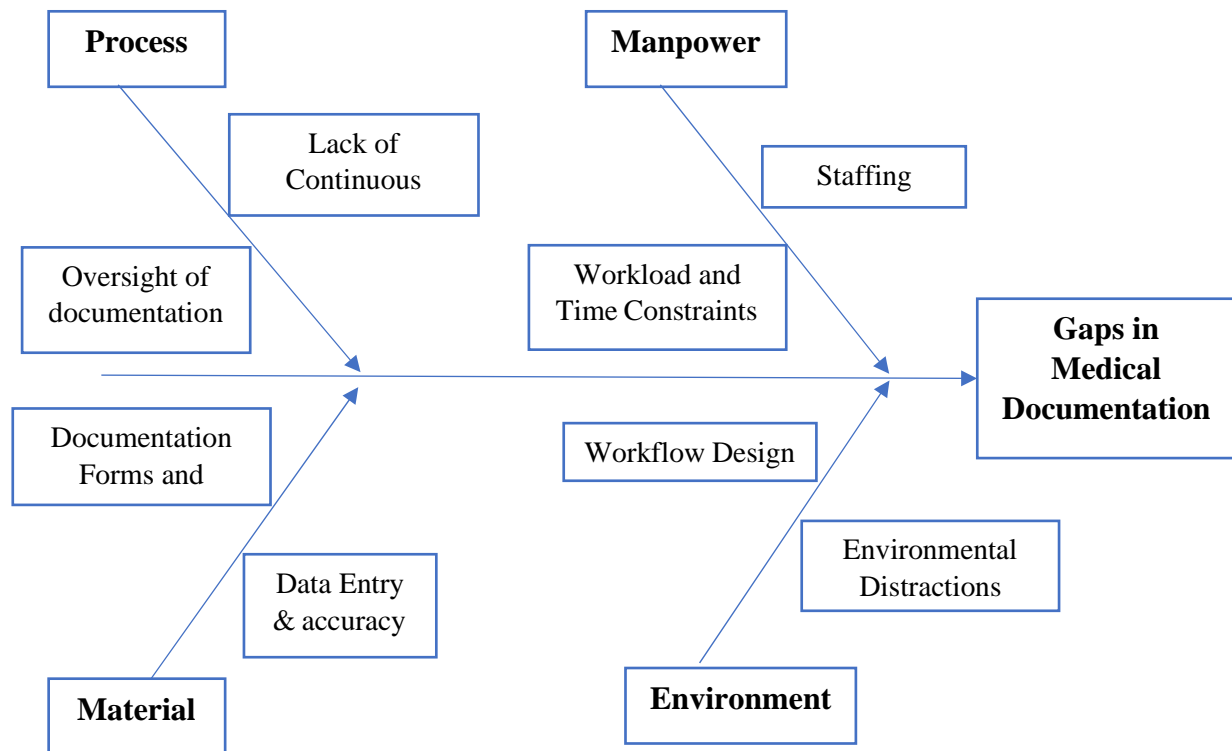
The table displays compliance percentages before any intervention implementation in In-Patient Department. This table shows how well the department adhered to certain standards or practices before the audit. It offers a comparison to assess the impact of the audit on compliance percentages in the In-Patient Department.



**Fig. 3: Graph representing the compliance percentage before implementation of any intervention in In-Patient Department**

The compliance rate prior any interventions was calculated as shown above and it was decided there is need for some improvement and few categories specifically which are “Triage category” and “Current Medication” in emergency department and “Family Education” and “Consultant Counter Sign.” in In-Patient department.

A brainstorming session was conducted with the HODs of all the concerned departments and the authorities concerned to identify the causes responsible for these gaps and to take the required actions to overcome these gaps. It involves a detailed investigation into the problems identified during the audit. By doing so, the underlying causes and contributing factors behind these issues were determined. This process provided valuable insights that guided improvement efforts. This comprehensive understanding formed the basis for developing effective strategies to enhance medical documentation practices, ultimately leading to improved patient care, safety, and overall healthcare quality.



*Fig. 4: Cause Effect Analysis (Fish Bone Diagram) for the gaps in medical documentation*

## Interventions:

After an in-depth analysis about the gap in the medical documentation compliance rate the following interventions were formulated and implemented with the help of respective authorities.

- Strengthening of training for the doctors on medical record documentation:** This action directly addresses the gap in documentation by enhancing the skills and knowledge of doctors. Training ensures that healthcare professionals are well-equipped to maintain accurate and comprehensive medical records, reducing the likelihood of incomplete or inaccurate documentation.
- During the induction program, training session on medical documentation to be more in detail:** Starting with thorough training during the induction program ensures that new doctors are immediately introduced to the importance of detailed medical documentation. This preventive action aims to instil good documentation practices from the beginning of their tenure, preventing future gaps.
- Duration of training hours to be extended as per the topics & content On Job training to be conducted in doctors' duty room every week for different specialties doctors:** By extending the training duration and conducting regular on-the-job training sessions, healthcare providers can continuously improve their documentation skills.

These actions provide ongoing education, reinforcing the importance of detailed documentation and reducing gaps.

- d) **Training shall be conducted during shift change. So, the maximum number of doctors can attend the session:** Timing training sessions during shift changes ensures that many doctors can participate. This strategy helps reach a broader audience and ensures that the knowledge and skills related to medical documentation are disseminated effectively.
- e) **Meeting with the Respective department HOD's to re-emphasize the process of medical record documentation:** This action involves collaboration with department heads to reinforce the significance of proper documentation within their respective departments. It helps establish a top-down approach to documentation compliance and ensures that department leaders actively support and promote accurate record-keeping.
- f) **A continuous process of active file audit to analyse & to find the deficit in the medical record documentation:** Conducting continuous audits of active files is a proactive approach to identifying gaps in documentation. Regular audits help in pinpointing specific areas or trends where documentation is lacking, allowing for targeted corrective actions.

These Corrective and Preventive Actions are strategically designed to bridge the gaps in medical documentation by focusing on training, continuous improvement, and collaboration with departmental leadership. By implementing these measures, healthcare organizations can enhance their documentation practices and reduce the likelihood of incomplete or inaccurate medical records, ultimately improving patient care and safety.

The interventions were implemented for 20 days, training was given to the respective stakeholders of medical records for 20 days and again the audit of medical records was conducted to check the effectiveness of interventions.

## **5.2 Post-intervention Compliance rate:**

The evaluation of outcomes focused on measuring the impact of the implemented changes on the quality of medical records. It involved assessing the level of compliance with the recommended documentation practices and collecting feedback from various stakeholders, including healthcare professionals and administrators, regarding the effectiveness of the improvements.

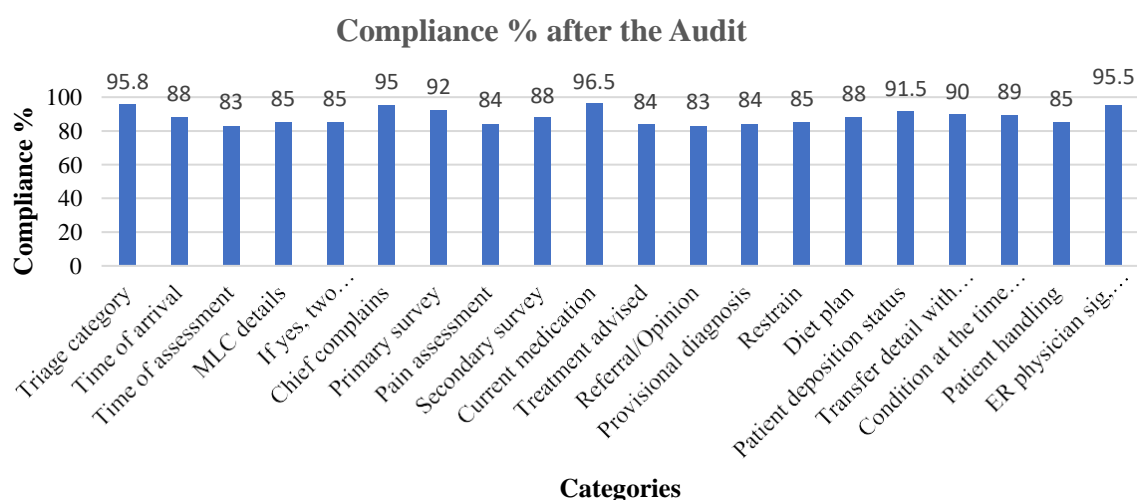
Evaluation and Process Monitoring are essential components of any quality improvement initiative in healthcare. In the context of improving medical documentation, these steps play a vital role. The monitoring of the process involved regularly assessing how well the implemented actions are progressing and their overall effectiveness.

## Compliance % of Emergency Department:

**Table 3: Post-intervention Compliance percentage table for Emergency Department**

Medical Checklist of Emergency	Compliance % after the Audit
Triage category	95.8
Time of arrival	88
Time of assessment	83
MLC details	85
If yes, two identification marks	85
Chief complains	95
Primary survey	92
Pain assessment	84
Secondary survey	88
Current medication	96.5
Treatment advised	84
Referral/Opinion	83
Provisional diagnosis	84
Restrain	85
Diet plan	88
Patient deposition status	91.5
Transfer detail with date and time	90
Condition at the time of discharge	89
Patient handling	85
ER physician sig, name, date, time	95.5

The table displays compliance percentages after the formulated interventions implementation in Emergency Department. This table shows how much the compliance percentage in each category has improved after the interventions were implemented.



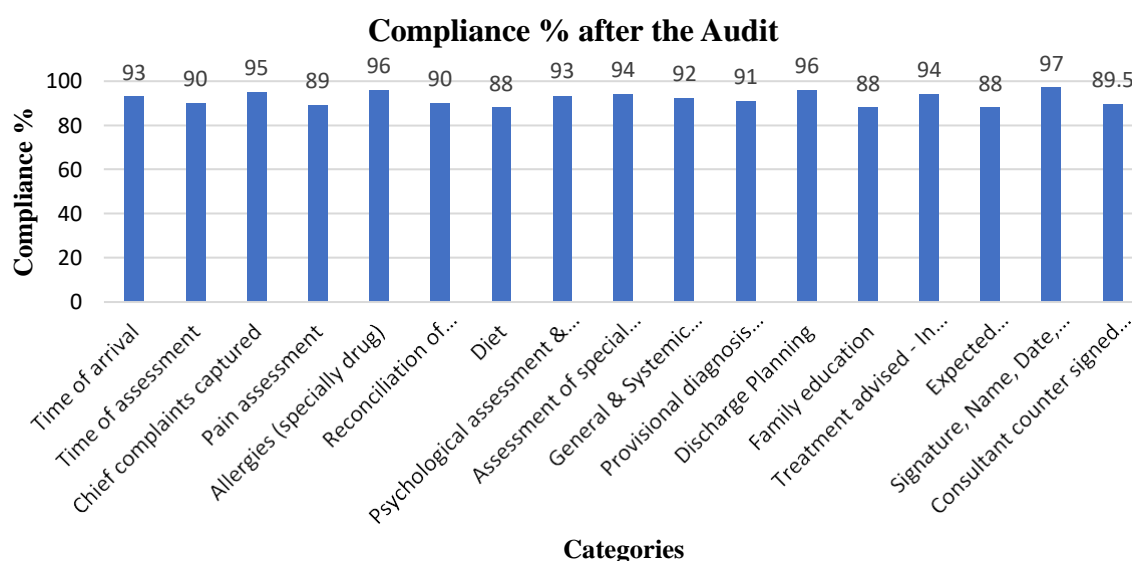
**Fig. 5: Graph representing the compliance percentage after implementation of interventions in Emergency Department**

## Compliance % of In-Patient Department:

**Table 4: Post-intervention Compliance percentage table for In-Patient Department**

Medical Checklist of IPD	Compliance % after the Audit
Time of arrival	93
Time of assessment	90
Chief complaints captured	95
Pain assessment	89
Allergies (specially drug)	96
Reconciliation of medications (Current medication)	90
Diet	88
Psychological assessment & History	93
Assessment of special population	94
General & Systemic Examination	92
Provisional diagnosis documented	91
Discharge Planning	96
Family education	88
Treatment advised – In CAPITAL LETTERS with Dose,route & frequency	94
Expected outcomes/Measurable goals	88
Signature, Name, Date, Time & BLK ID of Resident Doctor	97
Consultant counter signed within 24 hrs. of the admission (Signature, Name, Date, Time & BLK ID)	89.5

The table displays compliance percentages after the formulated interventions implementation in In-Patient Department. This table shows how much the compliance percentage in each category has improved after the interventions were implemented.

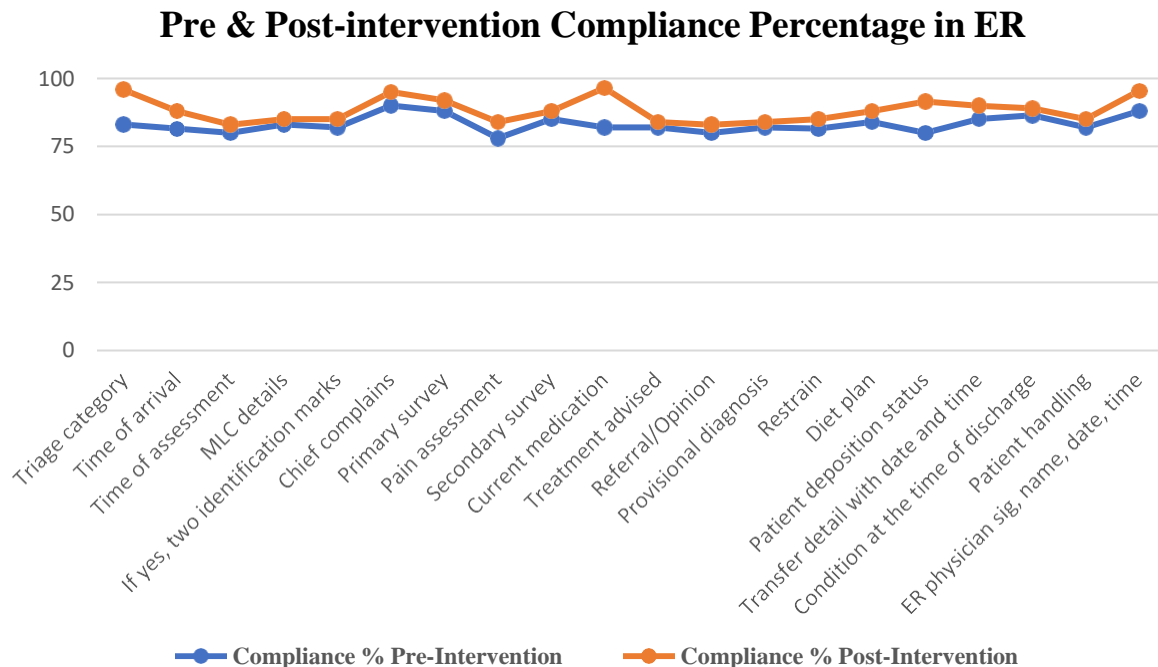


**Fig. 6: Graph representing the compliance percentage after implementation of interventions in In-Patient Department**

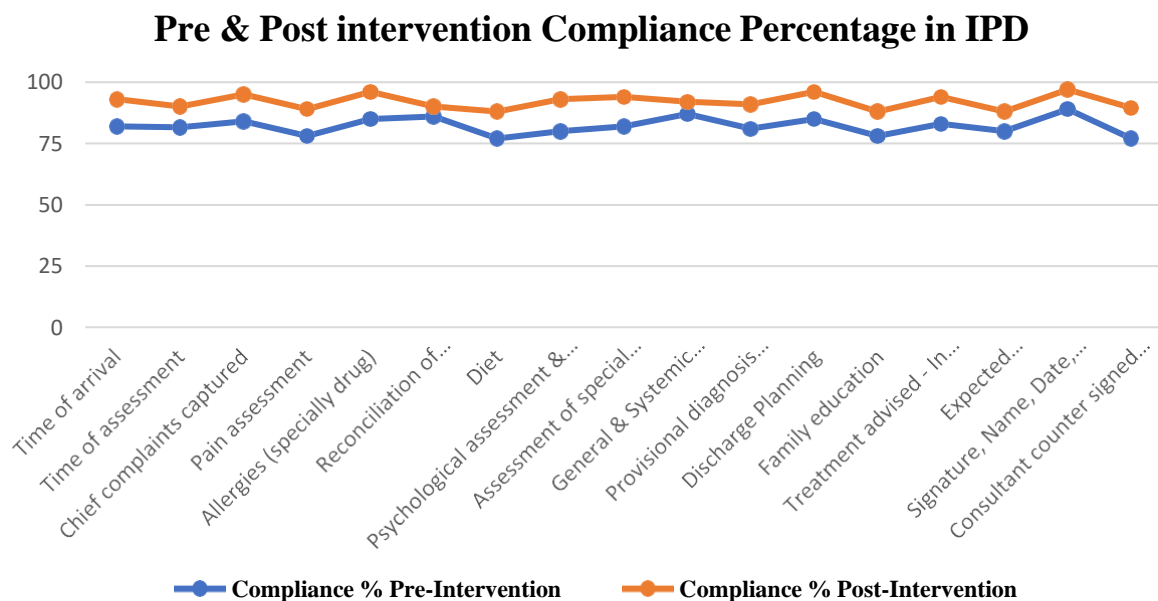


## Improvements Observed

The improvement in the compliance percentage within the ER & IPD Department over time can be visually observed, with one line representing initial compliance and another representing final compliance, typically along a time axis.



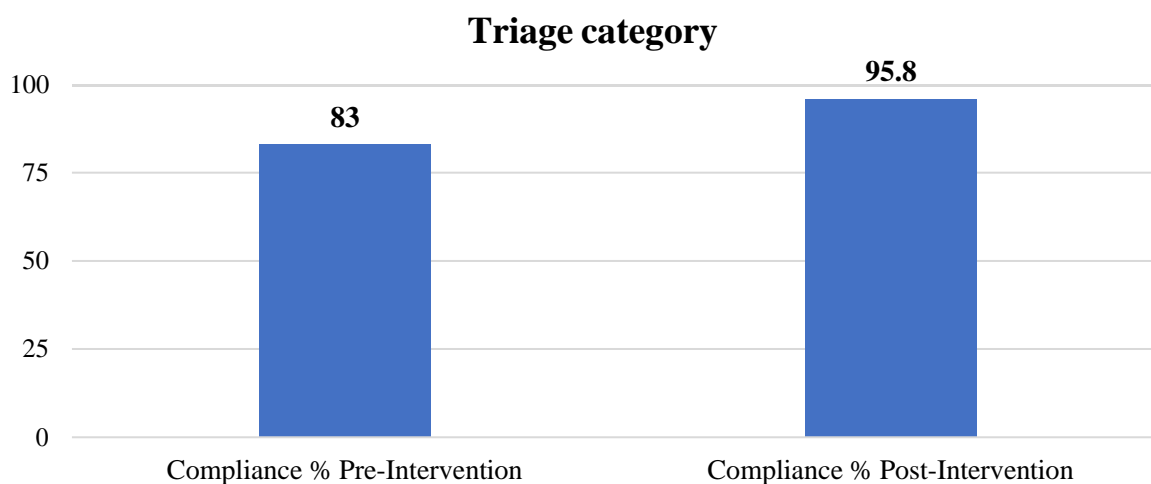
**Fig. 7: Line Graph representing Pre- & Post-intervention compliance percentage in ER**



**Fig. 8: Line Graph representing Pre- & Post-intervention compliance percentage in IPD**

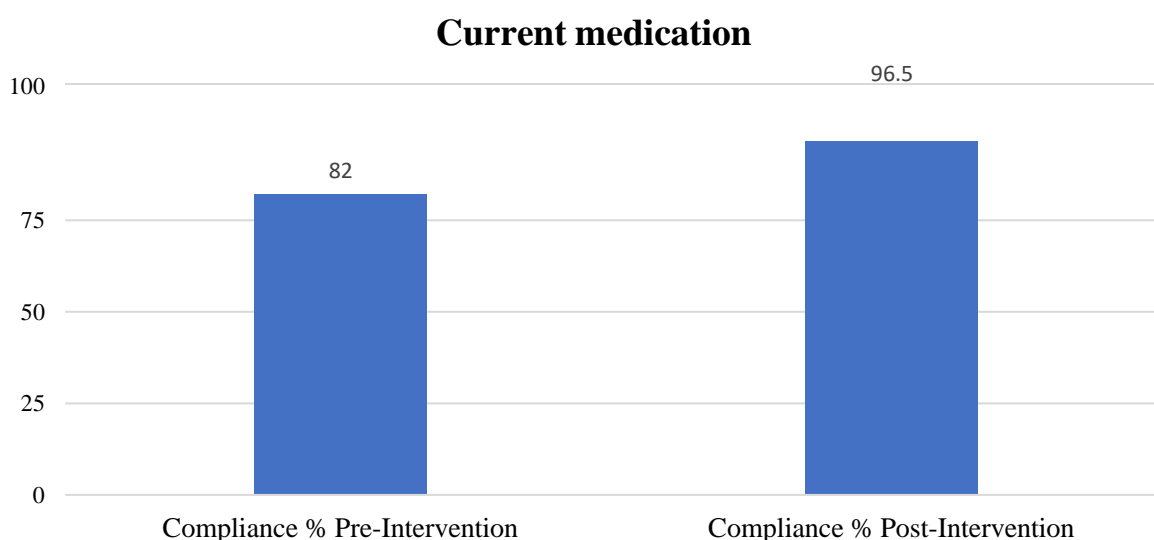
Improvement in compliance rate was observed in each category in both the departments and major significant improvements were observed in the specific categories which are “Triage category” and “Current Medication” in emergency department and “Plan of care” and “Consultant Counter Sign.” in In-Patient department.

#### 5.4.1 Quality Improvements under Emergency Department



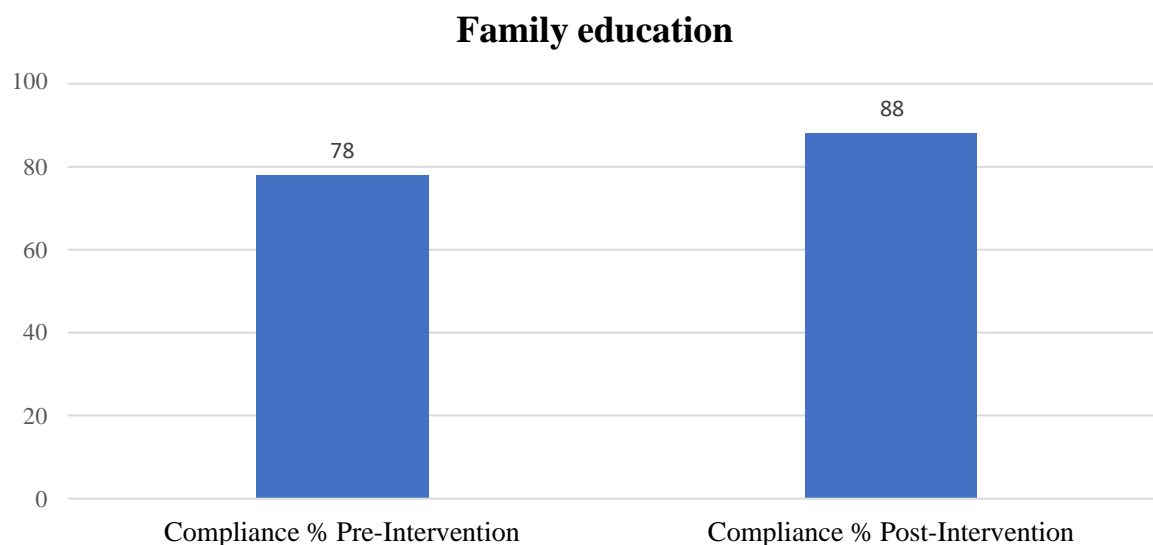
***Fig. 9: Quality Improvement (in%) observed in Triage Category under Emergency Department***

The bar graph represents the percentage of quality improvement in the Triage Category within the Emergency Department. It shows how the quality of care or services has changed in this specific category, expressed as a percentage increase.



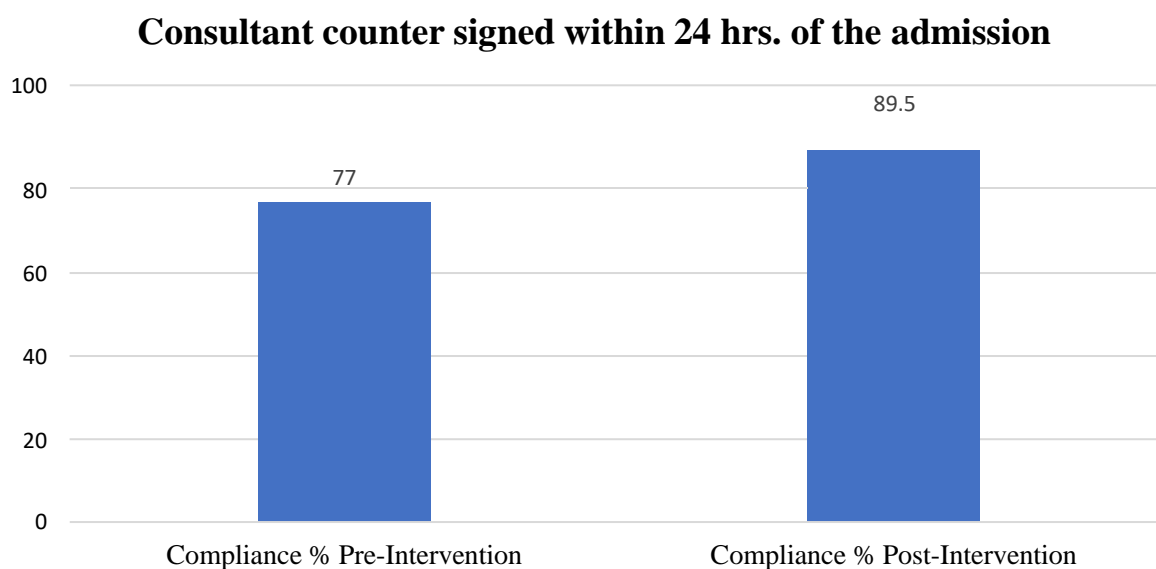
The bar graph represents the percentage of quality improvement in the Current Medication within the Emergency Department. It shows how the quality of care or services has changed in this specific category, expressed as a percentage increase.

## 5.4.2 Quality Improvements under In-Patient Department



***Fig. 11: Quality Improvement (in%) observed in Family Education under In-Patient Department***

The bar graph represents the percentage of quality improvement in the Family education within the In-Patient Department. It shows how the quality of care or services has changed in this specific category, expressed as a percentage increase.



***Fig. 12: Quality Improvement (in%) observed in Consultant Counter Sign. under In-Patient Department***

The bar graph represents the percentage of quality improvement in the Consultant Counter Sign. within the In-Patient Department. It shows how the quality of care or services has changed in this specific category, expressed as a percentage increase.

## **IMPLICATIONS**

Accurate documentation of a patient's healthcare records is important for the continuity of information flow from one provider or specialty to another.

Medical transcriptions contain data and critical information regarding the patient's past and present condition, as well as treatment protocols.

Compliance with clinical documentation guidelines can be improved through interventions such as education and training, audit and feedback, and the use of standardized documentation tools.

The study presented in the attached file focuses on two departments (Emergency and IPD) in one hospital and assesses compliance with a specific checklist before and after an audit.

The study found that compliance improved after the audit, suggesting that interventions such as education and training, audit and feedback, and the use of standardized documentation tools can be effective in improving compliance with clinical documentation guidelines.

The study also identified several causes and sub-categories that contribute to incomplete or inaccurate medical documentation, including issues related to the workflow and procedures followed in the documentation process, physical documents and information used in the documentation process, human resources, the conditions or context in which documentation takes place, and human factors such as the knowledge, attitudes, and behaviours of healthcare professionals involved in the documentation process.

The study suggests that a systematic breakdown of causes and sub-categories can help healthcare organizations pinpoint the specific areas that need improvement and develop targeted strategies to address the root causes of incomplete or inaccurate medical documentation.

The study also identified several corrective and preventive actions (CAPA) that can be taken to bridge the gaps in medical documentation, including strengthening training for doctors on medical record documentation, conducting thorough training during the induction program, extending the duration of training hours, conducting regular on-the-job training sessions, collaborating with department heads to reinforce the significance of proper documentation, conducting continuous audits of active files, and discussing audit reports with departmental heads on a weekly basis to improve compliance.

By implementing these measures, healthcare organizations can enhance their documentation practices and reduce the likelihood of incomplete or inaccurate medical records, ultimately improving patient care and safety.

## **CONCLUSION**

Based on the compliance percentage table and graphs, it can be concluded that there is a need for improvement in medical documentation practices. The compliance percentages for various aspects of medical documentation, such as chief complaints, pain assessment, and current medication, were below 90% before the audit. However, after the audit, compliance percentages improved significantly, with some aspects reaching a compliance rate of over 95%. The line graph representing the initial and final percentage of the emergency department shows a clear improvement in compliance over time. The compliance percentage table for the medical checklist of the IPD department also shows a need for improvement, with compliance percentages below 90% for some aspects of medical documentation. Overall, the results suggest that healthcare organizations should focus on improving their medical documentation practices to ensure accurate and complete records, ultimately improving patient care and safety.

In conclusion, the study of emergency and IPD documentation compliance is an evolving field with a promising future. It can contribute to the advancement of healthcare practices, the integration of technology, and the delivery of high-quality patient care. Additionally, it can help healthcare organizations adapt to the changing landscape of healthcare regulations and the increasing role of technology in healthcare delivery.

## **SUGGESTIONS**

**Quality team to discuss the active file audit report with the departmental HOD's on a weekly basis to improve compliance:** The regular discussions between the quality team and department heads, based on audit reports, facilitate a collaborative approach to improving documentation compliance. It ensures that identified gaps are not only acknowledged but also actively addressed within each department.

**Regular Assessment and Data Collection:** To maintain a high standard of documentation and healthcare delivery, a systematic approach was adopted. After each week of conducting audits, the quality team diligently calculated and documented the percentage of compliance and non-compliance with established standards and guidelines. This data was meticulously maintained in an Excel spreadsheet, creating a historical record of the audit results.

**Increasing Awareness:** Personnel involved in patient care and research should be educated about the importance of accurate record-keeping. Awareness campaigns and training sessions can help healthcare professionals understand how accurate documentation not only improves patient care but also contributes to the advancement of medical knowledge and research.

**Standardized Documentation Tools:** Hospitals should implement standardized documentation templates and tools to ensure consistency and completeness in medical records. These tools should be user-friendly and aligned with best practices, making it easier for healthcare professionals to document patient information accurately.

**Cause Effect Analysis:** Cause Effect analysis to identify the underlying causes or categories that contribute to incomplete or inaccurate medical documentation. This will help in pinpointing the specific areas that need improvement and develop targeted strategies to address the root causes of incomplete or inaccurate medical documentation.

**Training:** Strengthen the training for doctors & healthcare professionals on medical record documentation. This can be done by extending the duration of training hours, conducting regular on-the-job training sessions, and timing training sessions during shift changes. During the induction program, provide thorough training on medical documentation to instil good documentation practices from the beginning of their tenure. These programs can be conducted regularly, and they should cover the significance of accurate and comprehensive record-keeping, as well as practical skills for effective documentation.

**Collaborate with department heads:** Collaborate with department heads to reinforce the significance of proper documentation within their respective departments. This helps establish a top-down approach to documentation compliance and ensures that department leaders actively support and promote accurate record-keeping.

**Revise policies and checklist:** Review and revise documentation policies and guidelines to ensure they are clear, up-to-date, and aligned with best practices and regulatory requirements.

**Monitoring the audit process regularly:** Regularly review the impact of implemented actions and monitor progress in improving compliance. Adjustments to strategies may be made as needed.

**Implement electronic medical records (EMRs):** EMRs have been identified as a potential solution to improve the quality of medical records/documentation. However, there are challenges associated with accessing data that was recorded predominantly in clinical notes, rather than standardized structured EMR fields. Despite these challenges, implementing EMRs can help improve the accuracy and completeness of medical records.

## **REFERENCES**

1. Kumar, A., Kumar, R. (2020). Privacy Preservation of Electronic Health Record: Current Status and Future Direction. In: Gupta, B., Perez, G., Agrawal, D., Gupta, D. (eds) Handbook of Computer Networks and Cyber Security. Springer, Cham. [https://doi.org/10.1007/978-3-030-22277-2\\_28](https://doi.org/10.1007/978-3-030-22277-2_28)
2. Häyrynen, K., Saranto, K., & Nykänen, P. (2008). Definition, structure, content, use, and impacts of electronic health records: A review of the research literature. *International Journal of Medical Informatics*, 77(5), 291-304.
3. Bates, D. W., Cohen, M., Leape, L. L., Overhage, J. M., Shabot, M. M., & Sheridan, T. (2001). Reducing the frequency of errors in medicine using information technology. *Journal of the American Medical Informatics Association*, 8(4), 299-308.
4. Heeks, R. (2006). Health information systems: failure, success and improvisation. *International Journal of Medical Informatics*, 75(2), 125-137.
5. Bates, D. W., & Gawande, A. A. (2003). Improving safety with information technology. *New England Journal of Medicine*, 348(25), 2526-2534.
6. Cresswell, K., & Sheikh, A. (2013). Organizational issues in the implementation and adoption of health information technology innovations: an interpretative review. *International Journal of Medical Informatics*, 82(5), e73-e86.
7. Chaudhry, B., Wang, J., Wu, S., Maglione, M., Mojica, W., Roth, E., ... & Shekelle, P. G. (2006). Systematic review: impact of health information technology on quality, efficiency, and costs of medical care. *Annals of Internal Medicine*, 144(10), 742-752.
8. Shakti G, Sunil K, Chandrashekar R, Sidhartha S. Modern Trends in Planning and Designing of Hospitals, Principles and Practices.
9. Lorenzetti, D.L., Quan, H., Lucyk, K. *et al.* Strategies for improving physician documentation in the emergency department: a systematic review. *BMC Emerg Med* **18**, 36 (2018). <https://doi.org/10.1186/s12873-018-0188-z>
10. Megan E. McCabe, Richard Mink, David A. Turner, Donald L. Boyer, Mohammad Hossein Tchamatchi, Jason Werner, James Schneider, Veronica Armijo-Garcia, Margaret Winkler, David Baker, Katherine E. Mason, Best Practices in Medical Documentation: A Curricular Module, *Academic Pediatrics*, Volume 22, Issue 8, 2022, Pages 1271-1277, ISSN 1876-2859, <https://doi.org/10.1016/j.acap.2022.02.006>.
11. Esposito P, Dal Canton A. Clinical audit, a valuable tool to improve quality of care: General methodology and applications in nephrology. *World J Nephrol*. 2014 Nov 6;3(4):249-55. doi: 10.5527/wjn.v3.i4.249.
12. Hut-Mossel L, Ahaus K, Welker G, Gans R (2021) Understanding how and why audits work in improving the quality of hospital care: A systematic realist review. *PLoS ONE* 16(3): e0248677. <https://doi.org/10.1371/journal.pone.0248677>
13. Kuhn T, Basch P, Barr M, Yackel T, Medical Informatics Committee of the American College of Physicians. Clinical documentation in the 21st century: executive summary of a policy position paper from the American College of Physicians. *Ann Intern Med* [Internet]. 2015;162(4):301–3. Available from: <http://dx.doi.org/10.7326/M14-2128>
14. Mehnke, Anne MSN, RN. Managing a breach in patient confidentiality. *Nursing Critical Care* 5(4): p 48, July 2010. | DOI: 10.1097/01.CCN.0000384064.62455.66



15. Lisa M. Kern, Alison Edwards, Rainu Kaushal. [The Patient-Centered Medical Home, Electronic Health Records, and Quality of Care](#). Ann Intern Med.2014; 160:741- 749. [Epub 3 June 2014]. doi:[10.7326/M13-1798](#)
16. Sharifi S, Zahirli M, Dargahi H, Faraji-Khiavi F. Medical record documentation quality in the hospital accreditation. J Educ Health Promot. 2021 Feb 27; 10:76. doi: 10.4103/jehp.jehp\_852\_20.
17. Donabedian A. Evaluating the quality of medical care. 1966. Milbank Q. 2005;83(4):691-729. doi: 10.1111/j.1468-0009.2005.00397.x.
18. Gutheil TG, Gabbard GO. Misuses and misunderstandings of boundary theory in clinical and regulatory settings. Am J Psychiatry [Internet]. 1998;155(3):409–14. Available from: <http://dx.doi.org/10.1176/ajp.155.3.409>
19. Gaberson KB, Oermann MH. Clinical teaching strategies in nursing [Internet]. 3rd ed. New York, NY: Springer Publishing; 2010. Available from: <https://books.google.at/books?id=UHoZd9SN5FAC>
20. Jean Giddens, Jay P. Douglas, Shelley Conroy, The Revised AACN Essentials: Implications for Nursing Regulation, Journal of Nursing Regulation, Volume 12, Issue 4, 2022, Pages 16-22, ISSN 2155-8256, [https://doi.org/10.1016/S2155-8256\(22\)00009-6](https://doi.org/10.1016/S2155-8256(22)00009-6).
21. Moradi, G., Fazaeli, S., Meraji, M., Kimiafar, K., Sarbaz, M., Ershadnia, Z. Evaluation of an Awareness of Clinical Information Systems among the Staff of Medical Records Departments of Hospitals Affiliated to the Tehran University of Medical Sciences, 2011. *Journal of Paramedical Sciences & Rehabilitation*, 2012; 1(1): 35-42. doi: 10.22038/jpsr.2012.257
22. Abbassi S, Tavakoli N, Moslehi M. Readiness of hospitals with quality management systems based on joint commission on accreditation standards. Health Information Management [Internet]. 2012 [cited 2023 Oct 24];9(4):502–12. Available from: [https://him.mui.ac.ir/him/index.php/him/article/view/article\\_12116.html?lang=en](https://him.mui.ac.ir/him/index.php/him/article/view/article_12116.html?lang=en)