

**A STUDY ON MEDICAL RECORD DOCUMENTATION IN COMPLIANCE
WITH NABH 5TH EDITION GUIDELINES**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

By

Shaivalini Sarkar

Under the Supervision and Guidance of

Dr Arindam Das

2024

Ref: AHB/HRD/Per.F/Jun'24/16

Dates: 19th Jun'2024**TO WHOM SO EVER IT MAY CONCERN**

This is to certify that Dr. Shaivalini Sarkar joined us as an Intern in the Department of Quality on 1st Apr'2024 has completed her 75 days internship on 19th Jun'2024.

During her internship she was found good.

We wish all success in her future endeavours.

For Apollo Hospitals Enterprise Ltd.

Authorized Signatory
Human Resource Department



Organisation is accredited
by NABH

Apollo Hospitals-Bilaspur

Seepat Road, Bilaspur, Chhattisgarh - 495001, India.

☎ +91-7752 - 433433 / 433233

✉ info@apollohospitalsbilaspur.com 🌐 www.apollohospitalsbilaspur.com

📍 Add: Sit. Centre Land Line: 07752 416200 Mob. No. 9826073200

Regd. Office: Apollo Hospitals Enterprise Limited# 19, Bishop Gardens, Raja Annamalaipuram,
Chennai, Tamil Nadu-600 028, India.

☎ +91 044 2829 3333 🌐 www.apollohospitals.com

Corporate Identity Number (CIN) : L8510TN1979PLC008035

Scan here to
know us better

📘 ApolloHospital,Bilaspur

📱 @BilaspurApollo

🌐 apollohospitalsbilaspur

DECLARATION BY STUDENT

I hereby declare that this dissertation "A study on medical record documentation in compliance with NABH 5th Edition Guidelines" is the Bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published and unpublished work of others has been duly acknowledged in the text.

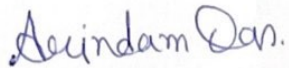

(signature)

Dr. Shaivalini Sarkar

Date: 03/07/2024

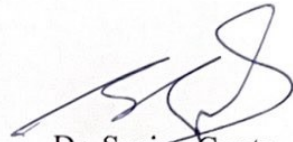
CERTIFICATE

This is to certify that dissertation titled “**A study on medical record documentation in compliance with NABH 5th edition guidelines**” is a record of the research work undertaken by **Dr. Shaivalini Sarkar** in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

A handwritten signature in blue ink, appearing to read 'Arindam Das'.

Arindam Das, PhD
Faculty Guide
IIHMR University, Jaipur

Date 3/7/2024

A handwritten signature in blue ink, appearing to read 'Dr. Sanjay Gupta'.

Dr. Sanjay Gupta
School Dean
IIHMR University, Jaipur

Date 02/07/2024

ACKNOWLEDGMENT

I take this opportunity to thank everybody who helped me in completing this project. I remain grateful for their aspiring guidance, invaluable constructive criticisms, and amiable salient advice during the project. I am highly indebted to them for sharing with me their frank and enlightening views, spread over several issues pertaining to this project.

I wish to show my deepest sense of gratitude and honour towards the respected Dean Dr. Sanjay Gupta, for his inspiration and constant encouragement. To my mentor, Arindam Das, PhD, Professor, I feel profoundly indebted. He took an intense interest in my project and continued to guide me till the completion of this project work. I thank him for the suggestions.

I am particularly indebted to my mentor, Mr. Aziz Khan, Quality Head, Apollo Hospitals, Bilaspur who guided, encouraged, and further provided insightful comments while I undertook this research. In the same appreciation, I value the patience and readiness to share in their highly enriched knowledge profoundly added to my understanding of the subject of medical record documentation and compliance pertaining to the NABH 5th edition guidelines.

I would also like to extend my gratitude to colleagues and friends who helped me through with their constant motivation and understanding.

I want to thank my parents for their good cooperation and encouragement, due to which I could complete this project. At last praise and thanks to God, Almighty, who showered blessings and underpinned the force and will to complete this work.

TABLE OF CONTENTS

Sr. No	Title	Page No.
1.	Introduction	12-15
2.	Review of Literature	16-17
3.	Methodology	18
4.	Results	19-31
5.	Discussion	32-36
6.	Conclusion	37-40
7.	References	41-42

LIST OF GRAPHS

Graph 1	Patient & Family Education Documentation	20
Graph 2	Nutrition Assessment Screening (For Adult Patients)	21
Graph 3	Nursing Admission Assessment & Action	22
Graph 4	Initial Assessment (Accident & Emergency)	23
Graph 5	Plan of Care	24
Graph 6	Informed Consent Form	25
Graph 7	Pre-Operative Checklist	26
Graph 8	Safe Surgery Checklist	27
Graph 9	Pre-Operative Anesthetic Assessment	28
Graph 10	Nursing Caps Risk Assessment Record	29
Graph 11	Total Compliance	30
Graph 12	Total Compliance (each form)	30

ABBREVIATIONS

• ED	Emergency Department
• EHR	Electronic Health Record
• EMR	Electronic Medical Record
• HDU	High Dependency Unit
• HR	Human Resources
• ICU	Intensive Care Unit
• IPD	Inpatient Department
• IT	Information Technology
• JCI	Joint Commission International
• NABH	National Accreditation Board for Hospitals & Healthcare Providers
• OPD	Outpatient Department
• UHID	Unique Hospital Identification Number

ABSTRACT

Medical records are essential for ensuring high-quality patient care and continuity among healthcare providers. They include assessments, treatments, test results, and consent forms, standardized to meet best practices and legal requirements. This study evaluates the compliance of medical record documentation with NABH 5th edition guidelines at Apollo Hospitals, Bilaspur. By assessing current practices, identifying gaps, and analyzing factors influencing compliance, the study aims to enhance documentation accuracy, completeness, timeliness, and relevance. The findings will provide actionable recommendations to improve patient safety, care quality, and regulatory adherence.

Objectives:

This study aims to evaluate the compliance of medical record documentation with the NABH 5th edition guidelines within Apollo Hospitals, Bilaspur. The specific objectives are to:

Evaluate the existing medical record documentation practices to determine the level of compliance with NABH 5th edition guidelines.

- Assess the quality of medical record documentation in terms of accuracy, completeness, timeliness, and relevance, as per NABH standards.
- Identify any gaps or deficiencies in the current documentation practices.
- Emphasize findings and recommend practical measures to promote compliance with the NABH guidelines while optimizing current practices of medical record documentation.

Methodology:

This was a descriptive study conducted at Apollo Hospitals, Bilaspur, for three months from April 2024 to June 2024. All the in-patient departments except ICU, HDU, Dialysis Ward, and Oncology Ward were included within the study area. A total of 500 files were scrutinized and checked; every 5th file was selected following systematic random sampling from all in-patient departments. Data was collected using a checklist prepared on Google form, which assessed compliance with the NABH guidelines. This checklist ranged from

patient identification to medical record documentation of clinical notes, medication records, consent forms, and discharge summaries

Key Results: The results showed there was variability across different departments in the levels of compliance. While some had high adherence to NABH guidelines, others presented wide gaps and deficiencies. Key findings include:

- Accuracy:** Patient identification and accuracy, both in clinical notes, were inaccurate and were beginnings of potential hazards to patient care.

- Completeness:** Most of the files were incomplete, particularly regarding the medication administered and doctors' follow-up comments.

- Timeliness:** The medical records were not updated in a timely manner. This broke the continuity of care.

- Relevance:** Some of the documents were irrelevant or duplications, making the patient's management cumbersome to handle.

These variables included inadequate training and lack of working protocols, limited resources, and staff resisting change. Healthcare providers did specifically highlight the need for education on prevailing practice, improved IT infrastructure, better guidelines, and other supports for compliant documentation.

Conclusion:

Full compliance with NABH 5th edition guidelines in Apollo Hospitals, Bilaspur, remains an uphill task. The identified gaps and deficiencies shall significantly improve once addressed, not only at the level of documentation but also in terms of quality and safety of patient care. This involves a multidimensional approach with regular training of the healthcare providers, the adoption of standardized documentation protocols, and investment in robust IT systems. This would ensure that the medical record documentation is highly accurate, timely, and comprehensive for effective patient management and quality assurance within a health care set-up.

Keywords:

Medical record documentation, NABH 5th edition guidelines, compliance, healthcare quality, patient safety

CHAPTER 1 –INTRODUCTION

This study primarily aims at assessing how far medical record documentation has adhered to the National Accreditation Board for Hospitals & Healthcare Providers (NABH) guidelines of the 5th edition. These guidelines bring in a comprehensive framework for the maintenance of high standards of healthcare delivery by structured and standardized documentation. On compliance, the objective of this paper is to establish breaks, challenges, and opportunities for medical record-keeping practices among healthcare institutions. The last purpose of this research is, therefore, to enable the provision of quality care to patients, ensure conformity with the laws and regulations, and facilitate better clinical decisions.

Medical record documentation is therefore an indispensable part of the smooth running of any healthcare system. The discrepancies and inadequacies in documentation snowball into major problems related to medical errors, compromised patient safety, and legal liabilities. Thus, stricter guidelines are prescribed by the NABH, and these guidelines are quite challenging for healthcare institutions to implement completely. These flow from factors such as poor training, unawareness, inefficiency in the system, and technological gaps. Investigating such issues would have been necessary in its efforts to improve compliance and consequently the overall quality of health services provided by it.

Medical records have always been the backbone of clinical care, helping in communication among caregivers, assisting in clinical research, and ensuring continuity of care. Such records are also invaluable in medico-legal cases, quality assurance, and accreditation procedures. The guidelines in the 5th edition of NABH lay emphasis on systematic and standardized documentation that will improve patient safety and reduce errors, consequently enhancing the quality of care.

Compliant medical record documentation is more crucial now than ever, considering the challenges being brought about by growing complexity in healthcare delivery and increasing emphasis on patient-centered care. Consequences can include inappropriate diagnosis, inappropriate treatments, delayed care, and increased healthcare costs. In addition, this has also called for strict adherence to the regulatory bodies and accreditation

agencies, where this becomes a means through which health institutions can ensure that it meets the necessary quality thresholds. benchmarks.

It may also be referred to as a systematic documentation of one's history of illnesses and care. The MRD, however, is the folder carrying all information pertaining to a patient's history of diseases and care. This is an acutely personal document; hence, there are many ethical and legal problems surrounding it, among which is how far third parties should go in allowing access to it and also where it has to be kept. Medical record documentation is a crucial activity in the healthcare systems because it provides the framework for healthcare interventions and decision making, communication, legal defensibility and quality assurance. According to the 5th edition of National Accreditation Board for Hospitals and Healthcare Provider (NABH) requirements, it has been crucial for medical record activity to observe the high level of accountability of maintaining the records updated, complete and accurate. Adherence to these guidelines is not just legal, but also vital for the safety of patients and the general improvement of clinical outcomes and provides tangible means of changing the negative culture within numerous health care organizations for the better.

Medical records have traditionally been compiled, stored, and maintained since 2008 by the MRD of The Apollo Hospitals. As far as identification of the file is concerned, Terminal Digit System of MRD is the most secure system and safe. The healthcare staffs are able to provide continuity of care to the patients individually through the information contained in the medical record. Moreover, it acts as the foundation for planning in patient care, as a progress note or communication log between the members of the patient's current healthcare team and other healthcare professionals who may become involved in the patient's care in the future, in protection of the legal interests of the patient and the healthcare team, and as a record of treatment and services provided to the patient. It may also act as a document to teach students or resident doctors in medicine, provide data for hospital's internal auditing or quality assurance, and provide medical research data. At the very least, patients' health records combine most of the above features including portability that enables sharing of patients' medical records across providers and healthcare systems.

This study will be focused on the evaluation of existing practice and the level of compliance regarding guidelines for the 5th edition of NABH in medical record

documentation at Apollo Hospitals, Bilaspur. On the basis of analyzing the gaps and deficiencies in the present practice of documentation, factors that are causative to non-compliance, the objective of this study is to come up with actionable recommendations so as to enhance compliance towards the observance of NABH guidelines and for the optimization of medical record documentation practices.

Research question

- What are the current practices and levels of compliance with NABH 5th edition guidelines in medical record documentation within Apollo Hospitals, Bilaspur
- Whether the quality of MRD as per NABH guidelines?
- What are the gaps or deficiencies in the current documentation practices?

Objectives:

- Evaluate the existing medical record documentation practices to determine the level of compliance with NABH 5th edition guidelines.
- Assess the quality of MRD in case of accuracy, integrality, timeliness, and relevance, as per NABH standards.
- Identify any gaps or deficiencies in the current documentation practices that may exist in relation to NABH guidelines.
- To spotlight key findings and recommend actionable solutions, to enhance compliance with NABH guidelines and optimize medical record documentation practices.

This study employs a descriptive design, focusing on in-patient departments within Apollo Hospitals, Bilaspur. Data collection will be conducted using a Google form checklist to assess various aspects of medical record documentation, such as patient identification, clinical notes, medication records, consent forms, and discharge summaries. The study will include a sample size of 500 records, selected through simple random sampling, to provide a comprehensive evaluation of compliance levels.

The implications of this research are significant for improving patient care and safety, ensuring legal and regulatory compliance, supporting quality improvement initiatives,

enhancing staff training and professional development, reducing risk and liability, and enhancing organizational performance and competitiveness. By addressing the identified gaps and challenges, healthcare institutions can achieve better compliance with NABH guidelines and improve the overall quality of medical record documentation.

CHAPTER 2– REVIEW OF LITERATURE

Authors (Year)	Study Location	Sample Size	Sampling Techniques	Salient Features
Pizziferri, L., Kittler, A. F., Volk, L. A., et al. (2005)	USA	3,805	Random sampling	Investigated the impact of an EHR on the time efficiency of physicians and quality of clinical documentation.
De Lusignan, S., & van Weel, C. (2006)	UK	Not specified	Not specified	Discussed the opportunities and challenges of using routinely collected computer data for research in primary care.
Thakkar, M., & Davis, D. C. (2006)	USA	Not specified	Not specified	Explored the role of health information technology in improving the quality of medical documentation and patient outcomes.
Carayon, P., Hoonakker, P., Hundt, A. S., & Karsh, B. T. (2009)	USA	Not specified	Not specified	Evaluated the effects of health information technology on workflow and documentation practices in healthcare settings.
Agarwal, R., Kalita, J., & Misra, U. K. (2010)	India	Not specified	Not specified	Evaluated the use of computer-based patient record systems in improving documentation accuracy and completeness.
Chan, K. S., Fowles, J. B., & Weiner, J. P. (2010)	USA	Not specified	Not specified	Studied the relationship between EHRs and healthcare quality indicators, emphasizing the importance of accurate documentation.

Jamoom, E., Patel, V., Furukawa, M. F., & King, J. (2012)	USA	3,180	Stratified random sampling	Analyzed the adoption of EHR systems and their impact on clinical documentation and patient care quality.
Bowman, S. (2013)	USA	Not specified	Not specified	This paper examined the effect of electronic health record systems on information integrity and patient safety.
Hebda, T., Czar, P., & Mascara, C. (2013)	USA	Not specified	Not specified	Reviewed the critical role of nursing informatics in enhancing medical record documentation and ensuring compliance with healthcare standards.
Wang, Y., Kung, L., Wang, W. Y. C., & Cegielski, C. G. (2018)	USA	Not specified	Not specified	Developed an integrated big data analytics-enabled transformation model for healthcare applications, focusing on improving documentation processes.

CHAPTER 3– METHODOLOGY

Materials and methods:

STUDY DESIGN- The present study is descriptive in nature.

SETTING CRITERIA-

- **Inclusion criteria-** All In-Patient departments i.e. two general wards, semi-private ward, private ward and deluxe room.
- **Exclusion criteria-** ICU, HDU, Dialysis ward, Oncology ward.
- **Study tools-** Checklist

DURATION OF STUDY- April 2024-June 2024

SAMPLE SIZE- 500 samples were collected from every 5th file following systematic random sampling, from In-patients departments (as mentioned above) of the Hospital to find any non-compliance with NABH standards.

SAMPLING TECHNIQUE- Systematic random sampling

DATA COLLECTION PROCEDURE- Google form using Hospital Records

CHAPTER 4- RESULTS

A total of 500 samples were collected from 50 patients were taken in the study using 10 various assessment forms for each patient through Google form using hospital records, ensuring anonymity and confidentiality. For record maintenance, UHID Number was recorded with date. The samples were collected from all IPD wards departments i.e. two general wards, semi-private ward, private ward and deluxe room.

These forms serve as a tool for internal audits and quality improvement initiatives, helping the hospital to identify areas where education practices can be enhanced.

The forms that were taken for compliance:

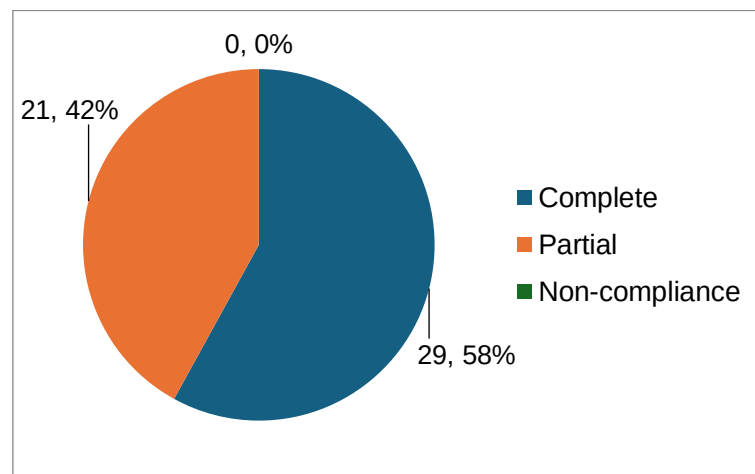
1. Patient & Family Education Documentation
2. Nutrition Assessment Screening (For Adult Patients)
3. Nursing Admission Assessment & Action
4. Initial Assessment (Accident & Emergency)
5. Plan of Care
6. Informed Consent Form
7. Pre-Operative Checklist
8. Safe Surgery Checklist
9. Pre-Operative Anaesthetic Assessment
10. Nursing Caps Risk Assessment Record

Based on the study examining medical record documentation in compliance with NABH 5th Edition Guidelines, following were observed:

a) Patient & Family Education Documentation

The Patient & Family Education Documentation form is a pivotal tool within the walls of a hospital, systematically documenting educational interactions between health professionals, patients, and their families. Such a form allows for consistent, accurate, and individualized information to be forwarded to patients and their families concerning medical conditions, treatment options, medications, and lifestyle changes. It generally contains patient demographics, needs assessment information, topics covered, teaching methods, patient understanding, and date and time for each session. This documentation provides a guide for tracking educational progressions and the certainty of understanding to identify gaps or changes in teaching methods as appropriate. This facilitates continuity of care because it gives a clear record to which these diverse health care providers would refer, indicating a sense of cohesiveness in approach to patient education. This form will also facilitate compliance and quality assurance in regard to the accreditation standards, among others, by NABH, JCI—all these want some form of evidence of patient education as a mandate for hospital accreditation processes.

Graph 1- Patient & Family Education Documentation (n=50)



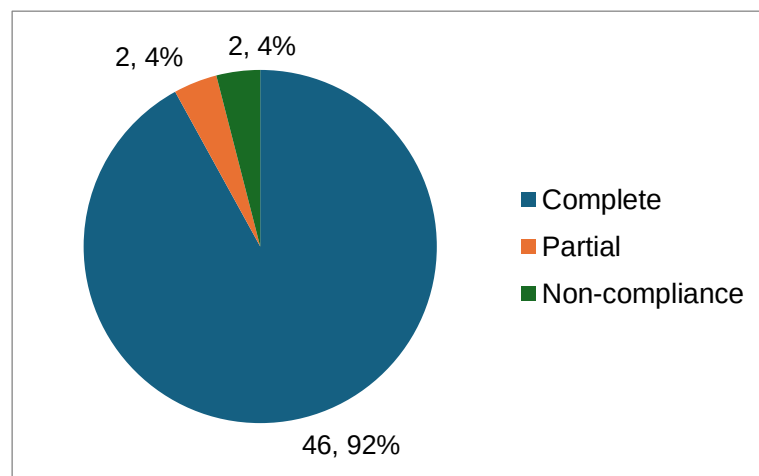
The result regarding the completion rate of patient and family education documentation is explained through analysis:

It highlights a significant portion of patient and family education documentation that is Complete (29.58%) and partially complete (21.42%).

b) Nutrition Assessment Screening (For Adults)

A Nutrition Assessment Screening form for adults in hospitals is used to assess the patient's nutritional status upon admission. It shows which patients are likely to suffer because of malnutrition. It therefore contains information on demographics data, medical history, dietary intake, changes in weight, and findings on physical examination—including BMI calculation. It enables the health professional to assess the risk towards nutrition and formulate an individual care plan. Such documentation will ensure timely interventions, prevent complications, and enhance recovery. It also facilitates the communication of healthcare teams by stressing on clinical guidelines with regard to certain key issues, such as the need for nutrition in the recovery and fitness of hospitalized patients. This form is, therefore, very important in the comprehensive and effective management of patients in hospitals.

Graph 2- Nutrition Assessment Screening (Adults) (n=50)



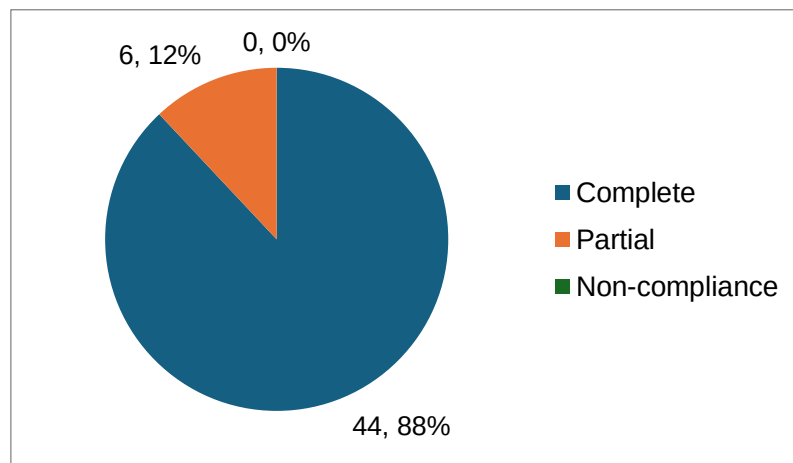
Additionally, it was found that the completion rate of Nutrition Assessment Screening (Adults). Here's a breakdown for the analysis:

The significant portion of nutrition assessment screening (adults) is complete (92%), partially complete (4%) and non- compliance (0%)

c) Nursing Admission Assessment & Action

This is a form used in hospitals to collect all sorts of information about a patient at the time of his or her admission. It has categories regarding time of arrival, patient attendant, language understandable, medical history, current medications, allergies, vital signs, and physical assessment. This form helps the nurse in pointing out immediately any care needs and in planning the proper interventions. It helps in compliance with healthcare standards and promotes patient safety and outcomes, as it ascertains proper initial assessment and immediate necessary action according to the condition and needs of the patient. This form is quite essential for delivering quality nursing care and managing patients.

Graph 3- Nursing Admission Assessment & Action (n=50)



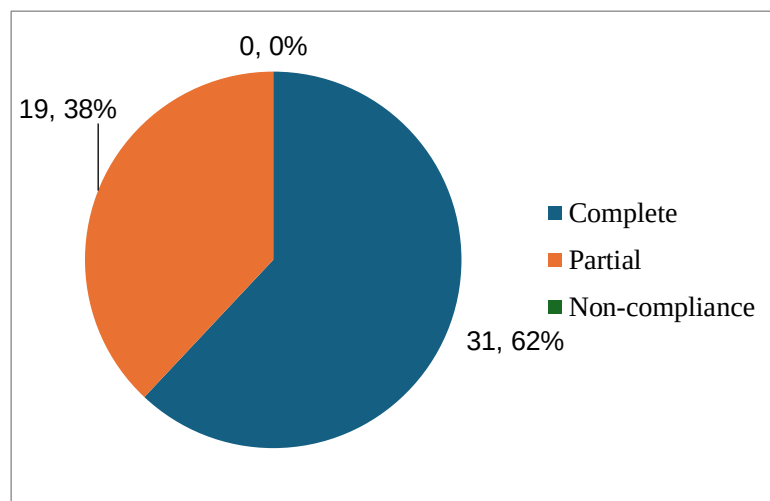
Further this study suggests that the completion rate of Nursing Admission Assessment & Action. Here's a breakdown for your dissertation analysis:

This highlights that a significant portion of nursing admission assessment & action is complete (88%), partially complete (12%) and non- compliance (0%)

d) Initial Assessment (Accident & Emergency)

The form that a patient has to fill in at first sight in the hospital is the Initial Assessment Accident & Emergency. These are forms that capture vital information about the patient on arrival to the emergency department. This form entails segments that help in capturing patients' demographics, the reason for visiting, past medical history, vital signs, pain assessment, and immediate observations. Such a form aids in the straightforward evaluation of a patient's condition, starts prioritizing care, and promptly institutes proper interventions. It allows good communication among the emergency team and facilitates swift decision-making. Systematic documentation of preliminary findings supports patient safety, smoothens care processes, and promotes adherence to clinical guidelines and other regulatory requirements—indeed, very critical elements in emergency care management.

Graph 4- Initial Assessment (Accident & Emergency) (n=50)



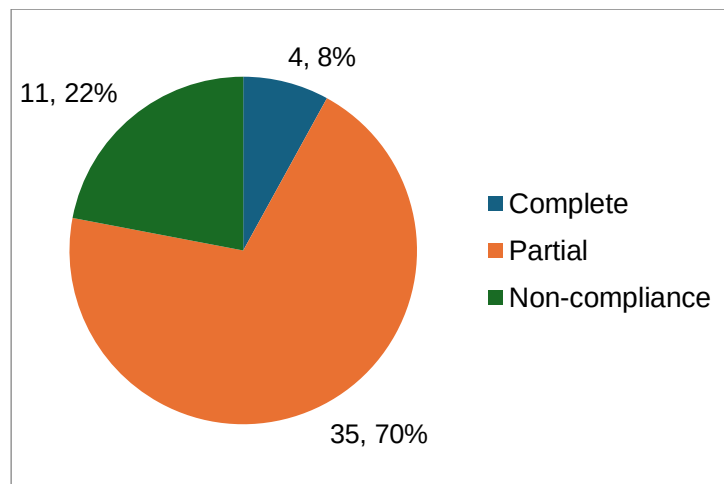
The above figure shows the completion rate of Nursing Admission Assessment & Action. Here's a breakdown for your dissertation analysis:

This indicates that a significant portion of nursing admission assessment & action is complete (88%), partially complete (12%) and non-compliance (0%)

e) Plan of Care

The Plan of Care form in a hospital is a detailed and individual plan on the pattern of treatment and recovery to be followed by the patient. It has sections for patient information, diagnosis, treatment goals, interventions, progress notes, and intervention plans that will be implemented. This form thus assists health providers in coordination and documentation of planned interventions, monitoring a patient's progress, and adjustment of care strategies. In doing so, it gives continuity and consistency to the care given to the patient and will ensure constructive communication among the health team. The Plan of Care form therefore enhances the following clinical guidelines and improves patient outcomes by systematically managing and assessing patient care within a hospital setting.

Graph 5- Plan of Care (n=50)



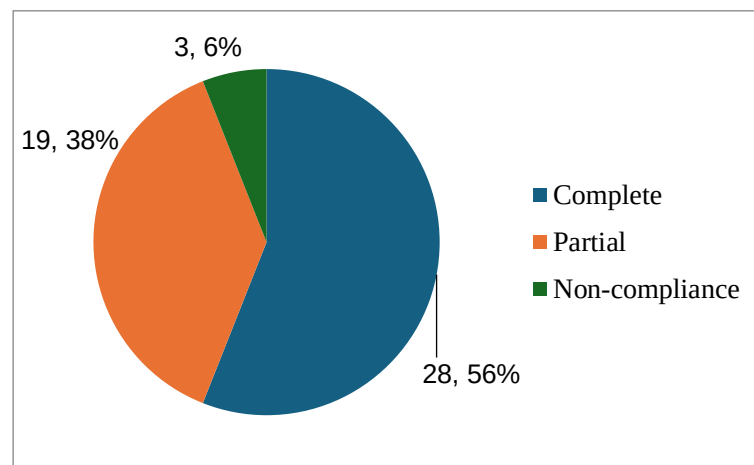
The result regarding the completion rate of Plan of Care through breakdown for the analysis:

This shows that significant portion of plan of care is complete (8%), partially complete (70%) and non- compliance (22%)

f) Informed Consent Form

The informed consent form in the hospital is an important document that protects the interests of the patient; it ensures that they really know and are willing to participate in the proposed treatments or procedures. This document contains the patient's information as well as the details of the procedure, the risks, benefits, and alternatives along with the right to refuse treatment. By signing this document, it basically means that the patient has been fully informed and gives his or her free consent. This form provides for and maintains patient autonomy, allows transparency, and helps meet a mix of legal and ethical considerations. It will help the engendering of trust between the patient and his healthcare provider in making relevant care decisions.

Graph 6- Informed Consent (n=50)



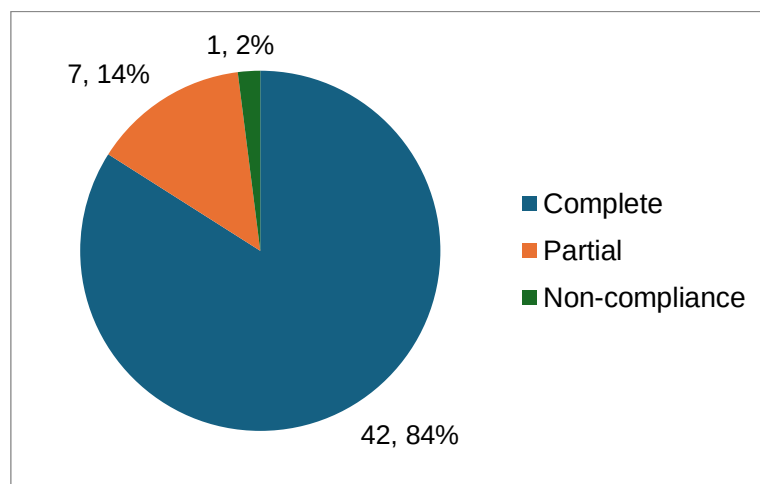
The completion rate of Informed Consent Form which can be explained through the analysis:

This highlights a significant portion of Informed consent form is complete (56%), partially complete (38%) and non- compliance (6%)

g) Pre-Operative Checklist

A pre-operative checklist form is provided at the hospital, which ensures that everything is set in preparation for the surgery. These will include the identification of the patient, verification of the surgical procedure, recital of medical history, checking for allergies, vital signs, verifying informed consent, and personal valuable items. The form also concerns pre-surgery instructions on diagnostic tests, laboratories, or Haematology tests. It enhances patient safety, reduces risks of errors, and allows thorough preparation of both the surgical team and the patient by addressing these elements in a systematic way. This form is paramount for maintaining high standards of care and aiding a smooth surgical process.

Graph 7- Pre-Operative Checklist (n=50)



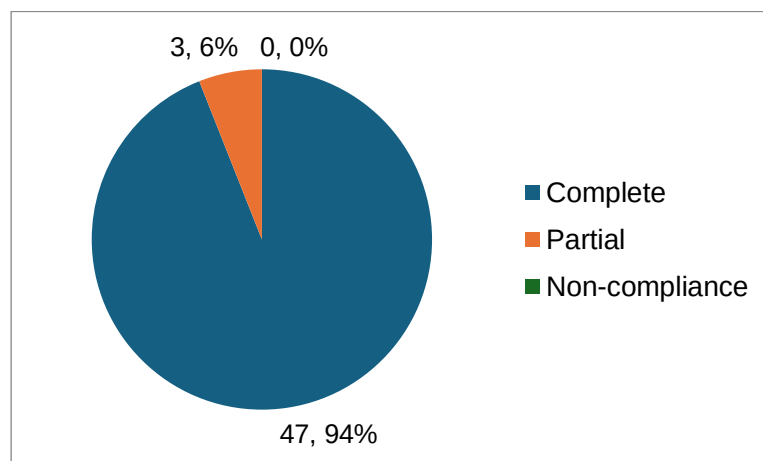
The graph suggests the completion rate of Informed Consent Form. Here's a breakdown for your dissertation analysis:

The highlighted shows that a significant portion of Informed consent form is complete (84%), partially complete (14%) and non- compliance (2%)

h) Safe Surgery Checklist

The surgical safety checklist hospital form reduces the risks of surgery by improving and encompassing details that would assure the following: verification of the identity, site, and procedure of the patient before any surgery. It also undergoes a review regarding critical steps and challenges anticipated. The checklist makes sure essential items like surgical instruments and equipment and medications are available and functioning properly. It enhances team communication through the confirmation of the roles and responsibilities and conduct of any final verification time-outs before incision. The form is very important for standardization of safety practices, improving patient outcomes, and enhancing a culture of safety among the surgical team.

Graph 8- Safe Surgery Checklist (n=50)



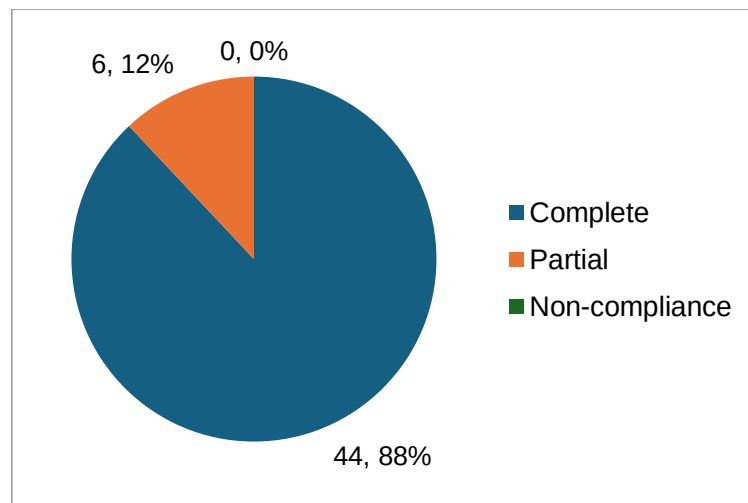
The above figure shows the completion rate of Safe Surgery Checklist. Here's a breakdown for the dissertation analysis:

A significant portion of safe surgery checklist is complete (94%), partially complete (6%) and non- compliance (0%)

i) Pre-Operative Anesthetic Assessment

A Pre-Anesthetic Assessment form is used to evaluate the general medical status of a patient, usually before the administration of anesthetics. Usually, this form includes the following sections: patient demographics, medical and surgical history, medications currently being taken, allergies, and a place to record vital signs. This form highlights risks, such as heart or lung conditions, which would create issues with the anesthesia. It ensures that all tests and consultations are completed and that the patient understands the process and related risks of anesthesia. This form guides anesthesiologists in planning and administering safe and effective anesthesia care, helping to maximize the safety of the patient and the success of the surgical outcome by collecting all the information in detail.

Graph 9- Pre-Operative Anesthetic Assessment (n=50)



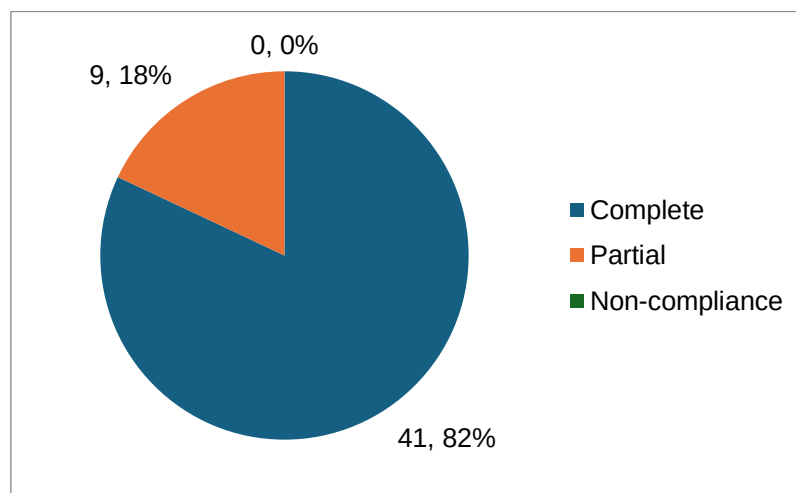
The above graph suggests the completion rate of Safe Surgery Checklist. Here's a breakdown for the analysis:

The significant portion of safe surgery checklist is complete (88%), partially complete (12%) and non- compliance (0%)

j) Nursing Caps Risk Assessment Record

The Critical Assessment and Patient Safety Risk Assessment Record form is used within hospitals to evaluate patient risks with a view of ascertaining safety. It includes areas for patient identification, risk factors for falling, pressure ulcers, infection, mobility, mind function, and skin integrity assessments. All this information helps the nurse to know and document specific risks and make specific care plans about those risks and how to prevent them. It improves patient safety by proactive intervention and ensures compliance with healthcare standards. Systematic evaluation and recording of these risks will help to improve patient outcomes and deliver quality care to patients.

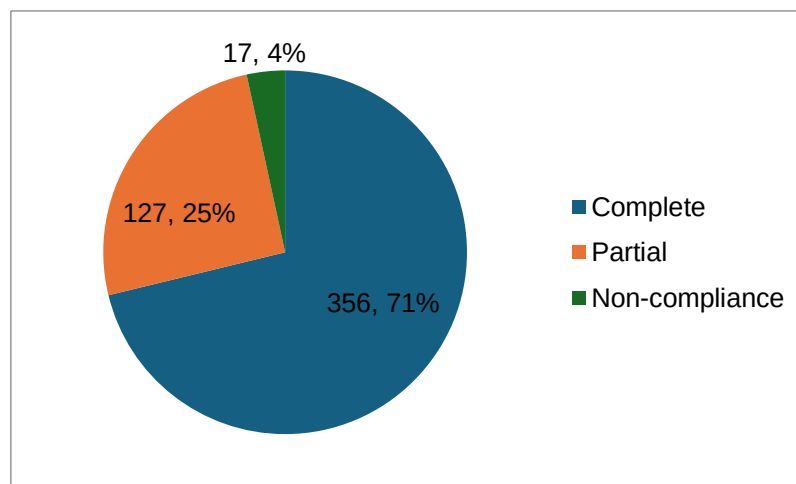
Graph 10- Nursing Caps Risk Assessment Record (n=50)



The pie chart depicts the completion rate of Safe Surgery Checklist. Here's a breakdown for the analysis:

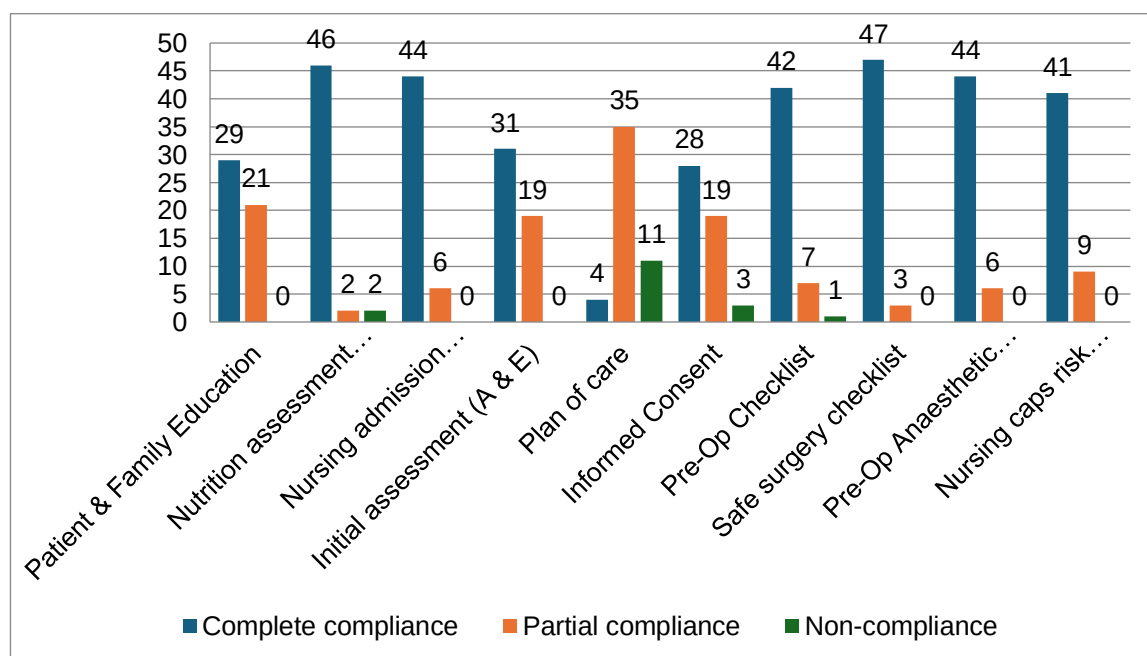
A significant portion of safe surgery checklist is complete (82%), partially complete (18%) and non- compliance (0%)

Graph 11- Total Compliance (n=500)



Out of 500 samples, it is found that 356 samples were complete compliance, 127 samples were partial compliance and 17 were non-compliance. The pie chart shows three slices labeled Non-compliance (4%), Partial compliance (25%), and Complete compliance (71%).

Graph 12- Total Compliance (each form)



• **High Compliance Forms:** The forms with the highest compliance (46-50) were:

- Safe Surgery Checklist
- Nutrition Assessment Screening (Adult)

- Partially **Compliant Forms:** Forms with partial compliance (30-45) are:
 - Initial Assessment (Accident & emergency)
 - Nursing Caps Risk Assessment Record
 - Nursing Admission Assessment & Action
 - Pre-Operative Anaesthetic Assessment
 - Pre-Operative Checklist
- Low **Compliance Forms:** Forms with the least compliance (0-29) were:
 - Plan of Care
 - Patient & Family Education Documentation
 - Informed Consent

According to the data, there is good compliance with some NABH 5th edition Guidelines for medical record documentation, there are areas for improvement, particularly with Plan of care, Patient & family education documentation and informed consent form.

CHAPTER 5- DISCUSSION

This study investigates the compliance of medical record documentation with the NABH 5th edition guidelines at Apollo Hospitals, Bilaspur. By evaluating current practices, identifying gaps, and analyzing factors influencing compliance, the research aims to enhance the accuracy, completeness, timeliness, and relevance of medical records. The findings reveal significant variability in compliance levels across different departments, highlighting the need for targeted interventions to address gaps and deficiencies.

Medical records play a crucial role in ensuring high-quality patient care by documenting assessments, treatments, test results, and consent forms. Standardized documentation practices are a requirement both from the legal point of view and for patient safety and continuation of care. There are standards given by the NABH 5th edition on maintaining good-quality documentation in medical records. Compliance with these may be challenging due to several factors, such as staff training, technology adoption, and culture within the organization.

Comparing it against other studies related to this study's findings shows difficulties in the field of medical record documentation. Agarwal, Kalita, and Misra replicating this study on the challenges of maintaining accurate and complete medical records in India manifest similarities. Their research has revealed the computer-based patient record systems showed much better performance with regard to documentation practices. This supports our recommendation to have Electronic Medical Record (EMR) systems with automated alerts and reminders for complete and accurate documentation.

According to Bowman et al. in 2013, EHR systems in the USA have a positive effect on the integrity and safety of information for patients. In fact, Bowman's study supports the fact that our own conclusion indicates that EMR systems help in improving compliance through the reduction of errors caused by manual interventions and the ease of adherence to stipulations by NABH. Another research by Pizziferri et al. in 2005 showed that EHRs improved the time efficiency of physicians and the quality of clinical documentation. It

further affirms that technology adoption in a health facility would improve documentation practices.

In 2009, a study by Niazkhani et al. regarding undesired effects of computerized provider order entry on medical record documentation was done in the Netherlands. Their findings emphasized that potential challenges to the implementation of technology include user resistance and disruption of workflow. This aligns with our observation that one major challenge for compliance is user resistance to adopting new documentation practices. To that end, a comprehensive strategy would help solve such challenges through staff education and support, in addition to continuous improvement initiatives.

Menachemi and Collum, 2011, provided an overview of the varying benefits and challenges to EHR adoption in the USA. Their study recognized that training by staff and standardization protocols were imperative in making improvements to documentation practices. This builds on our recommendation for periodic training sessions, which should be conducted to orient healthcare providers on the NABH guidelines and follow up for correct documentation. Training sessions can update staff knowledge and skill levels, thereby minimizing errors in documentation work and bringing about a culture of compliance.

Based on the study findings and comparisons with other related studies, some recommendations are being suggested that would immensely go on to help and increase compliance as far as NABH guidelines are concerned. There is a dire need for undertaking regular training sessions for all healthcare providers, where they would be updated on the latest guidelines and the importance of accurate medical record documentation. Such training should also include any changes in NABH guidelines to facilitate coherent and consistent compliance in its discussion. This would, therefore, create a culture of improvement as regular training for staff would boost their knowledge and skills, greatly reducing documentation errors.

Another key recommendation is the implementation of EMR systems with automated alerts and reminders. These systems can complete records in time, thereby making compliance easy by embedding the NABH guidelines as part of their templates. The automation of alerts reduces manual errors, hence improving the accuracy, completeness, and timeliness

of the medical records. The high costs of preliminary implementation and the later maintenance costs, and the challenges involved in changing the staff behavior habituated to the conventional system of documentation, are some of the concerns to be addressed.

Only with regular audits, monitoring, and checking up on the implementation of all the guidelines is continuous surveillance possible. This also helps healthcare institutions by pointing out common areas of non-compliance with regular audits so that necessary remedial action can be instigated in time. Audit results may help provide feedback—specifically to a biomedical healthcare provider—to undertake training for better documentation. There is, however, a major challenge wherein on one hand, regular audits require dedicated personnel and resources, and on the other hand, the institution faces the risk of 'audit fatigue' among its staff, which may result in diminished engagement.

Another important recommendation would pertain to the need for educating patients regarding the accuracy of records and encouraging them to offer complete and accurate information. It seems that patient education may enhance patient participation in their care and improve accuracy of medical records. Material for education includes informational materials, workshops, or even direct communication during a patient's visit. However, the level of health literacy will differ in every patient, and hence differences may occur in comprehension and participation. Development and dissemination of educational material is time- and resource-consuming.

However, despite this overall comprehensive limb of research in Router, some limitations must be accepted. The study is confined only to Apollo Hospitals, Bilaspur, and thus might not hold good for other hospitals or areas. Therefore, a large sample size and multi-centric study will have more generalised results. Furthermore, it is heavily based on quantitative data from audits of medical records, wherein little depth can be had with respect to healthcare providers. There should have been a greater balance, with deeply etched qualitative interviews in order to gain insight into what influences compliance.

The study is also delimited temporally since the period under investigation lasted for three months, which hardly covers long-term trends and changes that may happen within the documentation practices. Longitudinal design could give more accurate information about compliance. Notwithstanding the above limitations, this study gives an in-depth review of

the medical record documentation practices at the facility about the documented gaps and opens up areas for improvement. This means that practical recommendations are offered that can be directly implemented to improve compliance with NABH guidelines.

Inherent strengths of this study include the detailed assessment of the documentation practices in the hospitals and the generation of constructive recommendations, which were created based on the research findings. The value of the findings is incremented by comparing it with other relevant studies in deep context and within the broader context of the practice of documentation. Consultation on ethical principles of informed, written consent, voluntary participation, security, and confidentiality will ensure that the research results are both integral and reliable, but also respect the rights and privacy of persons.

This paper brings out the critical importance of accurate, complete, timely, and relevant medical record documentation as per NABH 5th ed. guidelines. It identifies gaps and challenges and consequently provides doable recommendations to improve the current documentation practices in Apollo Hospitals, Bilaspur. This can be improved with regular training sessions, EMR systems with automated alerts, periodical audits, and patient education. These shall help in ensuring the highest standards of accuracy and completeness in medical records for the overall enhancement of patient care quality and safety.

Future research should focus on a larger multi-center studies to make more generalizable findings. Longitudinal studies could mention ways in which the recommendations implement impacts in the long run. Additionally, in-depth and profound qualitative interviews with health providers shall contribute much to giving a broader understanding of what influences compliance to directives, the efficiency of several interventions, and changing times. Not giving up on the quest to survey and locate breaks in medical record keeping record will lead healthcare institutions into confirming their practice with the best standards, hence improving outcomes for patients, raising healthcare quality, and enhancing clinical excellence.

This research thus systematically evaluates the practice of medical record documentation at Apollo Hospitals, Bilaspur, against the guidelines on NABH 5th edition. The presented findings had significant gaps and areas for improvement with practical recommendations to enhance compliance. Therefore, comparing findings from this study to other relevant

studies provides a broader context and understanding of challenges and opportunities in medical record documentation. It will be possible to enhance quality as well as safety in care advanced to patients by increasing accuracy, completeness, timeliness, and relevance of medical records through the implementation of the recommended measures and solutions of challenges identified in healthcare institutions.

CHAPTER 6- CONCLUSION

he conclusion of the study deals with subtle findings and implications concerning compliance to medical record documentation in accordance with NABH 5th edition guidelines at Apollo Hospitals, Bilaspur. The objective of this study was to evaluate and classically improve the accuracy, completeness, timeliness, and relevance of medical records from different departments of the hospital. The bandwidth of the survey ranged from current practices to identification of strengths and significant gaps in adherence within NABH. Major findings pointed out, firstly, that standardization of documentation practices is imperative to healthcare—not just a question of compliance with the law, but also of patient safety and care continuity.

This variability in the compliance within departments of Apollo Hospitals, Bilaspur, brings out how complex health-care documentation may get. While some were marked with robust demonstration for adherence, others had gross inadequacies vis-à-vis completeness and timeliness. This variability calls for targeted interventions at departmental levels to address the unique challenges while promoting a uniformity of approach to standards of documentation across the hospital. Such interventions will, therefore, be very relevant in mitigating risks relative to incomplete or inaccurate medical records, ensuring the welfare of the patient and reputation of the institution are safeguarded.

The implications that can be gleaned from these findings extend beyond immediate compliance metrics to wider ramifications for healthcare quality and organizational resilience. Practices in better documentation of medical records not only strengthen the institutions concerned with healthcare in terms of legal and regulatory compliance but also foster a culture of accountability and continuous improvement. Hence, proactive adoption of the NABH guidelines is not an option but a strategic imperative for any healthcare institution aspiring to achieve and sustain high standards in excellence in both operational performance and patient care amidst changing regulatory environments.

The present study has brought to the forefront how EHR systems are potentially able to transform healthcare by bringing in accuracy and efficiency in documentation, in step with international studies on healthcare quality improvement, such as those by Agarwal, Kalita, and Misra in 2010, and Bowman in 2013. Intervention in this line will include the

integration of NABH guidelines in the EHR templates and automated alerts for incomplete entries—interventions that have huge potential for making the documentation process lean and error-free. Although implementation may be preceded by associated up-front costs and the potential resistance from staff familiar with traditional methods of documentation, the long-term benefits associated with EHR systems in terms of patient outcome and organizational efficiency enhancement warrant investments of this nature.

These recommendations from the study advocate a multi-faceted strategy for improving compliance to the NABH guidelines through regular training sessions, adoption of the EMR system, continuous audits, and projects on patient education. Health care providers have to be oriented time-to-time with intricacies of the NABH guidelines. Frequent training sessions will help in inculcating the culture of continuous learning and improvement. This provides a platform for updating knowledge of the staff regarding emerging compliance challenges and the reinforcement of best practices about documentation.

Implementation of the EMR system features as a key strategy in modernizing documentation practices and ensuring real-time compliance monitoring. Healthcare providers can imbed NABH guidelines into the EMR templates and put in automated alerts that significantly improve accuracy and completeness in their documentation. Integration of the EMR system also helps in smooth data sharing and inter-team collaboration among healthcare teams toward the optimization of coordination in patient care and clinical decision-making.

Regular audits complement technological interventions, in that they have systematic assessment activities to the compliance performance at various departmental levels in fields within the hospital. It is through such audits that recurring deficiencies in documentation are proactively Identified and trigger target quality improvement initiatives. Such iterative audits further develop practices of documentation to keep alignment updated with new evolving guidelines set by NABH and changing regulatory expectations.

Patient education programs are among the other systematic efforts towards engaging patients in their treatment process and adhering to documentation procedures. Engaging them with the purposefulness of medical history records empowers them towards participating in health decisions for them and to provide information that is most relevant to

the construction of case histories. Hospitals can use various multimedia platforms, informational materials, and interactive workshops in order to increase health literacy for greater collaboration in patient care.

Despite the comprehensive approach of this study, several limitations warrant consideration in interpreting its findings and recommendations. In this respect, this present study has one major limitation: it is conducted in a single healthcare institution, which sabotages the generalizability of its findings to broader regional or national contexts. Future research endeavors should encompass multi-center studies involving diverse healthcare settings to capture geographical variations in compliance and documentation practices comprehensively.

The results of this study are primarily based on quantitative data from medical record audits, putting forward the case for complementary qualitative insights from healthcare providers. Tools that are quantitative need supplementation with qualitative methodologies, in particular in-depth interviews and focus groups, so insight from these kinds addresses the socio-cultural, organizational, and technological determinants of compliance with regard to NABH guidelines. These answers will be very important in tailoring interventions that will be relevant and applicable across the variety of stakeholder perspectives and operational contexts within health institutions.

The length of this study may have temporal constraints on capturing these longitudinal trends in the documentation practices. Long-term studies would properly convey what an implemented intervention has done and how it can continue to bring improvement in compliance outcomes over more prolonged periods. Moreover, this will include stakeholder engagement insight involving reviews by patients, and also regulatory insight, thereby strengthening the comprehensiveness of the study in assessing the quality of documentation and patient care outcomes.

Its cardinal strengths lie in the stringent framework for evaluation and evidence-based recommendations that are based on empirical research and against the backdrop of internationally benchmarked best practices. This provides a strong base for the evolution of better documentation practices, with which to align it through its findings with international research into EHR systems, patient safety, and compliance with national and global

regulations. Comparative analysis enriches the discussion by illustrating effective strategies and lessons learned from international experiences that can help in policy decisions and strategic initiatives in healthcare quality improvement.

Conclusion: This study reiterates that the prime component for achieving compliance with NABH and enhancing patient care outcome lies in accurate, complete, and timely medical record documentation. The present study shall, therefore, focus on the identification of critical gaps and formulation of effective recommendations that shall assist Apollo Hospitals, Bilaspur, and many such health institutions in enhancing the standards of documentation. Recommended interventions, such as continuous training programs, the adoption of an EMR system, audits, and patient education initiatives, are ideally supposed to foster excellence culture and create an improvement continuum in healthcare delivery. Further research and collaborative efforts across sectors of health care will continue to advance documentation practices in supporting optimal patient outcomes and the advancement of quality in health care around the globe.

CHAPTER 7- REFERENCES

1. National Accreditation Board for Hospitals & Healthcare Providers (NABH). NABH Standards for Hospitals, 5th Edition. 2020.
2. Agarwal R, Kalita J, Misra UK. Computer-based patient record system: a survey. J Assoc Physicians India. 2010;58:163-167.
3. Bowman S. Impact of electronic health record systems on information integrity: quality and safety implications. Perspect Health Inf Manag. 2013 Winter;10(1c).
4. De Lusignan S, van Weel C. The use of routinely collected computer data for research in primary care: opportunities and challenges. Fam Pract. 2006;23(2):253-263.
5. Wang Y, Kung L, Wang WYC, Cegielski CG. An integrated big data analytics-enabled transformation model: Application to health care. Inf Manag. 2018;55(1):64-79.
6. Agarwal R, Kalita J, Misra UK. Evaluating the use of computer-based patient record systems in improving documentation accuracy and completeness; 2010.
7. Bowman S. Examining the impact of electronic health record (EHR) systems on information integrity and patient safety; 2013.
8. De Lusignan S, van Weel C. Opportunities and challenges of using routinely collected computer data for research in primary care; 2006.
9. Wang Y, Kung L, Wang WYC, Cegielski CG. Developing an integrated big data analytics-enabled transformation model for healthcare applications, focusing on improving documentation processes; 2018.
10. Pizziferri L, Kittler AF, Volk LA, et al. Investigating the impact of an EHR on the time efficiency of physicians and quality of clinical documentation; 2005.
11. Thakkar M, Davis DC. Exploring the role of health information technology in improving the quality of medical documentation and patient outcomes; 2006.
12. Chan KS, Fowles JB, Weiner JP. Studying the relationship between EHRs and healthcare quality indicators, emphasizing the importance of accurate documentation; 2010.
13. Jamoom E, Patel V, Furukawa MF, King J. Analyzing the adoption of EHR systems and their impact on clinical documentation and patient care quality; 2012.

14. Hebda T, Czar P, Mascara C. Reviewing the critical role of nursing informatics in enhancing medical record documentation and ensuring compliance with healthcare standards; 2013.
15. Carayon P, Hoonakker P, Hundt AS, Karsh BT. Evaluating the effects of health information technology on workflow and documentation practices in healthcare settings; 2009.