

**Summer Training at
Orchid Medical Centre, Ranchi**

**A Study on Fit-Gap Analysis of Medical Records
Documentation and its Importance in Quality Management.**

By-

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Certificate

This is to certify that Dr.Anumeha Prateek, D/O Mr.Ram Pyar Prasad, Roll No. - 1072, 1st Year Student of MBA in Hospital & Health Management Program, IIHMR University, Jaipur has completed her Summer Internship programme for 2 months from 10th May, 2021 till 10th July, 2021 in our Operations department at Orchid Medical Centre, Ranchi.

During this period she had gained knowledge about various functionalities of Operations department in a corporate hospital set up.

Her work was found to be satisfactory.

We wish her the very best for her future endeavors.

For Orchid Medical Centre



Director

ACKNOWLEDGEMENT

Summer internship is a great and most enriching experience in a student's life and I would like to express my gratitude to each and everyone who supported me during my 'Two-months' journey. This has not only been a great learning experience but also a great opportunity to expose myself to various departments of a healthcare sector.

I would like to thank Mr. Anant Jain, Director, Orchid Medical Centre, for considering me for this great opportunity to let me do my internship from this esteemed hospital.

Then I would like to extend my gratitude to Ms. Eva Srivastava, General Manager to trust me with such responsibilities and Mr. Gaurav Sen Gupta, Manager- Medical Operations, for his constant guidance and encouragement throughout. I would also like to thank Mr. Prithwiraj Mondal, Assistant Manager- Medical Quality, help me and guide me throughout my work-process.

At last, I want to extend my heartfelt gratitude to my mentor- Dr. (Col) Mahender Kumar for his constant encouragement and his kind words throughout the study. I would have never been able to complete this study without his guidance and to Dr. P.R Sodani- President, IIHMR University and Dr. Dharendra Kumar- Dean, IIHMR University for providing us with the great training and opportunities that helped me throughout my internship.

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ABBREVIATIONS

-  OMC- Orchid Medical Centre.
-  NABL- National Accreditation Board for Testing and Calibration Laboratories.
-  NABH- National Accreditation Board for Hospitals & Healthcare Providers.
-  CCU- Critical Care Unit.
-  ISCCM- Indian Society of Critical Care Medicine.
-  ICU- Intensive Care Unit.
-  OPD- Out-Patient Department treatment.
-  IP- In-patient.
-  OT- Operation Theatre.
-  MRD- Medical Records Department.
-  ICD- International Classification for Diseases.
-  MLC- Medico-Legal Case.

INTRODUCTION

About Orchid Medical Centre-



Orchid medical Centre is a multi-specialty hospital located at H.B. Road, Ranchi. The hospital aims to provide quality patient care with unrelenting attention to clinical excellence and patient comfort at the least cost possible. Competing with some of the best medical facilities in India, Orchid Medical Centre is an ISO 9001:2008 Certified Super Specialty Hospital equipped to cater to all medical requirements.

In the year 2020 Orchid Medical Centre has also received its NABH accreditation and has become one of the few hospitals in Ranchi to have NABH certification. Orchid Medical Centre is the first and only lab in Ranchi to have NABL certification. This nationally recognized certification issued by Quality Council of India ensures that the entire process from sample collection, storage testing and reporting are done as per the highest quality standards.

The CCU at OMC is ISCCM accredited. It is the first and only hospital in Ranchi to have this accreditation which certifies that the ICUs in its facility are the best available in terms of equipment, patient care and medical faculty.

OMC is also Medical Partner for sports teams like Ranchi Rays (Hockey India League), Patna Pirates (Pro Kabaddi League), Chennai Super Kings (Indian Premier League) and provide Medical Services for BCCI for International and National Cricket Matches in Ranchi. OMC has been approved by the US Consulate General and is the only hospital in Jharkhand to have this prestigious association for treatment of American citizens.

OMC is also empanelled with most TPAs and Corporate in Jharkhand to provide cashless treatment to eligible patients.

HOSPITAL PROFILE

Super-specialities

- Cardiology
- Nephrology (Kidney)
- Orthopaedics & Joint Replacement
- Neurology
- Gastroenterology & Hepatology
- Urology & Uro-surgery
- Plastic & Micro-vascular Surgery
- Neurosurgery

Specialities

- Radiology
- Pulmonology
- Psychiatry
- Physiotherapy
- Pathology & Laboratory
- Paediatrics & Neonatology
- Obstetrics & Gynaecology
- Nutrition & Diet
- Laparoscopic & G.I surgery
- Internal Medicine
- ENT
- Diabetology
- Dermatology
- Dentistry
- Critical Care
- Anaesthesiology

Services

- Bio-medical
- Housekeeping
- Infection control
- Nursing
- Pharmacy
- Quality control
- TPA Processing

Diagnostic Facilities

- Cardiology
 - ✓ Cardiac Cath lab for Angiography and Angioplasty
 - ✓ ECG
 - ✓ Stress ECG
 - ✓ TMT
 - ✓ Holter Monitoring
- Radiology
 - ✓ MRI
 - ✓ 3D CT-Scan
 - ✓ X-Ray
 - ✓ 4D Ultrasound with colour Doppler
- Gastroenterology
 - ✓ Colonoscopy
 - ✓ ERCP
 - ✓ G.I Endoscopy
 - ✓ SIBO Test
- Neurology
 - ✓ Video EEG
 - ✓ EMG

- ✓ SSEP
- ✓ BERA
- ✓ NCV
- ✓ VEP
- ✓ RNS

- Pathology
 - ✓ Fully automated biochemistry analyser
 - ✓ Immunoassay Analyser
 - ✓ Elisa Reader and Washer
 - ✓ Microbiology
 - ✓ Clinical pathology
 - ✓ Histopathology
 - ✓ Automated Blood Culture
 - ✓ Automated HPLC Analyser for HBA1C

- Other Diagnostics
 - ✓ Audiometry
 - ✓ Bronchoscopy
 - ✓ Diabetic Foot Clinic
 - ✓ Pulmonary Function Test
 - ✓ Polysomnography
 - ✓ Uroflowmetry

- Health Check-up Programmes
- OPD
- IP Facilities
- Pharmacy
- Casualty
- OT

Introduction to Medical Records Department

Medical records are one of the most vital components in modern health sector. It is a patient's detailed information documents that are documented and maintained during a patient's visit or stay in any healthcare organization.

A patient's medical record generally contains patient's face sheet having her/his age, gender, address etc., patient and attendant's ID proofs., medical, paramedical, and clinical documents along with investigation reports etc.

Maintaining every patient's medical record is important as it is that only proof one can rely on to know about the treatment that has been given to the patient. Apart from that, it also plays an important role in community health studies.

MRD also plays an important role in accessing the proper functioning of many departments in a hospital setting and hence has a major role in quality management and operations analysis.

As per the "Right to information Act, 2005, MCI regulations, Consumer Protection Act, 1986," etc., a good medical record maintenance system is necessary to benefit different walks of people in our community.

In NABH schedule, there is a separate audit parameter for MRD. The quick list of NABH audit for medical records contains the following: -

- Retention policy.
- Security & confidentiality.
- Birth/death reports.
- Transfer notes.
- System for access to medical records.
- Medical record audit.
- Case record sampling.
- Statutory documents.
- Destruction of case records.
- Fire safety.

MISSION

- To organize and manage every patient's medical records properly.
- Look for the gaps in those records and fill them in order to complete records.
- Issuing any required files to the concerned authorities whenever required.
- To look for safety and confidentiality of the documents.

VISION

- To generate and maintain high quality information related to the patients as well as hospital.

GOALS

- To properly maintain CPRS.
- To receive physical files, store, retrieve and discard medical records of the patients as per the legal requirements.
- To help in better and continuous quality management and operation of the healthcare organization.
- To help management in formulating policies and revising them when time demands.
- To maintain medico-legal documents of patients.
- To maintain patient's records in order.
- To help insurance and judicial authorities, investigating officials etc., by providing them with the required document.

SCOPE OF SERVICES

- A medical record is the documentation of healthcare services and medical treatments given to a patient by healthcare professionals.
- It is an important component of quality management as well. It helps in identifying the deficiencies of maintaining proper medical records and the problems it leads to in terms of quality and hence ensures in filling the gaps to improve the quality of services provided in the organization.
- Apart from that, it also draws attention towards the gaps that can be filled in active files so as to avoid them in closed patient records.

MRD At Orchid Medical Centre, Ranchi

The medical records department of Orchid Medical Centre, Ranchi is situated on the first floor of annexure building-2 of OMC.

The department is managed by two executives and they report to the HOD of MRD.

The working hour for OMC's MRD is 9am to 6pm from Sunday to Saturday.

The MRD of OMC is manual in nature and hence, it mostly deals with the IP medical records. However, all OPD and lab reports along with IP medical records are uploaded on OMC's CPRS on monthly basis.

Here, the MRD retains all IP files for a time span of 7 years and after that they are discarded as per the regulations, in order to make space for the new records. For birth case files, they are discarded once the infant turns 18.

Here, files are categorized as per color-coding. Red label is put on death case files, followed by light green color for LAMA cases and dark green color for MLC cases. For birth, referral and normal discharge no color coding is done. Apart from that, the files are categorized and numbered as per the standard ICD coding.

If any file is found to be deficient in completeness of the documents, it is sent back to the floor executives and once the floor executives fill the deficiencies, it is sent back to MRD.

Documents to look for in a medical record are-

- Checklist for MRD.
- Checklist for patient discharge.
- Admission paper.
- Discharge slip.
- LAMA summary/MLC copy (if applicable).
- Death /discharge summary.
- Birth/death certificate.
- Patient and attendant's ID-proof
- All consent forms.
- Emergency assessment form.

- Case history.
- Care of plan.
- Doctor's progress notes.
- All investigation reports.
- Medicine chart.
- Pre and post-surgery checklist.
- PAC evaluation sheet.
- OT sheet.
- Surgical safety checklist.
- Initial nursing assessment.
- Vital signs record.
- Nutritional assessment sheet.
- Pain assessment.
- Infection control checklist.
- Diet chart.
- Input-output chart.
- Daily nursing activity plan.
- Antibiotic usage form-OT.
- Patient transfer assessment.
- Glucose reading form.
- Patient counselling form.
- Activity record.

Authorities who can make entries in the medical records are-

- Doctor in-charge.
- Emergency room doctor.
- Consultant doctor.
- Related technicians.
- Nurse in-charge.
- Concerned nursing staff.
- Nutritionist.
- Physiotherapist.

Observations & recommendations for the MRD at OMC, Ranchi.

- With a continuous increase in the number of patients along with a wide retention period for IP files i.e., 10 years, there is an immediate need to expand the MRD of the organization.
- And if expansion is not possible, retention period should be reduced to 6-years or less to avail more space.
- A security system at the door of the department is an absolute necessity as the files in there contain important and confidential documents which can be misused if goes into wrong hands.
- Since the department is enclosed and has many important documents in there, proper ventilation should be there to prevent fungal infestations.
- Also, there should be an air conditioner in the department as during summers, being a closed space, it is difficult for staffs to work there, leading to decrease in productivity.
- Doctors, nurses and floor executives should be given proper training and orientation about the proper documentation of medical records of patients and its importance.

A Study on Fit-Gap Analysis of Medical Records Documentation **and its Importance in Quality Management.**

“Electronic health records are the answer to improving patient care.”

Hospitals not only provide healthcare facilities but also deals with the life of the patients and a good medical care solely rely on well-trained doctors, nurses and other healthcare providers, good quality facilities and a well-documented medical record.

Medical records have many roles to play in modern healthcare environment. Other than being a bridge between two healthcare professionals, medical record plays the most important role in the legal system of jurisdiction. Based on these medical records, any healthcare professional can be put behind the bars or can be saved from it.

Medical records must be documented properly as it is the only element of self-defense in healthcare sector.

Apart from these, MRD of any hospital also sometimes plays a role in making government policies related to healthcare.

RATIONALE

This project is on “MRD and Its Importance in Quality Management.”

It mainly focuses on how medical records are documented in the hospital sector, what are the loopholes and steps to be taken to fix it.

Main reasons of doing this project were: -

- Monthly audit of medical records documentation is an important part of the activities that are performed in the various clinical departments of any healthcare organization for checking not only the completeness of files but also to check for quality indicators for improvement as well.
- To help the organization in identifying the deficiencies in order to follow NABH protocols.
- With increasing number of medico-legal cases against healthcare professionals and hospitals, proper documentation of medical records plays the most important role to avoid any future legal allegations.
- The gap is analyzed to identify the steps to be taken to fill these gaps. Time-to-time training for hospital personnel and regular audits can improve the quality of services provided to the patients to a significant amount. Along with that, it also adheres to the standards of NABH.

OBJECTIVES

- To study the environment of Orchid Medical Centre, Ranchi.
- To acknowledge the parameters used at Orchid Medical Centre's MRD for documentation.
- To identify the gaps in in medical records documentation and
- To suggest few measures that might fill the gap.

RESEARCH METHODOLOGY

- I. Study Setting-** Orchid Medical Centre, Ranchi.
- II. Study Design-** Record Based Retrospective Study.
File type is Passive or closed file. It is of the patients who have taken treatment from the organization and have already been discharged or died.
- III. Study Duration-** 2 months (from 10th of May, 2021 to 10th of July, 2021)
- IV. Sample Size-** 360 medically managed patient files. All these 360 files are passive/closed files. Out of which 180 files are for the month of May, 2021 and 180 files are of June, 2021.
- V. Data Collection Technique-** Convenience sampling with no repeat entries.
- VI. Type of Data Collected-** Primary data collected by checking files of discharged or dead patients at MRD.
- VII. Method of Data Collection-** Standardized audit tool for passive/closed (In-patient) files were provided by the hospital itself.
- VIII. Variables and their Meanings-** In this report, there are two variables that are taken-
 - Compliance- As the name suggests, it means if the parameters taken are meeting with the requirements.
 - Non-compliance- If the parameters does not satisfy the requirements, it is referred as Non-compliance.

REVIEW OF LITERATURE

S.No.	Author	Year	Title	Study Description	Purpose	Conclusion
1.	Gunjan Patel	2009	Total quality management in healthcare	Quality management was introduced during Crimean war. It proved to improve the death rate from 43% to 10%. In this article, author also mentions the various principles and components of quality management in healthcare sector and how to achieve it.	To show the importance of quality management in healthcare. And, also to understand the principle components and steps to achieve and maintain the quality of various services provided in healthcare	To conclude, quality management plays a vital role in the healthcare sector. It ensures that the services that are provided to the patients in a healthcare system is safe and is a quality service. To ensure an indented quality management, one must ought to be a customer focused organization, keeping in mind the needs of their customers and constantly working towards achieving and in-fact overachieving it. The organization must lead and involve all the people in their

						organization to move towards their ultimate goal of customer satisfaction and also towards putting constant effort to be better than yesterday.
2.	Subhash S. Dodwad	2013	Quality management in healthcare.	This article talks about quality and its importance in healthcare sector. It also talks about how by making small but continuous changes towards it can benefit the organization in the long run. It also mentions the various dimensions of quality, continuous quality improvement methods, total quality management and quality assurance process i.e., PDCA cycle. It also talks about the services	To present a clear picture of what is quality management in terms of healthcare sector. Its building blocks and how we can move forward in the direction of achieving good quality management in healthcare.	To conclude, one cannot talk about healthcare without talking about quality management. They walk hand-in-hand. Quality management in healthcare is all about achieving the goal of providing good quality services to their consumers, be it the patients, their attendants or the member of the organization, that too at to lowest cost possible. Author also talks about various initiatives taken by

				provided to the consumer, be it the patient or any employee of the organization and about the initiatives taken by the Government of India towards healthcare.		Government of India in this direction like- Reproductive and child health, NRHM Program, establishing various health facilities including PHCs, CHCs, sub-centres, RCH Camps and many more.
3.	Ashok Deorari & Nigel Livesley	2018	Delivering quality healthcare in India- Beginning of improvement journey.	Quality management is the oxygen of healthcare system. It ensures that the services provided to the patients are up to mark which ensures smooth functioning of the system in the long run. Quality management has two parts- Quality assurance and Quality improvement. Quality assurance focuses on the supply,	To study about the building blocks of quality management and how managers can implement it in real life hospital scenarios	To conclude, quality improvement at ground level is the key to proper functioning of the healthcare system. Leading a team of people from all levels of the healthcare system to remove obstacles for improvement in targeted area on a day-to-day basis is a challenge. Every member of the team must have the knowledge of the

				infrastructure and staffs that are in place to provide quality care while Quality improvement focuses on training and equipping healthcare workers and managers with skills to solve problems on their level.		key processes that are involved in the system. The purpose of quality improvement is to fill the gap between the prevalent and the desirable. It can only be achieved by providing proper training and conducting regular audits regarding the same. Reaching the goal of providing indented quality service in lowest cost possible is difficult but it can be achieved by taking one step at a time on a day-to-day basis.
4.	Joseph Thomas	2009	Medical records and issues in negligence.	For treating doctors, properly document patient management is very important. It is the only way for doctors to prove that the treatment	To study about proper documentation of patient records and its importance.	For scientific evaluation of the organization's patient profile, to help them in analyzing the treatment results and to plan

				was carried out properly.		treatment protocols, medical records are very important. Other than that, it is a very important tool in the issues of alleged medical negligence.
5.	K Srinivasulu, V Tejaswini Namburi, AB Sai Samhitha	2016	A study on documentation of medical records.	Documentation is an essential part in healthcare sector, it should be documented timely, accurately and completely. This study was done on 100 case sheets.	To show the importance of proper documentation of medical records of patients and the drawbacks of a poorly documented medical record.	Proper documentation, organization and maintenance is not only the duty of every working doctor but of all the staffs of a healthcare organization including MRD of every hospital as ill-documentation can not only put someone in jail but proper documentation can save a person from jail as well and vice-versa.

UNDERSTANDING DOCUMENTATION PARAMETERS

According to the closed file audit checklist/toolkit, there are certain parameters which are used for documentation of IP medical records. These documentation parameters are judged on the basis of Compliance and Non-compliance.

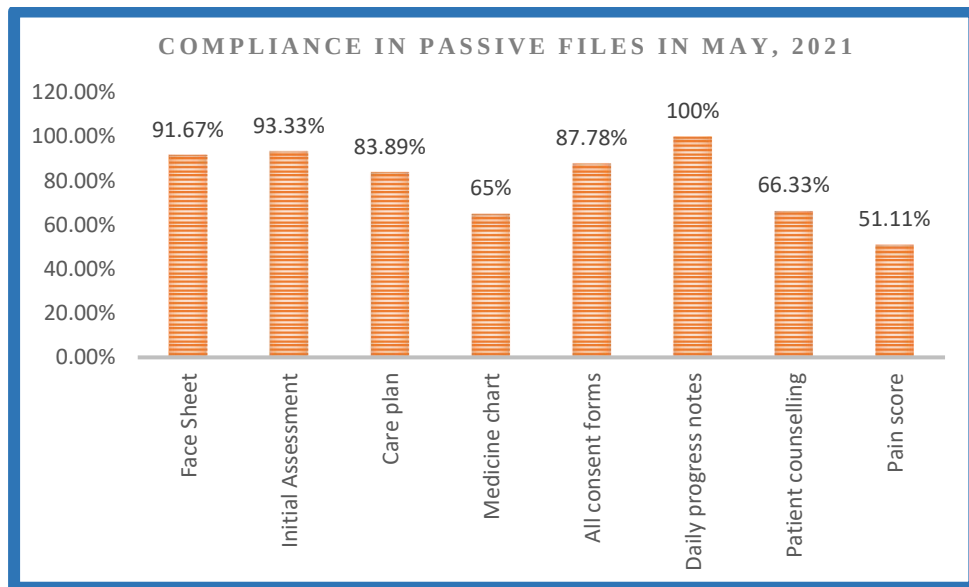
If any parameter has high Non-compliance rate, it should be the area where the organization should focus on, to eliminate it. These parameters are same for active files as well. However, closed files audits are done in MRD of that very organization and are more detailed as compared to the active file audits. These are the prime parameters to focus on-

PARAMETERS	TO BE FOUND IN	EXPLANATION
Face Sheet	Active & Closed files.	It contains patient's general information including name, age, sex, address, time of admission etc.
All Consent Forms	Active & Closed files.	It contains all consent forms including consent for treatment, surgery, blood transfusion etc.
Initial Assessment	Active & Closed files.	It is done by the medical officer present in the ward at the time of patient's arrival. It focuses on completion of initial assessment, care of plan, treatment given, patient history, chief complaint, etc. within 24 hours of patient's arrival.
Plan of Care	Active & Closed files.	It is documented by the concerned doctor daily on daily progress sheets.
Doctor Progress Sheets	Active & Closed files.	It contains patient's progress on a daily basis. It is documented by the present doctor.
Pain Score & Patient Counseling Sheets	Active & Closed files.	These are documented daily by nurse staffs daily. Pain score is recorded to check for patient's pain progress and patient counseling is done to inform about patient's daily condition to their attendants.
Medicine Chart	Active & Closed files.	It is a white colored sheet which contains of all the medicines that has been administered to the patient

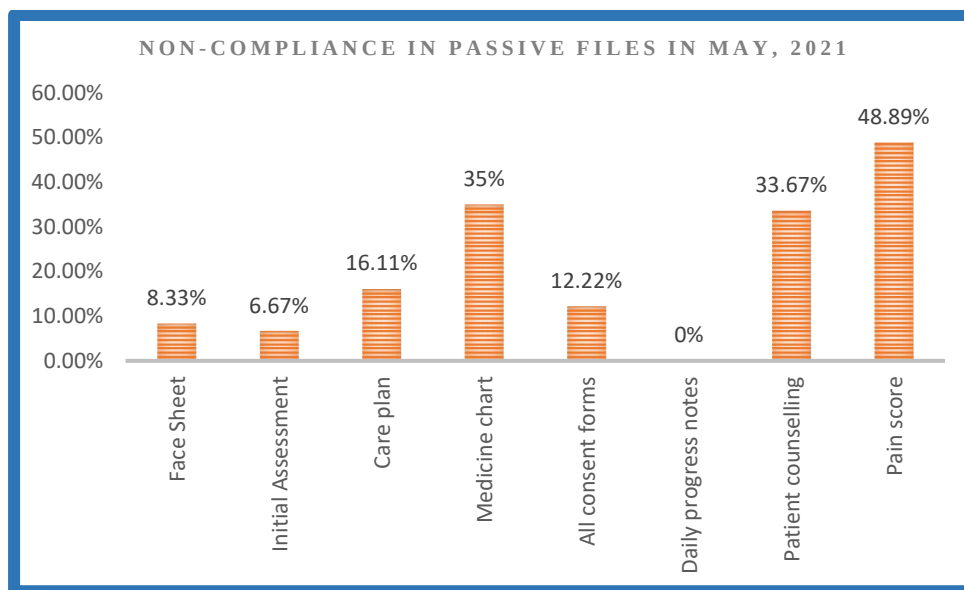
		during her/his stay in the hospital.
Patient Transfer Sheets	Closed files.	This sheet is filled and kept in the patient record when a patient is shifted from one ward to another, explaining why patient was shifted and also for easy understanding for staffs there to continue the right treatment.
Discharge/death Summary	Closed files.	It contains of a patients discharge summary along with the medicines and diet chart that she/he needs to follow after leaving hospital premises. Death summary along with death certificate is present in files of the patients who died during their treatment.

DATA ANALYSIS AND INTERPRETATION

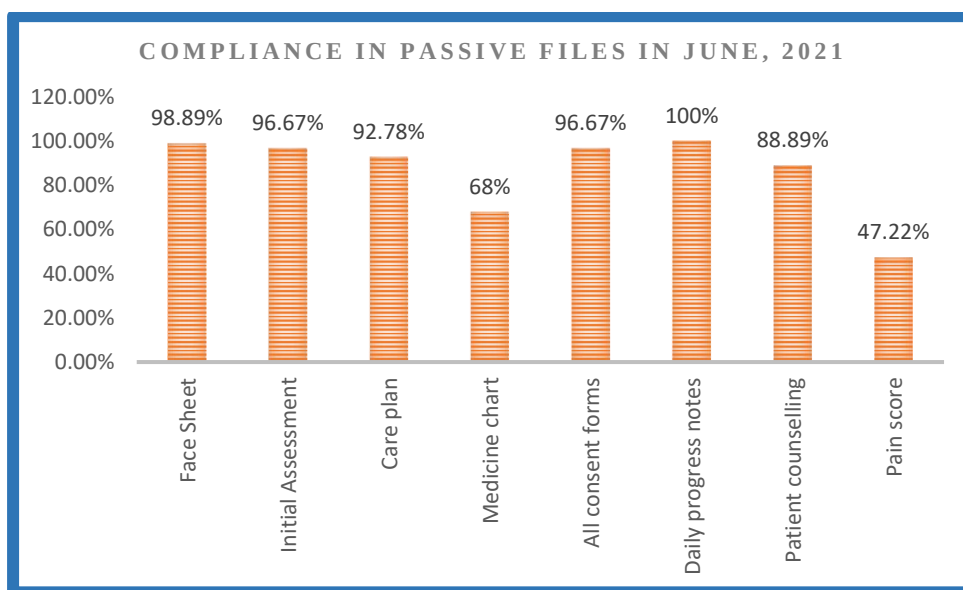
In this study, a total of 360 closed files were checked for compliance and non-compliance. After checking all 360 files, collected data was complied in MS EXCEL and with the help of graph, the data collected at OMC during the month of May and June,2021 is shown below-



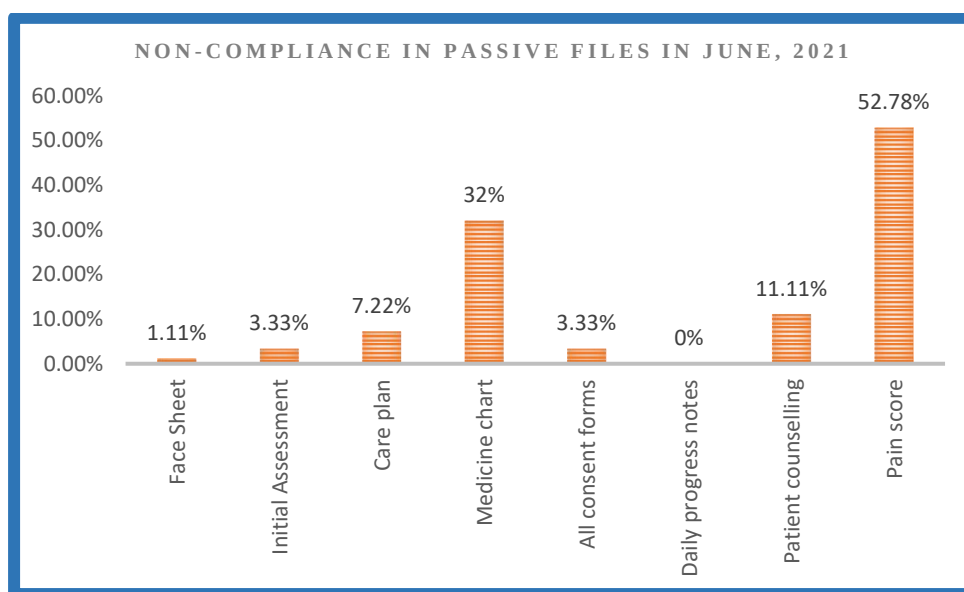
Interpretation- Out of 180 closed files studied in May,2021. above graph shows the compliance percentage of different parameters. Daily progress note shows 100% compliance, followed by initial assessment, face sheet, all consent forms, care plan, patient counseling, medicine chart and pain score having 93.33%, 91.67%, 87.78%, 83.89%, 66.33%, 65% and 51.11% respectively.



Interpretation - Out of 180 closed files studied in May, 2021, the above graph shows the non-compliance percentage of different parameters. Daily progress note shows 0% non-compliance, followed by initial assessment, face sheet, all consent forms, care plan, patient counselling, medicine chart and pain score having 6.67%, 8.33%, 12.22%, 16.11%, 33.67%, 35% and 48.89% respectively.



Interpretation - Out of 180 closed files studied in June, 2021. above graph shows the compliance percentage of different parameters. Daily progress note shows 100% compliance, followed by face sheet, initial assessment, all consent forms, care plan, patient counselling, medicine chart and pain score having 98.89%, 96.67%, 96.67%, 92.78%, 88.89%, 68% and 47.22% respectively.



Interpretation - Out of 180 closed files studied in June, 2021. above graph shows the non-compliance percentage of different parameters. Daily progress note shows 0% non-compliance, followed by face sheet, initial assessment, all consent forms, care plan, patient counselling, medicine chart and pain score having 1.11%, 3.33%, 3.33%, 7.22%, 11.11%, 32% and 52.78% respectively.

OBSERVATIONS

While comparing the collected data with the standard parameters, following things were observed-

- In the month of May, only 91.6% patient's face sheet was properly documented but this percentage improved to 98.89% in the month of June.
- In the month of May, only 93.3% patient's initial assessment sheet was properly documented but this percentage improved to 96.67% in the month of June.
- In the month of May, only 83.89% patient's care plan was properly documented but this percentage improved to 92.78% in the month of June.
- In the month of May, only 65% patient's medicine chart was properly documented, and this percentage slightly improved to 68% in the month of June.
- In the month of May, only 87.78% patient's all consent sheets were properly documented but this percentage improved to 96.67% in the month of June.
- In both May and June, daily progress notes documentation compliance score was 100%.
- In the month of May, only 66.33% patient's counseling sheet was properly documented but this percentage improved to 88.89% in the month of June.
- In the month of May, only 51.11% patient's pain score was properly documented but this percentage decreased to 47.22% in the month of June.

Apart from these,

- Patient or attendant's signature were not properly documented in the discharge sheet.
- Medicines given to patients were not documented in capital letters.
- Pain score was undocumented in many files.
- Patient counseling and pain score was irregularly documented.
- Doctor and/or attendant's signature were not evident on consent forms.

SUGGESTIONS

- Regular audits should be conducted for both active and closed files but especially for active files because if we eliminate the errors from active files itself, there won't be any discrepancies in closed files.
- Time to time training and orientation of doctors and nurses should be conducted.
- Doctors should keep in mind the completeness of consent forms.
- MRD should closely check all the files for completion and those files which have and deficiencies should be immediately send to the concerned department for completion.
- Management should make policies regarding the same.
- Nurses should be trained properly to document all the medicines in medicine chart and to take patient and/or attendant's signatures whenever required.
- A 2-levelled checking of these files should be done so as to minimize the chances of incompleteness of these files.

CONCLUSION

As rightly said by someone, what's not on the paper is not there at all.

So maintaining a medical record of patients is not only a treatment related need but it also proves to be a game-changer in medico-legal cases, in saving innocent lives as well as to punish the culprit for providing wrong treatment etc.

It is also very important to comply with licensing and accreditation related requirements.

It is a proof of what all treatments a patient received in that particular organization. It not only helps other medical professional to understand the treatment patient has undergone but also helps them in planning the further treatment plan.

This study highlights the medical records documentation system of Orchid Medical Centre, Ranchi and the collected data clearly shows that the documentation standard in OMC is satisfactory except for a few gaps which needs more focus. To keep a good standard these gaps should be filled immediately.

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