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ORIGINAL ARTICLE

Medical Audit of Documentation of Inpatient Medical Record in a Multispecialty Hospital in India

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ABSTRACT

Introduction: A medical record enables healthcare professionals to plan and evaluate a patient's treatment and ensures continuity of care among multiple providers. A study was conducted to do medical audit of documentation of inpatient medical record in a multispecialty hospital to assess whether the existing documentation procedure is as per laid-down policy.

Study design: Retrospective, descriptive study.

Study area: A 545 bed multispecialty hospital in medical ward, gynecology and obstetrics ward, surgical ward, ear, nose, and throat (ENT) ward, eye ward, pediatric ward, skin ward, and psychiatry ward.

Sample size: Systematic random sample of all inpatient medical records of select ward of last 12 months was done. Sample size was 320 case sheets, 40 from each department. The data collected were primary and the source was the discharge case files of the last 12 months available in the medical record section. The approach used for data collection was quantitative. The techniques applied were survey and observation. A structured checklist (audit tool) with 26 checklist points was developed keeping few of the quality indicators as the benchmark.

Findings: Gynecology and pediatric department records were not found appropriate. Psychiatry and dermatology dept record keeping was found appropriate as per laid-down policy. Planned care was not planned as per standard protocol in surgery department.

Recommendation: Sensitizing the clinical staff regarding the importance of proper documentation of the forms and hospital-wide standardization of the medical record keeping including admission and discharge summary. Rewarding the best performing department/unit and educating and training the responsible staff to make a complete record of every patient should be emphasized in the hospital. There should be monthly audit of the documentation procedure.

Conclusion: Medical records are technically valid health records that must provide an overall correct description of each patient's details of care or contact with hospital personnel. Medical records form a very important and critical document in hospital. These records are vital for legal purposes and for future planning of the hospital medical care.

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INTRODUCTION

A medical record enables healthcare professionals to plan and evaluate a patient's treatment and ensures continuity of care among multiple providers.[1] The quality of care a patient receives depends directly on the accuracy and legibility of the information the medical record contains.[2] Maintaining a complete record is important not only to comply with licensing and accreditation requirements, but also to enable a healthcare provider to establish that a patient received adequate care.[3]

Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit standards/criteria and the implementation of changes in practice if needed.[4]

The definition of clinical audit as per the National Institute of Clinical Excellence (NICE): "A quality improvement process that seeks to improve patient care & outcomes through systematic review of care against explicit criteria and the implementation of change".[5]

AIMS AND OBJECTIVES

Medical audit of documentation of inpatient medical record in a multispecialty hospital.

- To assess whether the existing documentation procedure is in accordance with the policy established by the hospital.
- To identify the lacunae in the same and to propose some possible solutions.

MATERIALS AND METHODS

Study Design

Retrospective, descriptive study.

Study Area

A 545 bed multispecialty hospital in medical ward, gynecology and obstetrics ward, surgical ward, ENT ward, eye ward, pediatric ward, skin ward, and psychiatry ward.

Sample Size

Systematic random sample of all inpatient medical records of last 12 months. Sample size was 320 case sheets, 40 from each department.

The following records were assessed for completeness of documentation: admission information (date of admission and serial number), demographics (age, sex, and patient number), history, examination, investigations, diagnosis, and treatment, attending doctor, procedures, summary-of-a-day, and follow-up. Other information checked to find out admission information: serial number and date of admission; demographics: age, sex, and hospital number; history: presence of documentation in correct section; examination: presence of documentation in correct section; investigations: presence of documentation in correct section; diagnosis: presence of documentation in correct section; treatment: presence of documentation in correct section; attending doctor: named doctor documented; procedures: procedures noted in correct section; summary-of-a-day: 1st, 2nd, and 3rd named doctor on-call. Follow-up was measured but excluded from the final primary outcome analysis as it is often completed at a different time to the rest of the inpatient book.

Data Collection

The data collected were primary and the source was the discharge case files of the last 12 months available in the medical record section. The approach used for data collection was quantitative. The techniques applied were survey and observation. A structured checklist (audit tool) was developed (Table 1) keeping few of the quality indicators as the benchmark.

Table 1: Checklist for clinical audit of medical records of inpatients

Clinical audit checklist	*Yes*	*No*
The hospital management develops an approach to improve accuracy of patient identification (identity proof)		
Medical record/health information retention and disposal policy is available, implemented, and monitored		
Medical record destruction log-book is maintained and retained with all mandatory entries as recommended in hospital policy document		
Hospital management has developed clearly defined informed consent policy and procedure for general and specific healthcare procedures		
The care provided to each patient is planned and written in the patient’s record by the health professional providing the care		
The care for each patient is planned by the responsible physician, nurse, and other health professionals within 24 hours of admission to the hospital		
The plan is updated or revised, as appropriate, based on the reassessment of the patient by the care providers		
Orders are written when required, are legible, and follow organization policy		
All patients have an order for food in their record		
The order is based on the patient’s nutritional status and needs		
The hospital management respects patient health information as confidential		
Hospital management has developed and implemented policies and procedure to prevent the loss or misuse of patient information. There is evidence of monitoring		
Patient records contain a copy of the discharge summary with all mandatory elements		
Discharge summary is prepared at discharge by a qualified individual		
Patient’s referral/transfer policy, procedure, and referral forms are developed in accordance with hospital policy on patient referral		
All inpatients have an initial assessment(s) which includes an evaluation of physical, psychological, social, and economic factors and all assessment must be documented legibly		
The entries in the medical record must contain; Numeric date (D/M/Y)		
• Numeric time		
• Name with stamp		
• Appropriate initials of care provider		
Patient care record must be maintained/kept in their individual folders		
Alteration or correction in the medical record must remain legible by using a single line to score out the information to be corrected		
Medical records must not include abbreviations other than those approved, published, and made available to all staff		
All the discharge summary contains details of		
• Summary of diseases		
• Treatment given		

(Cont’d…)

(Cont'd…)

Clinical audit checklist	Yes	No
• Follow-up instruction		
• Instruction for patient		
Discharge summary contains ICD number		
Discharge summary contains signature of treating physician/surgeon		
MLC initiated in all cases where it should initiated		
LAMA patients have given their unwillingness of treatment		
Lab investigation form duly filled and entered in case sheet		

ICD: International Classification of Diseases; MLC: Medicolegal case; LAMA: Leaving against medical advice

OBSERVATIONS AND DISCUSSION

There is clearly a large discrepancy between the standard of record keeping in various departments. Psychiatry department was found to be best while gynecology and pediatric departments were found not satisfactory. Planned care was not provided to the patients as per standard protocol in surgical and psychiatric wards as shown in Table 2. Almost all departments (5–10%) were not documenting the food order in the medical records. Entry in medical record for date/name/sign was not present in most of the departments, notably in gynecology department (25%). Leaving against medical advice (LAMA) patients were discharge without taking unwillingness for treatment certificate in pediatric (10%) and gynecology department (5%) patients. International Classification of Diseases number was not found in gynecology (40%) and skin (20%) patients' discharge. Discharge summary was not found duly completed in gynecology, eye, and pediatric wards (20%). Alteration in medical records was found in almost all the departments.

Table 2: Various department-wise findings

Clinical audit checklist	Medical ward (40)	Gynecology and obstetrics ward (40)	Surgical ward (40)	ENT ward (40)	Eye ward (40)	Pediatric ward (40)	Skin ward (40)	Psychiatry ward (40)
The hospital management develops an approach to improve accuracy of patient identification (identity proof)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical record/health information retention and disposal policy is available, implemented, and monitored	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical record destruction log-book is maintained and retained with all mandatory entries as recommended in hospital policy document	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hospital management has developed clearly defined informed consent policy and procedure for general and specific healthcare procedures	Yes	Yes	Yes	Yes	Yes	No	No	No
The care provided to each patient is planned and written in the patient's record by the health professional providing the care (Graph 1)	Yes: 32 No: 8	Yes: 31 No: 9	Yes: 28 No: 12	Yes: 34 No: 6	Yes: 36 No: 4	Yes: 32 No: 8	Yes: 34 No: 6	Yes: 30 No: 10
The care for each patient is planned by the responsible physician, nurse, and other health professionals within 24 hours of admission to the hospital	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
The plan is updated or revised, as appropriate, based on the reassessment of the patient by the care providers (Graph 2)	Yes: 30 No: 10	Yes: 32 No: 8	Yes: 30 No: 10	Yes: 32 No: 8	Yes: 30 No: 10	Yes: 32 No: 8	Yes: 36 No: 4	Yes: 38 No: 2
Orders are written when required, are legible, and follow organization policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
All patients have an order for food in their record (Graph 3)	Yes: 31 No: 9	Yes: 30 No: 10	Yes: 34 No: 6	Yes: 30 No: 10	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 30 No: 10
The order is based on the patient's nutritional status and needs	Yes: 31 No: 9	Yes: 30 No: 10	Yes: 34 No: 6	Yes: 30 No: 10	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 30 No: 10

(Cont'd…)

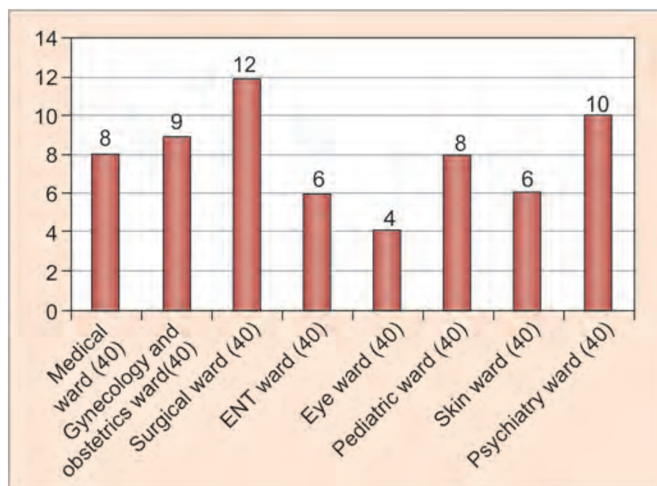
(Cont'd…)

Clinical audit checklist	*Medical ward (40)*	*Gynecology and obstetrics ward (40)*	*Surgical ward (40)*	*ENT ward (40)*	*Eye ward (40)*	*Pediatric ward (40)*	*Skin ward (40)*	*Psychiatry ward (40)*
The hospital management respects patient health information as confidential	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hospital management has developed and implemented policies and procedure to prevent the loss or misuse of patient information. Evidence of monitoring	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Patient records contain a copy of the discharge summary with all mandatory elements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Discharge summary is prepared at discharge by a qualified individual	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Patient's referral/transfer policy, procedure, and referral forms are developed in accordance with hospital policy on patient referral	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
All inpatients have an initial assessment(s) which includes an evaluation of physical, psychological, social, and economic factors and all assessment must be documented legibly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
The entries in the medical record must contain numeric date (D/M/Y) • Numeric time • Name with stamp • Appropriate initials of care provider (Graph 4)	Yes: 32 No: 8	Yes: 30 No: 10	Yes: 32 No: 8	Yes: 34 No: 6	Yes: 32 No: 8	Yes: 34 No: 6	Yes: 36 No: 4	Yes: 34 No: 6
Patient care record must be maintained/kept in their individual folders (Graph 5)	Yes: 34 No: 6	Yes: 36 No: 4	Yes: 36 No: 4	Yes: 34 No: 6	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 34 No: 6	Yes: 34 No: 6
Alteration or correction in the medical record must remain legible by using a single line to score out the information to be corrected (Graph 6)	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 34 No: 6	Yes: 34 No: 6	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 38 No: 2	Yes: 34 No: 6
Medical records must not include abbreviations other than those approved, published, and made available to all staff	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
All the discharge summary contains details of • Summary of diseases • Treatment given • Follow-up instruction • Instruction for patients (Graph 7)	Yes: 34 No: 8	Yes: 32 No: 10	Yes: 34 No: 8	Yes: 36 No: 6	Yes: 32 No: 8	Yes: 32 No: 8	Yes: 36 No: 4	Yes: 34 No: 6
Discharge summary contains ICD number (Graph 8)	Yes: 36 No: 4	Yes: 34 No: 16	Yes: 34 No: 6	Yes: 36 No: 4	Yes: 36 No: 4	Yes: 38 No: 2	Yes: 32 No: 8	Yes: 38 No: 2
Discharge summary contains signature of treating physician/surgeon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MLC initiated in all cases where it should be initiated	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAMA patients have given their unwillingness of treatment (Graph 9)	Yes	Yes No: 2	Yes	Yes	Yes	Yes No: 4	Yes	Yes
Lab investigation form duly filled and entered in case sheet (Graph 10)	Yes: 38 No: 2	Yes: 32 No: 8	Yes: 36 No: 4	Yes: 36 No: 4	Yes: 34 No: 6	Yes: 38 No: 2	Yes: 34 No: 4	Yes: 38 No: 1

ICD: International classification of diseases; MLC: Medicolegal case; LAMA: Leaving against medical advice

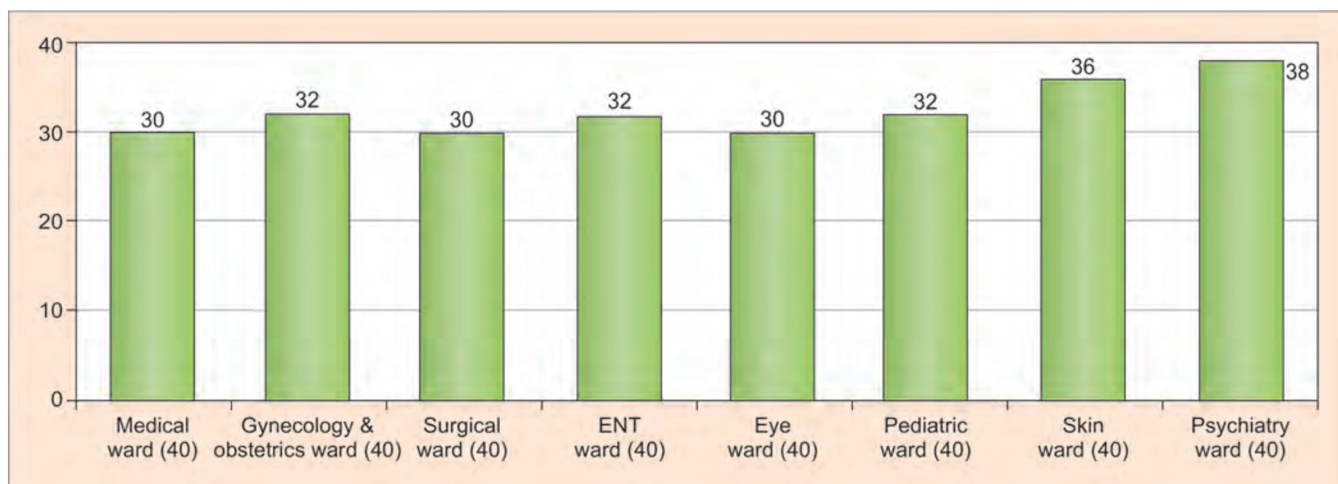
RECOMMENDATIONS

- Root cause analysis to be done to find out the reason for lapse in certain departments.

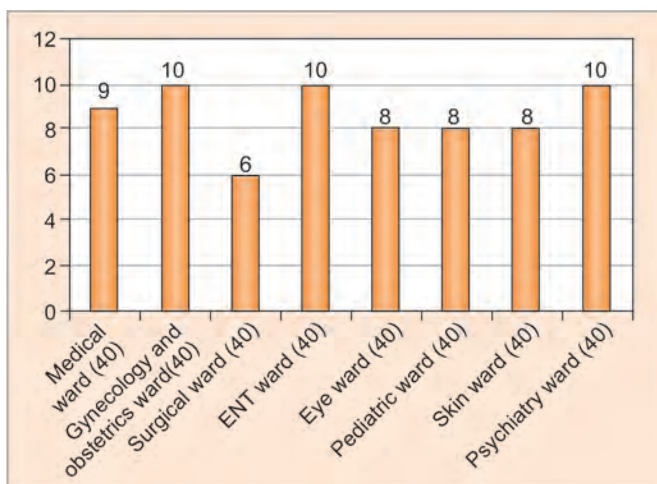


Graph 1: Planned care not provided to patient as per standard protocol

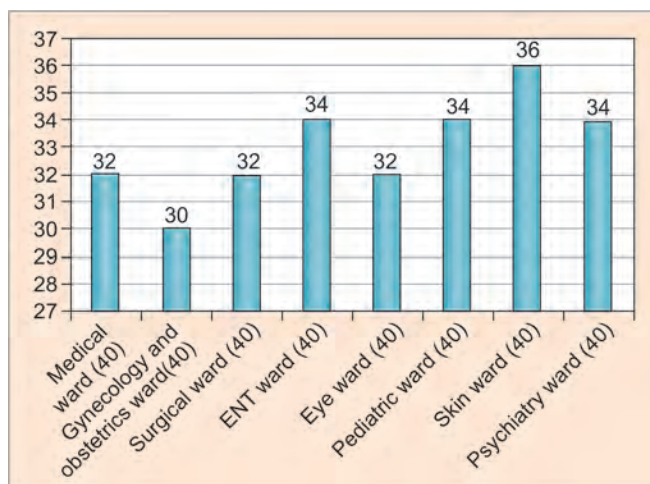
- Sensitizing the clinical and clerical staff regarding the importance of correct record keeping should be stressed to the interns both from a patient care and research perspective.[6]
- Hospital-wide standardization of the medical record keeping including admission and discharge summary.[7]
- Rewarding the best performing department/unit and educating and training the responsible staff to make a complete record of every patient should be emphasized in hospital.
- There should be quarterly medical audit of the documentation procedure.
- The interns/residents responsible for filling in the inpatient records should be taught how to adequately fill in the records in a scientific manner.[8]
- A weekly check of the medical records by consultant to assure that it is being completed.
- In addition, sections in the pro forma should be filled in according to their title, to maintain clarity of notes.[9]



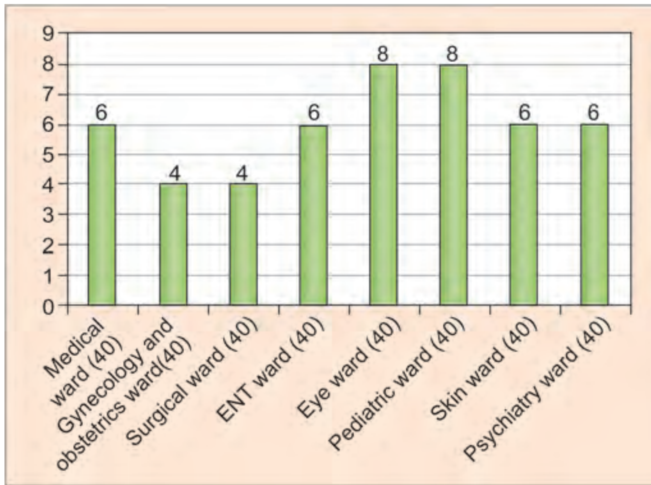
Graph 2: Updated or revised plan, as appropriate, based on the reassessment of the patient by the care providers



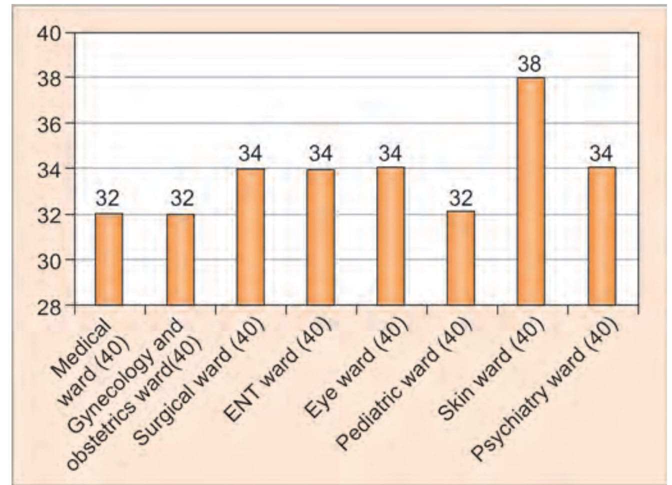
Graph 3: Nondocumentation of food order in medical record



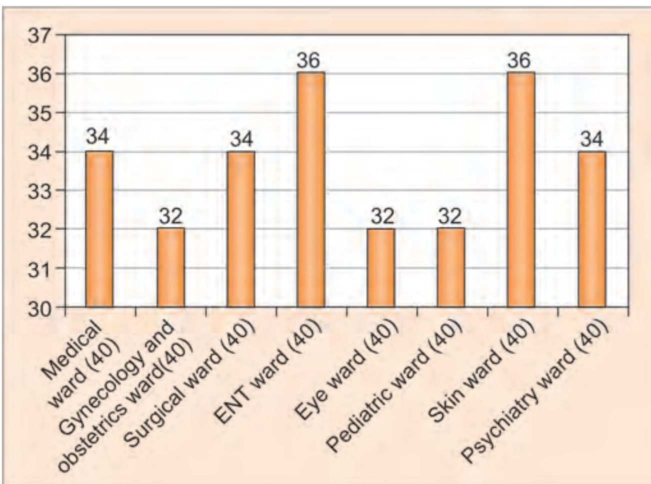
Graph 4: Entry in medical record for date/name/sign



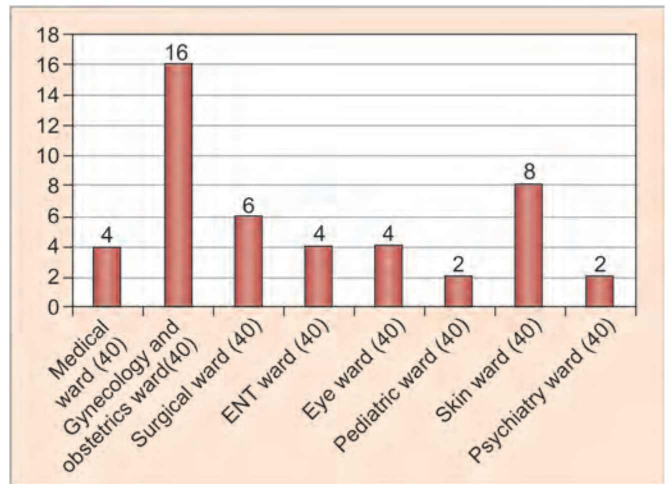
Graph 5: Patient care record not maintained/kept in their individual folders



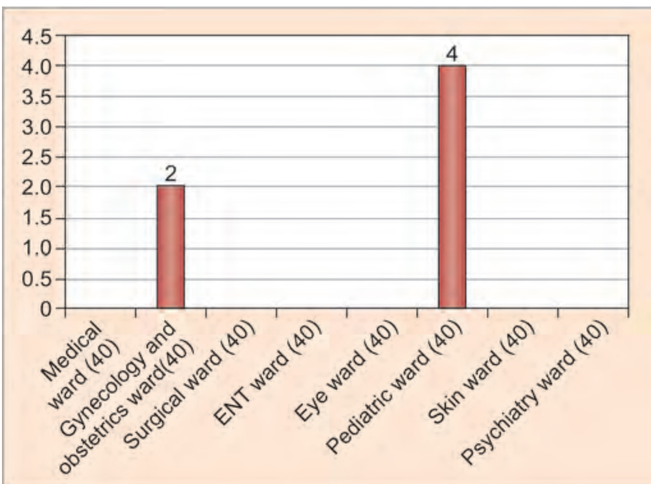
Graph 6: Alteration or correction in the medical record



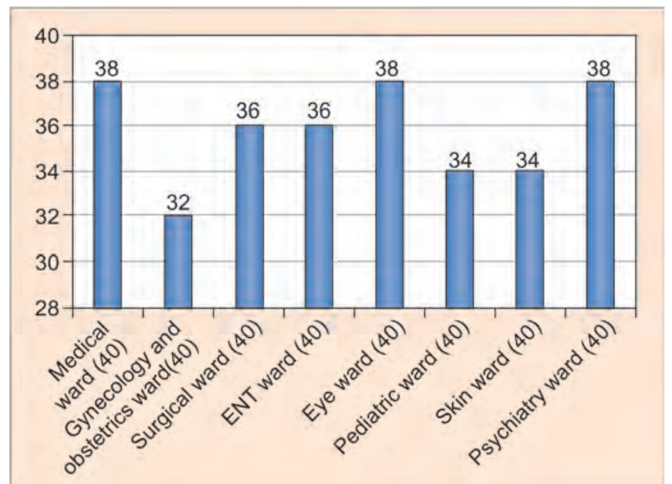
Graph 7: Completion of discharge summary



Graph 8: International Classification of Diseases number not entered in discharge summary



Graph 9: Leaving against medical advice patients have not given their unwillingness of treatment



Graph 10: Lab investigation form duly filled and entered in case sheet

- It should be the responsibility of the discharging doctor or ward in charge to return to the inpatient records and complete the required section on "follow-up". This should also be signed by the respective physician.[10]

CONCLUSION

Medical records are technically valid health records which must provide an overall correct description of each patient's details of care or contact with hospital personnel.

Medical records form a very important and critical document in hospital. These records are vital for legal purposes and for future planning of the hospital medical care. All possible steps should be taken to ensure that all hospital medical records are maintained in systemic and orderly manner. The importance of the medical records should also be communicated to all staff. Periodic audits of the medical records will help to determine the possible deficiency in keeping records, which can be improved and worked upon by the hospital.

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