

A STUDY TO ASSESS THE NEED FOR PROPER MAINTENANCE OF MEDICAL DISCHARGE SUMMARIES

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ABSTRACT

Introduction: A medical record is a systematic documentation of a patient's medical history and future care for medico-legal use. A poor medical record maintenance can negatively affect patient care and safety. This study aims to assess the proper maintenance of medical records in Victoria Hospital, a tertiary care teaching hospital attached to a Medical college. **Methods:** This cross-sectional study was conducted by analyzing first 150 discharge summaries of patients discharged from March 1, 2009 from various specialties of a tertiary care hospital excluding medico legal cases. The discharge summary format of the hospital was taken as the standard and evaluation for adequacy of history and other parameters entered was assessed. Descriptive statistics were used to analyze various statistical discrepancies. **Results:** Patient's condition at discharge was missing in 86 (66.15%). Patient's address was missing in 21 (16.1%) cases. Almost all the discharge sheets lacked mailing address. Total 96 (73.8%) summaries had use of abbreviations for diagnosis. Age and sex were missing in 1 (0.76%) case. Doctor's signature was illegible in 103 (79.3%) and missing in 2 (1.5%) summaries. Doctor's name and their level/position were missing in 118 (90.76%) and 125 (96.1%) respectively. Total 126 patients (96.9%) were not given any instructions on discharge. **Conclusions:** The discharge summaries analyzed were seen to be inadequate especially in documenting the course during hospital stay, condition at discharge, appropriate instructions and the treating physician's details. These can probably be addressed by introducing electronic medical records if feasible.

Otherwise, the discharge summary should be standardized and doctors should be trained to write legible, complete discharge summaries.

Key Words: discharge summaries, hospital, records, Patients, follow up

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INTRODUCTION

A medical record is a systematic documentation of a patient's medical history and care which is compiled and stored by the health care providers¹. A discharge summary transfers important clinical information from inpatient to outpatient settings and between hospital admissions and is important in maintaining the continuity of care^{2,3}. As per the Joint Commission on the Accreditation of Healthcare Organizations, it should contain the following components: 1. Reason for hospitalization, 2. Significant findings, 3. Procedures and Treatment provided, 4. Patient's discharge condition, 5. Patient and family instructions (as appropriate),and 6. Attending physician's signature⁴. It serves as a reliable documentation of patient's medical history.

Medical records serve as documented proof in case of any legal issues regarding the quality of treatment or negligence arise. These records form reliable and easily accessible data sources for health policy planning⁵. A poor

quality discharge summary can negatively affect patient safety⁶. This study aims to assess the adequacy of medical records by the health professionals, prepared by the hospital.

METHODS

This cross-sectional study was conducted by analyzing first 150 discharge summaries of patients discharged from March 1, 2009 from various specialties excluding medico legal cases of a tertiary care hospital. Prior permission was taken from the head of Institution. The discharge summary format of the hospital was taken as the standard in its premises and evaluation was done for completeness of the information recorded

Table 1. Headings under which completeness was checked

Demographic details

Name, Age, Sex, Address

Hospital details

Inpatient number, Bed number, Unit, Date of admission, Date of discharge

Diagnosis

Abbreviations used, Legibility

Case details

History, Physical examination, Investigation, duration in hospital with treatment given, Condition at discharge, Treatment Instructions while discharging, Follow up

Doctor’s details

Signature- legible or not, Name, Designation

The data was entered and analyzed using SPSS software

RESULTS

Table 2. Demographic details

| Demographic details | Frequency missing (%) |
|----------------------------|------------------------------|
| Name | 0 (0%) |
| Age | 1(0.66%) |
| Sex | 2(1.33%) |
| Address | 13(8.66%) |

A total of 150 discharge summaries were analyzed. Age was missing in discharge summary of 1 (0.66%) of the patients. Sex was missing in 2(1.33%) of the patients. Patient’s address was missing in 13 (8.66%) patients.

Table 3. Hospital details

| Hospital details | Frequency missing (%) |
|-------------------------|------------------------------|
| Inpatient number | 0 (0%) |

| | |
|-------------------|-----------|
| Ward & Bed number | 7 (4.66%) |
| Unit | 9 (6.00%) |
| Date of admission | 4(2.66%) |
| Date of discharge | 3 (2.00%) |

Patient's ward & bed number was not found in 7 (4.66%) cases. About 9 (6.00%) of discharge sheets failed to mention the unit under which the patient received treatment. Date of admission (DOA) and date of discharge were missing in 4(2.66%) and 3 (2.00%) summaries respectively.

Table 4. Diagnosis and use of abbreviations

| Diagnosis and abbreviations | Frequency (%) |
|------------------------------------|----------------------|
| Diagnosis | 150(100%) |
| Abbreviations used | 101(67.33%) |
| Legibility | 150 (100%) |

In almost all discharge summaries legibly written Diagnosis were found. Abbreviations were used for diagnosis in 101 (67.33%) cases.

Table 5. Case details and missing frequency

| Case details | Missing Frequency (%) |
|---------------------|------------------------------|
| History | 15(10.00%) |

| | |
|------------------------|-------------|
| Physical examination | 11(7.33%) |
| Investigation | 150(100%) |
| Condition at discharge | 48(32.00%) |
| Treatment at discharge | 4(2.66%) |
| Instructions | 48 (32.00%) |
| Follow up | 12 (8.00%) |

15 (10.00%) and 11(7.33%) discharge summaries had no clinical history and physical examination findings respectively. Investigations and results were mentioned in all summaries. Although, the treatment during the hospital stay was present in all summaries, the patient's condition at the time of discharge was not mentioned in 48 (32.00%) summaries. Treatment at discharge was missing in 4(2.66%) cases. About 12 (8.00%) summaries had no advice on follow up. About 48 patients (32.00%) were not given any instructions, like diet, exercise etc.

Table 6. Doctor's details and missing frequency

| Doctor's details | frequency (%) |
|-------------------------|----------------------|
| Signature missing | 4 (2.66%) |
| Legibility | 33 (22.00%) |
| Name missing | 81(54.00%) |
| Designation missing | 106(70.66%) |

4 (2.66%) summaries lacked the signature of the doctor writing the discharge summary. Only 33(22.00%) summaries had legible signatures of doctor. Doctor's name and designation were missing in 81 (54.00%) and 106 (70.66%) respectively

DISCUSSION

Medical records should be should be clear, complete, organized and accessible as they play an important role in the future treatment, especially continuity of care and planning health policy^{2, 5}. It has an important role in case of medico legal issues. As observed, address was missing in 13(8.66) discharge summaries. None of discharge summaries contained the full mailing addresses. This precludes any opportunity to contact the patient for follow up and future contact for any reason.

In some discharge summaries basic hospital details like ward & bed number, unit were missing. The study found almost 101(67.33%) diagnosis with abbreviations, which is more as comparison to 27% in an emergency based study conducted in India⁷.

It was surprising to note that clinical details like history and physical Examination were missing in 15(10.00%) and 7(4.66%) summaries respectively which was higher than a similar study conducted in Canada⁸.

The course in the hospital mostly contained the medications administered but lacked any documentation of patient's improvement or deterioration during the hospital stay. Thus there was no information on how the patient responded to treatment when a new hospital or doctor read the summary. Surprisingly, the condition of discharge was not mentioned in 48(32.00%) cases. It has been identified as one of the essential components of a good medical discharge summary. It is of extreme importance as it helps prevent any legal hassles in case a stable patient deteriorates after discharge from the hospital. The medications prescribed during discharge were missing in 6

summaries. The dosage of medications and duration was mentioned in all. This was better in comparison to the Canadian study.

Around 48(32.00%) cases lacked any instruction which, if appropriate, has been identified as an important component of a discharge summary. It was found that the doctor's details entered at the end of the sheet were grossly lacking. Only 33(22.00%) of signatures were legible, 81 (54.00%) summaries had no doctor's name, 106 (70.00%) didn't mention the designation of the doctor writing the summary.

The doctor's details especially signature is important in a discharge summary. It aids doctor to doctor communication, follow-up and is important in medico-legal cases. Also, a patient has a full right to have knowledge of who the treating physician is, which has not been addressed here. The results show that the discharge summaries are inadequate in important areas like hospital, doctor's details and other details like course in the hospital, condition at discharge and appropriate important instructions. During the study it was found that the summaries were not always uniform, complete and the information was sometimes difficult to understand and retrieve. The findings are corroborated by studies which find that paper records can be illegible, incomplete and poorly organized, making it difficult to ensure quality of care⁹. This is in contrast to electronic medical records that provide documentation which are 40% more complete and 20% faster to retrieve¹⁰. There are more benefits of EMR in comparison to traditional paper based medical record like improved patient care through efficient access to accurate records; improved office efficiency; easy data retrieval from more legible, understandable records and potential financial benefit^{10,11}. Also these records form reliable and easily accessible data sources for health policy planning. They have also been shown to be conducive to more complete and accurate documentation by health care professionals. Interestingly, one study showed that doctors using paperless records were able to recall more advice given to patients¹¹. Therefore, it seems for a tertiary care hospital, the time for switching to electronic medical record system has come. There are a few shortcomings of EMR like data hacking, requirement of a trained person and major investment which needs to be addressed while implementing Electronic Medical Record System¹². If switching to an EMR system is not feasible at present, the discharge summary should be standardized; doctors

should be trained to write legible and complete discharge summaries. The details of the treating physician should not be omitted. The study design being retrospective is one of the limitations of the study. Also, the sample is not random and consists of all cases admitted during a certain period of time. Since a basic checklist for the presence or absence of certain factors was utilized the study fails to scrutinize the quality of details written in the discharge summary. The fact that the study was entirely based on discharge summaries and there was no comparison with the patient's file prevents any comment on whether important details have been missed in the discharge summaries.

CONCLUSIONS

The discharge summaries analyzed were seen to be inadequate especially in documenting course during the hospital stay, condition at discharge, appropriate instructions and the treating physician's details which are an essential part of a good discharge summary. Deficiencies were also found in other areas like demographic details. The lack of legibility of the doctor's signature and information about the attending physician needs to be addressed. Electronic medical records can be a possible solution as they have been found to be more complete, legible, understandable, efficient and accessible than paper medical records. May be it is time to switch to electronic medical records in a tertiary Hospital. If it is not feasible at present, the discharge summary should be standardized; doctors should be trained to write legible and complete discharge summaries including condition at discharge, instructions and details of the treating physician.

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