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QUALITY OF DISCHARGE SUMMARY IN VARIOUS DEPARTMENTS OF A TERTIARY CARE HOSPITAL

ABSTRACT

Background: Aims and objectives of this audit were to find out whether all the criteria of discharge summary outlined in modified Van-Walraven et al 1999 were met in the discharge summary of various department of Tribhuvan University Teaching Hospital (TUTH) and to determine the completeness of the discharge summary.

Methods: This audit was carried out in TU Teaching Hospital, Maharajgunj, Kathmandu, Nepal. Eight departments (Medicine, Surgery, Gynecology, Pediatrics, ENT-HNS, Orthopedics, Ophthalmology&Psychiatry) were included. 24 discharge summaries from April 2015 to March 2016 were analysed from each eight departments. Discharge summaries were selected by systematic random sampling (Discharge summary of 1st and 3rd week were randomly selected). Discharge summaries were analysed and compared with previous audit of 2015. Modified Van-Walraven criteria-ten points were evaluated in discharge summary.

Results: In this study Department of ENT - HNS showed the best discharge summary as per modified VanWalraven criteria whereas department of Orthopedics had the least inclusion of criteria. Regarding completeness of hospital discharge summary form, Department of ENT and HNS had the highest number of almost completely filled discharge summaries (>90%) followed by department of medicine.

Conclusion: Discharge summary should be filled up completely, clearly and without missing necessary information. Regular audit should be performed to ensure the quality of dischargesummary.

Key Words: Audit, Modified Van Walraven Criteria, Quality of discharge summary.

INTRODUCTION

A Discharge Summary (DS) is an important multipurpose clinical report which is primarily used to communicate post discharge framework of care between hospital physicians and primary care[1-3] as well as to patients and their families [2,4]. In addition, clinical coders rely on these summaries in the process of clinical classification.[5,6] Discharge Summary is considered to be high quality when it is short, delivered quickly, and contains clinical information which is considered important for adequate follow up care.[7-9] The information includes patient's chief complaint, diagnostic findings, summary of clinical management, advice on ongoing management of clinical condition, appropriate use of medications, relevant laboratory results and follow-up plan. Aims and objectives of this audit were to find out whether all the criteria of discharge summary outlined in modified Van-Walraven et al 1999, were met in the discharge summary of various department of Tribhuvan University Teaching Hospital (TUTH) and to determine the completeness of the discharge summary, to compare the findings of previous audit with the current one and to observe whether the recommendations of previous audit were followed.

MATERIAL AND METHODS

This audit was carried out in TU Teaching Hospital, Maharajgunj, Kathmandu, Nepal. Eight departments (Medicine, Surgery, Gynecology, Pediatrics, ENT-HNS, Orthopedics, Ophthalmology & Psychiatry) were included. 24 discharge summaries from April 2015 to March 2016 were analysed from eight departments. Discharge summaries were selected by systematic random sampling (Discharge summary of 1st and 3rd week were randomly selected). Discharge summaries were analysed and compared with

previous audit of 2015. Modified Van-Walraven criteria-ten points were evaluated in discharge summary which were as follows: admission and discharge diagnosis, very brief and relevant history, physical examination and findings, laboratory results, procedure and surgery done, complications in the hospital, discharge medications and active medical problem at discharge.[10] Discharge summary were modified by adding admission and discharge date and follow up instructions. The discharge summary paper in TUTH is in printed form in which 35- spaces are to be filled in by surgical departments and 31- spaces are to be filled in by non-surgical departments (Medicine/psychiatry). Numbers of spaces filled were converted to percentage and compared among the various departments. Files of those who left against medical advice (LAMA), and discharge from maternity were excluded.

RESULTS

Diagnosis was mentioned in discharge summary of all eight departments. Very brief and relevant patient history was complete in all the departments except pediatrics and medicine. In surgery and eye departments completeness of patient history increased to 100% in year 2016 in comparison to 2015 (95.5%). In medicine department completeness of patient history decreased to 87.5% in year 2016 in comparison to 2015 (95.5%). Physical findings were complete in discharge summaries of ENT, Eye and Psychiatry departments only in both years. In medicine, obstetrics & gynecology and pediatrics departments completeness of physical findings increased in year 2016 in comparison to 2015. In surgery and orthopedic departments completeness of physical findings decreased in year 2016 in comparison to 2015. Lab results were complete in discharge summaries of medicine and psychiatry departments only while completeness of lab results decreased in surgery, pediatrics,eye and orthopedic departments while it decreased in obstetrics &gynecology and ENT departments. Recording of surgical procedure were complete in surgery, obstetrics &gynecology, ENT and eye departments in both years. Completeness of recording of surgical procedure increased in orthopedic in year 2016 in comparison to 2015. Complications were nil in all departments in both years. Completeness of discharge medication increased in surgery and eye department in year 2016 in comparison year 2015. Active medical Problems were nil in all departments except surgery, eye and Orthopedic departments in both years. Date of admission and discharge were complete in all departments except surgery and obstetrics &gynecology in both years. Follow up instruction were complete in all departments except surgery, obstetrics & gynecology, orthopedic and psychiatry departments in both years.

Table 1: Comparison of completeness of discharge summaryasper modifiedVanWalraven criteria in year 2015 and 2016

Departments	Completeness of discharge summary in Percentage in year 2015 /2016									
	Diagnosis	History	Physical findings	Lab Results	Surgical procedure	Complications	Discharge medications	Active Medical Problem at discharge	DOA/DOD	Follow up Instruction
Medicine	100//100	95.5/100	90.1/100	100/100	NA	NIL	100//100	NIL/NIL	100//100	100//100
Surgery	100//100	95.5/87.5	95.5/87.5	86.4/87.5	100/100	NIL	95.5/100	35.5/41.6	95.5/100	95.5/95.5
Pediatrics	100//100	100//100	80.4/95.5	95.5/95.8	NA	NIL	100//100	NIL/NIL	100//100	100//100
Gynecology	100//100	100//100	95.5/95.8	95.5/91.6	100/100	NIL	100//100	NIL/NIL	95.5/100	100/91.6
ENT-HNS	100//100	100//100	100/100	100/95.8	100/100	NIL	100//100	NIL/NIL	100//100	100//100
Eye	100//100	95.5/100	100/100	77.3/83.3	100/100	NIL	86.4/100	65.5 /79.2	100//100	100//100
Orthopedics	100//100	100//100	100/91.6	54.5/58.3	89.5/100	NIL	100//100	24.5 /20.8	100//100	95.5/87.5
Psychiatry	100//100	100//100	100/100	100/100	NA	NIL	100//100	NIL/NIL	100//100	95.5/91.6

DISCUSSION

A good summary provides relevant concise and accurate information and ensures the degree of continuity of care for the patient. Adam et

al[11] considered diagnosis, information given to the patient, clinic date, list of medications and investigations are more important in discharge summary. In general the discharge summary in TUTH looked good in all departments but necessary information's are still lacking in few summaries. In an audit on the quality of discharge summary in TU Teaching Hospital by Pradhananga et al[12] from April 2005 to September 2005, department of Gynecology showed the best summaries in which most of the necessary information were included whereas Orthopedics had the least information. From Completeness point of view Department of ENT & HNS was the best; Department of Orthopedics again had the least completeness of the summary. In this study Department of ENT and HNS showed the best discharge summary as per modified Van-Walraven criteria whereas department of Orthopedics had the least inclusion of criteria. Regarding completeness of hospital discharge summary form, Department of ENT and HNS had the highest number of almost completely filled discharge summaries (>90%) followed by department of medicine. It shows department of medicine has improved regarding completeness of discharge summaries.

Van-Walraven[13] assessed the completeness of hospital discharge summaries and the efficiency of the discharge summary system in two urban teaching hospitals. Of the 106 discharge summaries reviewed, 99.1% were complete which was better than our result. Information was missing on the admission diagnosis in 34.0%of the summaries, the discharge diagnosis in 25.5%, the discharge medications in 22.8% and significant laboratory tests and results in 42.9%; which is comparable with our results.

The continuation of treatment between hospital departments and the primary care physician had been issued in several studies using discharge letters audit. Raval et al assessed the adequacy of the discharge summary in reporting important investigative results and future management plans in patients hospitalized and discharged with a diagnosis of heart failure.[14] Wilson et al examined the reliability, effectiveness, accuracy and timeliness of hospital to general practitioner information transfer by discharge summaries.[15] We recommend that discharge summaries should be routinely audited. This will ensure that problems with documentation are addressed and may improve completeness. It will also reinforce the importance of discharge summaries to physicians in training. Regular audit should be performed to ensure that the quality of the ideal discharge summary is maintained.

RECOMMENDATIONS

Regular audit should be performed yearly to maintain the quality of discharge summary. Complete discharge summary (e.g. full address, telephone number, blood group, laboratory results, hospital stay, complications, clear follow up instructions, full signature and consultant full name etc) should be written. Modern technology should be used e.g. printing the discharge summary. Interdepartmental meetings should be called and every audit should be presented there. Previous recommendations and new recommendations should be strictly followed.

CONCLUSION

Discharge summary should be filled up completely, clearly and without missing necessary information. Regular audit should be performed to ensure that the quality of discharge summary is maintained.

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