

Rolling audit on the quality of discharge summary in TU Teaching Hospital

R. P. S. Guragain, P. Adhikari

Professor and Unit chief, Paediatric Otolaryngology, Final year resident MS (ORL-HNS) , Ganesh Man Singh Memorial Academy of ENT and Head and Neck Studies, TUTH, Kathmandu, Nepal

Correspondence to: Dr. Prakash Adhiakari, Ganesh Man Singh Memorial Academy of ENT and Head and Neck Studies, TUTH, Kathmandu, Nepal.

e-mail: prakash_ooz@hotmail.com

Background: Audit 2007 (December) was significant in that it was the third rolling audit on the discharge performance started in TU Teaching Hospital. The audit was started in 2005 and it intends to transfer important clinical information from inpatient to outpatient settings and between hospital admissions.

Materials and Methods: There were 20 discharge summary forms picked up from each of seven departments of TU Teaching Hospital between November 2007 and December 2007. All summaries were looked for the inclusion of modified Van Walraven criteria. Apart from Van Walraven eight points, admission and discharge date and follow up instructions were also checked by the second author. These summaries were compared with previous discharge summary performed 2 ½ years ago.

Results: Department of ENT and HNS showed the best discharge summary as per modified Van Walraven criteria whereas Department of Orthopaedics had the least inclusion of criteria. Previous study showed best summaries in Department of Gynaecology while poor in Department of Orthopaedics. Regarding completeness of hospital discharge summary form, Department of ENT and HNS had the highest number of almost completely filled discharge summaries (>90%) while Department of Medicine had the least number of properly filled discharge summaries. Previous audit showed Department of ENT and HNS to be the best while Department of orthopaedics to be the worst. On analyzing the previous recommendations, they were not properly followed.

Conclusion: Discharge summary should be filled up completely without missing necessary information. Although ENT and HNS has best discharge summary according to Van Walraven discharge criteria as well as completeness of our hospital discharge summary, it needs to follow previous recommendations. The recommendations previously given should be strictly followed and informed to the heads of all Departments concerned.

Introduction

Hospital discharge summaries are an important method of communicating information necessary for continuing patient care.¹ Discharge summaries are intended to transfer important clinical information from inpatient to outpatient

settings and between hospital admissions.

For a discharge scoring system to be useful, it must be practical, easy to retain, and applicable to most. Reduction in the length of stay in the ambulatory surgery unit by the prompt and safe discharge of patients can help to reduce

costs and improve unit efficiency. Discharge documentation serves many functions including the prescription of medicines, general communication and serving as a record of admission.

Audit on quality of discharge summary in TU Teaching Hospital started in 2005. According to Van Walraven eight points must be included in the discharge summary: 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.² Apart from above points, admission and discharge date and follow up instructions were also checked.

Completeness of discharge summary: 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).

The purpose of this audit is to compare the audit of discharge summary with the previous audit done in TU

1) and for completeness in filling up the given spaces (Table 2). Numbers of spaces filled in the discharge summary were converted to percentage and were compared among the various departments. Files with missing notes, files of those who left against medical advice (LAMA), and discharge from maternity and pediatric Department were excluded. Maternity dDepartment had separate discharge form and in the Department of Paediatric none of the summary were completely filled up and only neonatal discharge were available. The discharge summaries were compared with the previous one done 2 ½ years ago.

Results

The admission and discharge dates were written in all 20 discharge summaries of all departments except 1 each from Medicine, Gynaecology and Orthopaedics. Diagnosis, history, discharge medications were written properly by all departments in this study. Regarding physical examination, 2 summaries each of Medicine and Orthopaedics and 4 discharge summaries of Psychiatry were not mentioned.(Table:1).

Table:1. Inclusion of Modified Van Walraven Criteria in the discharge summary and its comparison with Pradhananga and Guragain study

Departments	Diagn osis	History	Findings	Lab result	Surgery procedure	Comp.	Dis. medication	Problem at disc.	DOA /DOD	F/U instructions
Medicine	20(20)	20(20)	18(17)	18(18)	-	8(20)	20(20)	3(0)	19(20)	16(20)
Surgery	20(20)	20(20)	20(20)	19(19)	19(20)	13(18)	20(20)	0(0)	20(20)	19(20)
Gynaecology	20(20)	20(20)	20(20)	20(20)	20(20)	13(20)	20(20)	0(0)	19(19)	20(20)
ENT-HNS	20(20)	20(20)	20(20)	16(14)	20(20)	14(14)	20(20)	7(0)	20(20)	19(20)
Ortho	20(20)	20(20)	18(16)	10(12)	20(20)	8(12)	20(20)	0(0)	19(20)	19(20)
Ophthalmology	20(20)	20(20)	20(20)	11(13)	20(20)	18(20)	20(20)	15(0)	20(20)	20(20)
Psychiatry	20(20)	20(20)	16(17)	16(17)	-	12(14)	20(20)	0(0)	20(20)	20(20)

Bracket () indicates the results of Pradhananga and Guragain study

Teaching Hospital and to observe whether the recommendations of previous audits were followed. As the rolling audit of discharge summary improves the quality of writing the discharge summary, we are regularly doing the audit at an interval of one year.

Materials and Methods

There were 20 discharge summary forms picked up from each of seven departments (Medicine, Surgery, Gynaecology, ENT, Orthopaedics, Ophthalmology and Psychiatry) of TU Teaching Hospital between November 2007 and December 2007. All summaries were looked for the inclusion criteria of Modified Van Walraven criteria (Table

Laboratory results were written in all the summaries of Department of Gynaecology. Regarding complication, it was missing in some of the discharge summaries of all the departments. Only 7 from ENT and HNS and 3 from medicine documented active medical problem at discharge. Follow up instructions were not written in 2 discharge summary of medicine, 1 each of surgery, ENT and Orthopaedics. However, the proper follow up instructions such as when, why, where to come, whom to meet were clearly mentioned in 55% of ENT discharge summaries.(Table:1).

On analyzing the completeness of discharge summary printed by TU Teaching Hospital, department of ENT and HNS showed the highest percentage of completeness

Rolling audit

(Table:2). The most missing points in all discharge summaries were date of birth, telephone number, full name and signature of the doctor who writes the discharge summary, name or full name of the consultant.

Table:2. Completeness of the discharge summary form printed by TUTH and its comparison of Pradhananga and Guragain study

Departments	60-70%	70-80%	80-90%	> 90%
Medicine	0(0)	8(6)	8(13)	4(1)
Surgery	1(1)	3(2)	11(7)	5(10)
Gynaecology	1(0)	4(3)	7(10)	8(7)
ENT-HNS	1(0)	1(0)	6(9)	12(11)
Ortho	2(3)	6(5)	6(10)	6(2)
Ophthalmology	1(0)	6(3)	7(11)	6(5)
Psychiatry	0(0)	0(0)	11(10)	9(10)

Bracket () indicates the results of Pradhananga and Guragain study

Discussion

Since the publication of the original document in 1996, several publications have indicated continuing problems with the production of discharge documentation. In 1995, Carl van Walraven and Anthony Weinberg reported on the assessment of quality in a discharge summary system.² In a further report they noted that the quality of the reporting decreased as the length of the discharge summary increased.³

The effective discharge strategy 2007 (December) was significant in that it was the third rolling audit against the discharge performance started in T U Teaching Hospital 2005. Discharge planning should be thought as soon as the patient is admitted. Several clinical discharge criteria have been formally described, to facilitate and guide physicians or nurses, and for subjective assessment of patient status. However, none has been evaluated for validity and reliability. Discharge of patients should be achieved without compromising the quality of patient care.

Patient readiness for discharge needs to be addressed in a simple, clear, reproducible manner that meets the national standards of medical and anaesthesia care. The development and the provision of a database to record the data and that would calculate and product all necessary reports ensured the reliability and the validity of the record. Summary content that increased quality most included admission diagnosis (mean 8.2), pertinent physical examination findings (6.6) and laboratory results (6.8), procedures (7.1) and complications in hospital (7.1),

discharge diagnosis (8.8), discharge medications (7.9), active medical problems at discharge (7.8), and follow up (6.6).³

None of the departments improved to write any complication in discharge summaries. Department of ENT and HNS showed the best discharge summary as per modified Van Walraven criteria whereas department of Orthopaedics had the least inclusion of criteria. Previous study showed best summaries in Department of Gynaecology while poor in department of Orthopaedics. Regarding completeness as per hospital discharge summary form, department of ENT and HNS had the highest number of almost completely (>90%) filled discharge summaries while department of medicine had the least number of properly filled discharge summaries. In Pradhananga and Guragain study⁴, only discharges of Department of ENT and HNS were computer printed but this study could not find any printed discharge summary except 3 discharge summaries from surgery Department.

Van Walraven assessed the completeness of hospital discharge summaries and the efficiency of the discharge summary system in two urban teaching hospitals.³ Of the 106 discharge summaries reviewed, 99.1% were complete which was better on the admission diagnosis in 34% 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.³

Discharge instructions should be given to the patient and should be responsible for the care of the patient a home. Discharge information was the most important determinant of quality, followed by hospital information. The top ranking items were: Discharge diagnosis, discharge medications, active problems at discharge, therapeutic procedures, complications, medical or social issues outstanding at discharge, consultations during admission, follow up arrangements, community services arranged, prognosis, and functional ability. These items are a minimum requirement and there is a potential for including much more data in a discharge document. A minimum dataset should be evidence based and include all those items seen as essential.

The continuation of treatment between hospital departments and the primary care physician had been issued in several studies using discharge letters audit.⁵⁻⁷ 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.⁵ Wilson et al examined the reliability, effectiveness, accuracy and timeliness of hospital to general practitioner information transfer by discharge

summaries.⁶ We believe 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 without missing necessary information. ENT and HNS had best discharge summary according to Van Walraven discharge criteria as well as completeness. Performances of different departments were changed in this rolling audit. Modern technology should be used by all departments.

References

1. Van Walraven C, Laupacis A, Seth R, Wells GA. A randomized trial comparing dictated and database-generated hospital discharge summaries. *Int Soc Technol Assess Health Care* 1998; **14**: 60.
2. Van Walraven C, Weinberg AL. Quality assessment of a discharge summary system. *CMAJ* 1995; **152**(9): 1437-42.
3. Van Walraven C, Rokosh E. What is necessary for high-quality discharge summaries? *Am J Med Qual* 1999; **14**:160-9.
4. Pradhananga RB, Guragain RPS. Audit on the quality of discharge summary in TU Teaching Hospital. 2006; **28** (3):32-34.
5. Raval AN, Marchiori GE, Arnold JM. Improving the continuity of care following discharge of patients hospitalized with heart failure: is the discharge summary adequate? *Can J Cardiol*. 2003; **19**:365–70.
6. Wilson S, Ruscoe W, Chapman M, Miller R. General practitioner-hospital communications: a review of discharge summaries. *J Qual Clin Pract*. 2001; **21**:104–8.
7. Bolton P, Mira M, Kennedy P, Lahra MM. The quality of communication between hospitals and general practitioners: an assessment. *J Qual Clin Pract*. 1998; **18**:241–7.