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## AN AUDIT OF OPERATIVE NOTES AT TUTH

### Objective:

To observe the completeness of the operative notes in the GMSMA of ENT and Head & Neck studies, TUTH, IOM with respect to the guidelines of RCS (Royal college of Surgeons) and compare the results with that of previous audit conducted in July 2009.

### Material and Methods:

Forty eight operative notes were randomly analysed retrospectively for completeness and proper documentation as per the protocol laid down in Good Surgical Practice by the Royal College of Surgeons of England (RCS Eng), 2008.

### Results:

All of the operative notes had date, pre-operative diagnosis, complete surgical procedure, per-operative findings, surgeon's name, post-operative plan with author's name and signature. 97% had inpatient number, 93% had bed number and 89.5% had post-operative diagnosis.

### Conclusion:

Regular audit should be done to improve the standard of operative notes that must be legible and complete to be produced as evidence in the court. Digital system is better than manual one for the documentation.

**Keywords:** operative notes, audit, evidence.

### INTRODUCTION:

A clear, accurate medical record keeping is one of the cornerstones of good medical practice. The General Medical Council (GMC) states that it is every doctor's duty to keep clear, accurate, legible and contemporaneous patient records which report the relevant clinical findings.<sup>1</sup> The errors of documentation are known to occur in all medical specialties with possible range of clinical and medico-legal consequences. The litigations in Otorhinolaryngology are even more as this is liable to affect one's identity and ability to hear, speak, smell or swallow.<sup>2</sup> Operative note is an important document, which is often produced in a court of law as documentary evidence, either by the plaintiff or the defendant. Therefore, it has to be legible and comprehensive. Handwritten notes, when incomplete and illegible often weakens a doctor's defense.<sup>2</sup> There are various formats for writing operative notes and the one given by Royal College of Surgeons of England is a well accepted one.

### MATERIAL AND METHODS:

This was a retrospective study conducted at GMSMA of ENT and Head & Neck studies, TUTH, IOM, Kathmandu, Nepal. Forty eight operative notes, 12 of each subspeciality were randomly selected and was analysed by a single observer (the third author from another institute so as to reduce biasness) for patient details, pre and post operative

**Table 1: Showing the information that should be included in all operative notes**

Ensure operative notes are legible
Date and time
Elective/emergency procedure
Names of operating surgeon and assistant
Operative procedure carried out
The incision
Operative diagnosis
Operative findings
Any problems/complications
Details of tissue removed, added or altered
Identification of any prosthesis used, including serial numbers
Details of closure technique
Postoperative care instructions
A signature

diagnosis, operative procedure, per-operative findings, biopsy, post-operative plan with author's full name and signature and use of abbreviations. All of them were scrutinized for the completeness and the findings were also compared with that of the previous audit conducted in the same department in July 2009. The Royal College of Surgeons "Good Surgical Practice 2008"<sup>3</sup>, was used as the standard for this audit. The Section 1.5 on Record Keeping, details the information that should be included in all operative notes (table 1).

### RESULTS:

All of the operative notes were hand written and some were overwritten. All had variables like name, age, sex, date of surgery, pre-operative diagnosis, surgical procedure, per-operative findings and surgeon's name written in legible manner. There were frequent uses of the abbreviations in all of the operative notes. The ward in which patient were admitted, post-operative plan with author signature and full name were written in all and as compared to the previous audit where it was present in 98% and 93% respectively seems to have improved. The inpatient number and bed number were present in 97% and 93% of the operative notes and as compared to the previous audit where they were present in 99.3% and 95.8% respectively seems to have deteriorated. Similarly the post-operative diagnosis was written in 89.5% as compared to 100% in the previous audit which also seems to have deteriorated. The findings as compared with the previous audit (July 2009) results are shown in table 2.

### DISCUSSION:

Operative notes are often used in medico-legal cases and patients have a legal right to access their records subject to certain conditions.<sup>4</sup> Maintaining a full and proper record of an operative note is a professional responsibility of every surgeon. Hand-written surgical notes are often produced as evidence in medico-legal malpractice cases and incomplete and illegible notes are a potential source of weakness in a surgeon's defence.<sup>5</sup> Operative notes have a central role in management of the patient and education of future surgeons.<sup>4</sup> Several audit on operative notes have been done in the past and the results published in medical literatures. Shayah et al<sup>6</sup> (Hull R Infirmary) showed that the documentation of patient identification seen in 94%, name of surgeon seen in 98%, clearly written postoperative instructions was noted in 94% and the diagnosis present in 46% , all

of which were present in 100% in our study as shown in table 2. After introducing the aide-memoir at their department the second cycle demonstrated a 100% recording of the patient identification, diagnosis, operative findings and post-operative instruction.

**Table 2 : Comparison with previous audit**

	Previous audit July 2009 (%)	Present audit August 2010 (%)
Patient's Name, Age, Sex	100	100
Inpatient No.	99.3	97
Ward	98	100
Bed No.	95.8	93
Date	100	100
Pre-op diagnosis, Procedure, Surgeon's name, Per-op findings	100	100
Post-op diagnosis	100	89.5
Post-op plan & Author Signature with full name	93	100
Biopsy (send/not send)	63	58

Similarly our results were compared to the audit carried out by Lefter et al<sup>4</sup> at the Royal Hobart Hospital, Hobart, Tasmania, Australia. In this study, the type of the operation was not accurately recorded in 12 (6.31%) operation notes, patient's identification was not noted in 13 (6.8%) of notes. Postoperative instructions were missing in 14.73% of notes and 15.26% of the scrutinized notes did not have a signature. As compared to our audit, patient's identification was present in 97% whereas type of the operation, postoperative instructions and signature were present in all the notes. Our results as compared to them may appear to be slightly better probably due to the recommendations from previous audits and strict implementation of the same.

**Table 3 : Showing comparison of IOM with Hull R. Infirmary**

Criteria	Hull R Infirmary	IOM
Patient ID	94	97
Name of surgeon	98	100
Diagnosis	46	89.5
Postoperative instructions	94	100
Finding	91	100

## RECOMMENDATIONS:

Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Where indicated, changes are implemented at an individual, team, or service level and further monitoring is used to confirm improvement in the healthcare delivery<sup>7</sup>. There are certain recommendations put forth by our audit. Use of initials to be avoided and only those abbreviations which are well accepted to be used. Previous studies have shown that quality of the operative notes can be improved by adding simple aide-memoire attached to operative note sheets<sup>6</sup> or word processor in theatre.<sup>8</sup> As installation of word processor may lead to extra financial burden to the institution, use of aide-memoire attached to every operation note sheets would be of help. Similarly introduction of computerised operative notes and a regular rolling audit would go a long way in improving the quality of operative notes.

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