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ORIGINAL ARTICLE

# Use of a Problem based Standardized Proforma can Improve Documentation in Daily Morning Ward Rounds in Surgical Patients

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## ABSTRACT

**BACKGROUND**

Accurate and comprehensive documentation during surgical ward rounds is essential for patient safety, care continuity, and medicolegal purposes. Traditional note-taking, often delegated to junior staff during fast-paced orthopedic rounds, risks omission of vital details. Standardized proformas based on problem-oriented frameworks, such as SOAP (Subjective, Objective, Assessment, Plan), may enhance documentation quality.

**METHODS**

This hospital-based quality improvement project was conducted in the Department of Orthopedics at Patan Hospital, Nepal, over six weeks. A SOAP-based standardized proforma was developed with faculty input and implemented for morning ward rounds in patients undergoing operative procedures. Documentation quality was assessed prospectively by comparing 50 ward round notes before and after proforma introduction, analyzing completion rates for key documentation elements.

**RESULTS**

After implementation, documentation completeness improved across all measured domains. Recording of the patient's name improved from 12% to 96%, plan from 44% to 90%, diet status from 20% to 88%, and discharge planning from 62% to 100%. Subjective and objective elements also showed improvement, and overall completeness increased from 60.8% to 96.7%. Feedback from medical and nursing staff indicated enhanced clarity and satisfaction with the documentation.

**CONCLUSION**

A standardized SOAP-based ward round proforma significantly improved documentation in orthopedic post-operative ward rounds. This approach enhances communication, supports safe patient care, and may reduce medicolegal risk. Broader adoption of such structured templates is recommended to ensure essential information is consistently recorded.

**KEYWORDS**

documentation; orthopedic procedures; patient safety; quality improvement; ward rounds

## INTRODUCTION

Accurate documentation of doctor–patient encounters is vital for patient care continuity, safety, and medicolegal reasons.[1] In busy orthopedic rounds, junior staff often record notes at speed, risking omission of critical details.[2] Inadequate documentation can disrupt communication, delay care, and increase medicolegal vulnerability.[3] Standardized proformas have been shown to improve the completeness and accuracy of ward round records, facilitating better handovers and safer discharges.[4,5] The SOAP format—subjective, objective, assessment, and plan—offers a systematic framework to structure ward round notes.[6] Incorporating SOAP principles into a standardized ward round proforma may help ensure consistent, comprehensive documentation and support quality patient care. This quality improvement project aimed to evaluate the effectiveness of a SOAP-based proforma in improving orthopedic ward round documentation at Patan Hospital, Nepal.

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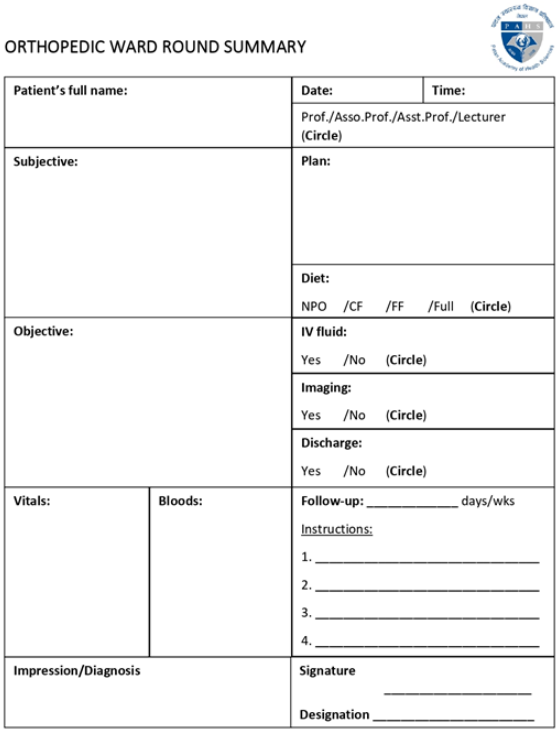
## METHODS

**Study design**

Hospital based quality improvement project. A check list of essential components of ward round documentation were derived from the 'good surgical practice' established by the Royal

College of Surgeons.[7] A draft of SOAP proforma was prepared and discussed with the faculty members to prepare the finalized SOAP proforma (Figure 1).



ORTHOPEDIC WARD ROUND SUMMARY

| | | |
|---|---|---|
| **Patient's full name:** | **Date:** | **Time:** |
| | Prof./Asso.Prof./Asst.Prof./Lecturer (Circle) | |
| **Subjective:** | **Plan:** | |
| | **Diet:** NPO /CF /FF /Full (Circle) | |
| **Objective:** | **IV fluid:** Yes /No (Circle) | |
| | **Imaging:** Yes /No (Circle) | |
| | **Discharge:** Yes /No (Circle) | |
| **Vitals:** / **Bloods:** | **Follow-up:** _____ days/wks<br>Instructions:<br>1. _____<br>2. _____<br>3. _____<br>4. _____ | |
| **Impression/Diagnosis** | **Signature** _____<br>**Designation** _____ | |

**Figure 1: SOAP proforma used in documenting ward round**

**Place and Duration of study**

Department of Orthopedics, Patan Hospital, PAHS for 6 weeks

**Ethical approval and Patient consent**

This quality improvement project was conducted following institutional protocols at Patan Hospital. Formal ethical approval was not required as the project evaluated existing documentation practices without patient-identifiable data, but permission was obtained from the Department of Orthopedics. Individual patient consent was waived as no direct patient intervention occurred.

**Inclusion and exclusion criteria**

Inclusion criteria: All patients admitted to the orthopedic ward following operative procedures during the study period. Exclusion criteria: Patients admitted for non-operative management and patients discharged before the morning ward rounds were excluded.

**Sample size and sampling**

A total of 100 patient records were reviewed, with 50 in the pre-intervention phase and 50 in the post-intervention phase. Convenience sampling was used to include consecutive eligible patients during the six-week study period.

**Statistical analysis and software used**

Data were entered and analyzed using Microsoft Excel. Descriptive statistics were used to compare documentation completeness before and after intervention, expressed in percentages.

## RESULTS

There were 50 patients in the pre-intervention arm and 50 in the post intervention cohort. In the post intervention readings, the recording of the patient's name rose from a figure of 12% to 96%. Similar results were seen for the recording of subjective findings, which rose from 92% to 100%. Recording of objective findings showed improvement rising from 84% to 96% after the introduction of the proforma (Table 1).

**Table 1: Comparing preintervention and postintervention stages**

| Variables | Pre-intervention arm (%) | Post-intervention arm (%) |
|---|---|---|
| Patient name | 12 | 96 |
| Subjective | 92 | 100 |
| Objective | 84 | 96 |
| Diagnosis | 100 | 100 |
| Plan | 44 | 90 |
| Diet | 20 | 88 |
| Discharge planning | 62 | 100 |
| Follow up advices | 58 | 100 |
| Signature | 76 | 100 |

Documentation of the clinical impression/diagnosis was 100% in the phase before introduction of profroma and also in the post-intervention period. Recording of patient's diet status rose to 88% from 22%.

Finally, the recording of the discharge planning, follow up advices and signature on the ward round note rose from 62%, 58% and 76% respectively to 100% each in the post-intervention period.

Overall the average documentation under all headings increased from 60.8% to 96.7%.

## DISCUSSION

This quality improvement project has highlighted the usefulness of a simple ward round template to ensure that important clinical information is recorded, which can help improve patient safety and communication on the ward.[8] The ward round proforma is increasingly being recognized as a suitable framework on which critical patient information can be recorded. Post-operative complications, for example, are common after major surgical operations. Their early identification and management, through good record keeping and team communication, can minimize harm to the patient.[9]

This study found that virtually all the agreed headings of our post take ward round proforma had been filled in to 88-100%. These strong results have a number of implications for future patient care. The most important implication is the quality and safety of patient care. Although this study did not look at the outcomes of patient care specifically, incomplete documentation is an important potential factor for unfavorable outcomes and potential harm.[6]

In one particular study, post-operative instructions were absent in nearly two-thirds of operative reports. Some elements of the operative report critical for ongoing postoperative management of the patient were found to be documented poorly including weight-bearing status and instructions for the use and removal of orthoses

(including slabs, knee splints and plaster casts).[6]

A UK based study done in 2014 had shown that ward round proforma use resulted in significantly improved standardization, evidence-based management of post-operative complications and the overall quality of ward rounds. This study also shows that a high-level documentation of important patient status helps in management decisions.[8]

Feedback from the doctors involved in documentation showed that they liked to use the template. They also felt that it was a good proforma and also made complete case information about that patient available while on ward rounds or to ensure important documentation was complete, like VTE risk assessments or treatment plans. This meant that they were keen to use the template and had bought into the concept. Feedback from the nursing team was that the ward round entries were set out in a logical fashion and they could understand the plans and jobs that needed to be done for that day.

By clearly documenting clinical observations, a deteriorating patient can be highlighted to a senior colleague or consultant and an appropriate management plan can be initiated swiftly. We could also ensure patients were on the correct antibiotics for the correct duration, therefore reducing the risk of antibiotics resistance. Focusing on these areas made patient's stay in hospital safer and helped with timely safe discharges. A short, simple checklist attached to operative reports in an UK orthopedic unit showed significant improvement in all aspects of the operative report. Improving documentation of the operative report remains critical for adequate patient management and ensures surgeons are not vulnerable to litigation because of missing or illegible documentation.[6]

While the results of this study were strong, a caution should be raised as there were some problems with the study. It was non-blinded and as a result could be subject to the observational bias. There is evidence of maintained standards from a recent study carried out in an orthopedic setting where average compliance with proforma headings remained at 96%.[10] This was a very similar study to this one and as such it would suggest that the gains achieved with this study could be maintained with continued use of proforma for the SOAP note.

The proforma was also large and required a full sheet within the patient's notes. Staff satisfaction with the proforma was high. In the future, with the advances in information technology, electronic record keeping would likely take over paper-based record keeping. This may solve some of the shortcomings of the quality of record keeping. However the use of a standardized electronic proforma could be a way of incorporating the results of research into day-to-day practice in the future.

The introduction of a ward round template significantly improved the documentation of important pieces of clinical information that impact directly on patient safety. Communication between doctors and nurses improved and decisions that were made on ward rounds were fully documented in the clinical notes. Clear documentation of key clinical information will make a patient's stay in hospital safer and ensure timely and safe discharges with follow-up instructions.

## CONCLUSION

Standardized proformas improve the documentation of post-take ward round notes and help to clarify the onward management plan for all aspects of a patient's care and will help avoid adverse events and litigation which should improve the quality and safety of patient care.

**CONFLICT OF INTEREST**

None

## DISCUSSION

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