A comprehensive audit of nursing record keeping practice

Paul Griffiths, Samantha Debbage, Alison Smith

Abstract

Good quality record keeping is essential to safe and effective patient care. To ensure that high standards of record keeping are maintained, regular clinical audit should be undertaken. This article describes an audit and re-audit of nursing record keeping at Sheffield Teaching Hospital NHS Foundation Trust. The article demonstrates improving audit data in 2005 and 2006 and describes how audit and the resulting recommendations and action plans can result in real improvements in the quality of record keeping. The keys to success in this ongoing audit programme are identified as stakeholder involvement, support from the senior nurses in the organization and the use of the data for both local and trust-wide purposes.

Key words: Change management ■ Clinical audit ■ Improvement ■ Nursing ■ Record

Record keeping is an integral part of nursing and midwifery practice. Good practice in record keeping can help to protect the welfare of patients by ensuring high standards and continuity of care and better communication between members of the healthcare team (Heartfield, 1996; Nursing and Midwifery Council [NMC], 2005). One way to ensure that high standards of record keeping are maintained is through continuous clinical audit (Cheevakasemsook et al, 2006). Through audit one can assess the standard of the record and identify areas for improvement (Dimond, 2005a).

In 2005 a major Trust-wide audit of nursing records was undertaken; this was repeated in 2006 to examine if improvements had occurred. The audit provides nursing staff with instant data to assess the quality of record keeping thus enabling changes in practice at ward level. This article describes the benefits of this audit to nursing practice and demonstrates how this audit project has enabled improvements in the quality of nursing records at Sheffield Teaching Hospitals NHS Foundation Trust (STHFT).

To establish best practice in nursing records practice and to reduce risks to patient safety that can arise from poor record keeping, local record keeping standards were established at STHFT in 2005. These local standards were developed using guidance from bodies such as the NMC (2005), the NHS Litigation Authority (NHSLA, 2006), and the Royal College of Physicians (2007). (See Table 1 for an excerpt from the standards document [STHFT, 2005].)

In total, 19 criteria for record keeping were established, comprising 91 standards. The standards cover all aspects of nursing care from recording patients’ details and presenting problems at admission through to the quality and content of the discharge documentation. The standards were developed through the STHFT nursing records group which comprises nursing staff of varied grades from matron to staff nurse. All 26 STHFT clinical directorates have a representative on this group. The group is supported by, and reports to, the Nursing Executive Group (NEG), thus ensuring senior nursing support.

Audit methodology

An electronic pro forma was developed to audit the standards. When completed, using the scoring system detailed in Box 1, the spreadsheet automatically provides a percentage and traffic light indication of compliance.

In November 2005, and again in November 2006, all inpatient wards were asked to use the pro forma to audit ten sets of notes for patients under their care at that time – the audit was carried out by one member of the nursing team (at that team’s discretion) on each ward. Each ward was then asked to develop recommendations and actions for future practice in their clinical area based on the red and amber results. Furthermore they were asked to submit the data to the clinical effectiveness unit so they could be collated to generate a Trust-wide picture of nursing record keeping practice at STHFT.

Aims and objectives

The main aim of the original audit project was to examine current nursing record keeping at STHFT and look at ways in which existing practice could be improved. The objectives were to:

- Identify adherence to the STHFT record keeping standards
- Identify factors that may be contributing to any failures in meeting the standards, and
- Make recommendations for future practice at STHFT.

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When the audit was repeated in 2006, the aim was to identify if the changes put in place following the 2005 audit had impacted positively on nursing record practice and to enable a comprehensive review of the effectiveness and efficiency of nursing records at STHFT.

**Results**

A total of 64 wards (of a possible 87 at STHFT) participated in the audit in 2005, giving collated data for 640 inpatients. In the re-audit in 2006, 74 wards took part so the data is representative of 740 inpatients. The results were collated for the Trust and each of the 91 audit standards had an overall compliance rate. In both 2005 and 2006 the results for all the standards were grouped into three categories and colour-coded using the traffic lights system as described in Box 1. Table 2 shows the percentage of standards that fell in each traffic light category when the results were collated for STHFT.

This summary of the audit demonstrates that compliance appears to be improving steadily. There are now fewer standards in the red category and more in the amber, but there are still several areas of record keeping practice in red where improvements can be made. Of the 91 audit standards that are comparable for 2005 and 2006, 76 increased in compliance. The biggest increase in compliance was 30.6% with the meticillin-resistant *Staphylococcus aureus* screening section of the documentation now complete in 70.8% of cases (40.2% in 2005). Compliance in 15 of the criteria decreased, with the biggest fall in compliance being 4.1%. This drop came in the criteria for each patient having an evidence-based nursing care pathway/plan, with compliance being 80% (84.1% in 2005). Overall, there is an average increase in compliance across all the audit criteria of 4.3% since the 2005 audit, indicating that some of the work done after the 2005 audit has had a positive impact. Some statistical analysis of the results as detailed in Box 2 supports this claim.

Further evidence of the improvement in practice between 2005 and 2006 can be seen by looking back at the recommendations that were developed after the 2005 audit. The recommendations are detailed in Table 3 alongside the actions that took place to ensure effective implementation. The results demonstrate how the actions have contributed to improved compliance.

Although there is still room for improvement in all these examples, they do show that when acted upon, recommendations from record keeping audit can have a positive impact. Further analysis of the results indicated that in both 2005 and 2006 audits, good and poor practice tended to be consistent across STHFT. Many wards were finding the red and amber results for the same standards. This prompted further investigation to examine if poor results were leading to increased risks for the patient — Box 3 demonstrates this.

This risk assessment, carried out by the deputy chief nurse and the chair of the nursing records group, suggested that in some cases nursing time was being spent completing data that was not relevant to the care of that patient. On occasion the demands on nursing time to complete such information may be detrimental to patient care and may reduce the overall quality of record keeping (Owen, 2005). The risk assessment was useful because it helped to distinguish between problems with documentation practice and problems inherent in the documentation. This additional information was crucial when planning the recommendations for future practice, as in some cases it was the layout and content of the nursing documentation that needed changing rather than existing nursing practice.

**Limitations of the audit**

There are some limitations to this audit. The scoring system relies on a degree of subjectivity from the perspective of the auditor. They must determine what constitutes a score of between 0 and 4 where it is not a straightforward yes or no response. The guidance that is distributed with the audit helps combat this but in future perhaps the guidance could be made more explicit and inter-rater reliability tests could be used to ensure consistency.

**Table 1. Excerpt from STHFT record keeping standards**

<table>
<thead>
<tr>
<th>No. Criteria</th>
<th>Evidence base</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Every entry must be dated, timed and signed</td>
<td>Nursing and Midwifery council (2005)</td>
</tr>
</tbody>
</table>

**Table 2. Standards in each traffic light category**

<table>
<thead>
<tr>
<th>Traffic light</th>
<th>Percentage of standards for 2005 (n)</th>
<th>Percentage of standards for 2006 (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREEN (80–100% compliance)</td>
<td>45% (41)</td>
<td>45% (46)</td>
</tr>
<tr>
<td>AMBER (50–79% compliance)</td>
<td>32% (29)</td>
<td>39% (40)</td>
</tr>
<tr>
<td>RED (&lt;50% compliance)</td>
<td>23% (21)</td>
<td>16% (16)</td>
</tr>
</tbody>
</table>

**Box 1. Details of the scoring system**

While auditing the notes, the auditor used the following scoring system:

0 = if no evidence of an attempt to document information
1 = if inadequate information is documented
2 = if some of the relevant information is documented
3 = if most of the information is documented
4 = if all of the information is documented
n/a = if criterion is not applicable

This meant that each standard could score a total of 40, when ten patients were audited on each ward. For example, if the patient’s full name was on all ten records, then the total score would be 40 giving compliance of 100%. If patients full name was on nine records, then the total score would be 36 giving compliance of 95%. If a criterion was not applicable for any of the patients then when n/a was entered the spreadsheet automatically reduced the expected score by 4. The scores were collated for all wards before being converted into compliance rates for Sheffield Teaching Hospitals NHS Foundation Trust. The traffic light system ensures that criteria with an overall compliance of between 80% and 100% are green, those with compliance between 50% and 79% are amber and those below 50% are red.
Table 3. Recommendations and actions from 2005 and 2006 audit

Recommendations

- Education – many of the areas identified for improvement are new additions to the nursing documentation. The professional and practice development unit can be assessed to provide education and training about the new assessment/referral documentation and how it should be completed.
- For the housing section, awareness needs to be raised among staff of the housing liaison workers who can be accessed
- A detailed audit of falls assessments will help identify the problems with the documentation in this area and raise awareness of the need to assess patients who are falling
- There are various risk issues that need addressing Trust-wide, such as incidents where entries are not signed, dated and timed or are not legible. Awareness of the importance of such issues is crucial.

Action taken

- Education and training has been provided to help staff throughout Sheffield Teaching Hospitals NHS Foundation Trust to understand and correctly use the new documentation
- Training and education regarding the housing liaison workers has taken place
- A Trust-wide falls assessment audit has taken place in 2006
- Awareness raising has been undertaken, including examining the potential legal implications of poor documentation to enable improvement with these documentation issues

2005 audit compliance

- General improvements – see Table 2 and Box 2
- Appropriate housing referrals are complete in 21% of cases
- Appropriate falls assessment are completed in 52% of cases
- Entries dated in 90% of cases
- Entries timed in 85% of cases

2006 audit compliance

- General improvements – see Table 2 and Box 2
- Appropriate housing referrals are complete in 44% of cases
- Appropriate falls assessment are completed in 66% of cases
- Entries dated in 95% of cases
- Entries timed in 90% of cases

be performed to check data consistency. A further limitation could be that record keeping practice only improves when the audit takes place, although there is an attempt to avoid this, as not all ward staff know when the audit is taking place. To avoid this problem spot check audits could be initiated in-between the yearly audits.

Dissemination of results

The audit and re-audit data was disseminated through various channels in 2007. Some key points of dissemination have been:
- Presentation at care group and directorate meetings
- Presentation at the nursing records group
- Presentation at the patient records committee
- Presentation to the nursing executive group
- Presentation to the clinical management board
- Dissemination of 3-page report to record keeping leads in clinical areas.

Recommendations for future practice

At the dissemination sessions the results of the audit and the risk assessment were discussed with the varied groups of stakeholders present at the above meetings. From these discussions, several key recommendations for future practice were developed as outlined below:

1. The initial nursing assessment document is to be reduced to ensure the capture of essential information and reduce duplication (this has happened and the new version has been in use since July 2007)
2. The initial nursing assessment documentation is now based on a system of trigger questions which only prompt more detailed review when necessary

Box 2. Statistical analysis of audit results

Fifty-eight wards completed the audit in both 2005 and 2006. Paired sample t-tests demonstrated that 26 wards had significantly increased in compliance across all criteria (P<0.05) between 2005 and 2006. Paired sample t-tests also revealed that of the 76 criteria that increased in compliance, ten increased significantly between 2005 and 2006 (P<0.05).
3. A sub-group of record keeping is immediately formed to rationalize and standardize charts and checklists by August 2007.

4. Joint work is undertaken with the healthcare governance team to improve adverse incident recording in records.

5. A nursing care guideline for discharge planning is being produced and a final day checklist introduced.

6. Each directorate should risk assess their local results, compare them to the STHFT data and from all their recommendations establish three key actions for demonstrable improvements in their future practice and then assess progress in these areas in the 2007 audit.

7. The STHFT education and development team will continue to offer regular training courses into the appropriate use of the nursing documentation and the patient safety and legal issues associated with poor records practice for nursing staff in all clinical areas. The uptake of such training will be crucial to improvements in record keeping practice.

8. Re-audit to take place in November 2007 – this audit will include a more detailed audit of all aspects of the documentation, including falls documentation, fluid balance chart, peak flow chart and the discharge medication form.

9. The next audit is to be multidisciplinary, involving all members of the care team and assess medical and nursing documentation in order to be sufficient for STHFT purposes when data is submitted to the health care commission as part of the Annual Health Check for NHS Trusts (Healthcare Commission, 2007).

These recommendations are now being followed up by members of the nursing records group. Regular progress updates on these points is taking place at the monthly meetings and NEG is also receiving updates on progress.

**Conclusion**

Record keeping needs to be considered as an intrinsic part of nursing practice (Dimond, 2005b). The ongoing nursing record keeping work shows that when done well, audit can have a real impact on the quality of clinical records (Darmer et al, 2006). Simply undertaking the audit can raise awareness of the need to improve practice. Dissemination of results, education and training and local action planning are all crucial to improving practice (Cheevakasemsook et al, 2006), and have all contributed to the improvement in practice between 2005 and 2006. The next audit is planned for November 2007, so evidence will be generated to examine if the improvements are continuing.

There are some key reasons why this approach to improving the audit of nursing records has been a success. Having a dedicated project group (the nursing records group) with involvement of those undertaking the audits on the wards alongside dedicated audit leads has been crucial. The nursing records group has the support of NEG so has senior nursing sponsorship for implementing recommendations in practice. Another reason for the success of the audit is that it has multiple uses. Directorate nursing teams can use the audit evidence to inform and change local practice and to support Trust objectives such as attainment of NHSLA standards. The audit has also enabled senior nursing staff to examine areas of poor practice Trust-wide and assess whether this is a problem inherent in the documentation rather than with staff and therefore enabling them to adapt nursing documentation accordingly.

Further evidence of the success of this ongoing work is demonstrated by the current replication of the audit by medical staff to examine the content and quality of medical records at STHFT. In November 2007, the nursing audit tools will be adapted and used for a Trust-wide audit of medical record keeping. The final step in the process will be to get all members of the care team to use the audit tools to examine the quality of the whole record to establish a clear and comprehensive view of the patient record.

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**KEY POINTS**

- Good quality record keeping is vital to safe and effective patient care.
- A group of motivated stakeholders is important for undertaking a large scale audit.
- When done well, clinical audit can lead to improvements in record keeping quality.
- To make changes to practice in a large organisation senior nursing support is required.
- Record keeping audit should aim to involve all members of the care team.

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**Box 3. An example of risk assessment of audit results**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percentage complete</th>
<th>Risk to patient</th>
<th>Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies</td>
<td>90.4%</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Occupation/school</td>
<td>59%</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

In this example one can see that although compliance is high for allergies, in the 10% of applicable cases where this information was not recorded there is a significant risk to the patient. Conversely compliance for detail of a patient’s occupation/school is far lower but in terms of the care for those patients this represents a much lower risk.