Recycling the surgical audit

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Background: Clinical audit is a process used to improve the quality of care provided to patients. With an increasing body of evidence to question the effectiveness of audit, this study aims to evaluate the standard of surgical audits carried out in a large teaching hospital.

Methods: All surgically orientated audits proposed to the hospital’s audit office over a 5-year period were evaluated against criteria set out in accordance with guidelines produced by the National Institute of Health and Clinical Excellence.

Results: Of the 79 audits proposed, 33 were completed and took an average of 3.4 months. Forty-eight percent of completed audits identified actions, 12% implemented changes, and 9% closed the loop. The number of proposed surgical audits has not increased significantly over the past 5 years.

Conclusions: This study demonstrates that the minority of audits manage to identify actions, implement change, and complete an audit cycle. Part of this inefficiency can be attributed to a lack of communication between audit leads and the audit office. To overcome this problem, it is suggested that audit offices take an active role in facilitating the audit process at all times.

Keywords: clinical audit, audit cycle, audit office

Introduction
Clinical audit is the quality improvement process in which current practice is systematically compared against recommended standards in order to implement change where necessary.1

As one of the key pillars of clinical governance,2 evidence of active involvement in the audit process has become almost obligatory for surgeons with the Royal College of Surgeons of Edinburgh now recommending that posts have protected time dedicated towards the practice of audit.3 The process itself is carried out in a defined sequence of 6 steps said to make up a “cycle” (Figure 1). Audits of the highest value will usually be “closed loop” audits reaching step 6.

Though the theoretical benefits of the audit are widely accepted, there is a growing body of evidence to suggest that its practical implementation is often suboptimal.4,5 This article aims to study the standard of audits carried out by surgical groups in the Southampton General Hospital.

Methods
All audits carried out by surgical groups between 1 January 2005 and 1 January 2010 were retrospectively reviewed using databases acquired from the hospital audit office. Audits were tabulated in an Excel spreadsheet and categorized according to
their surgical speciality. Individual audits were then coded as proposed (stage 1), completed (stage 4), completed with actions identified (stage 5), or reaudited to close the loop (stage 6) in accordance with recommendations on audit methodology made by National Institute of Health and Clinical Excellence and the Care Quality Commission.6

Results
A total of 79 surgically orientated audits were registered with the audit office during the study period. Of these, 1 was proposed but never started and 2 were started but abandoned before data collection. A total of 43 were registered as still active and 33 were completed (42%). The average time taken to complete an audit was 3.4 months. The number of surgical audits proposed during each calendar year is displayed in Figure 2.

Of the 33 completed audits (defined as reaching step 4), a total of 16 managed to identify actions (48%) and 4 of these implemented changes (12%). Three were closed loop audits (9%). The specialities of Cardiothoracic and Trauma and Orthopedics were most likely to complete audits and report them to the audit office at 100% and 60%, respectively.

Discussion
This is the first study appearing in the literature to review the standard of clinical audit conducted by a number of surgical specialities. The study design was intentionally different from other studies7–9 by acquiring data from the hospital audit office as opposed to individual audit reports. By doing this, the true impact that clinical audit has on improving standards in our hospital could be better identified.

Overall, audits were of a lower standard than has been previously described with 9% of audits closing the loop being around half of that reported in other studies.7–9 This discrepancy can be attributed to a lack of communication between auditors and the audit office and was exemplified by the existence of 7 audits commenced in 2005 registered as “active”. As audits took an average of 3.4 months to complete, it seems likely that many audits are either abandoned or completed without communicating findings to the audit office.

Auditor-specific and audit office-specific barriers to the completion of audits were discussed with the hospital audit office. The most commonly encountered reason for auditors not completing their studies arose from a lack of training in audit methods, a situation also found in a previous review.4 Similarly, a lack of access to audit supervisors from the senior clinical team seemed to contribute to the low rate of completion. In addition, the average of 7 surgical audits carried out during each year brings to question how many audits are being conducted without official trust approval. In many cases, the audit office were unable to complete the audit cycle loop alongside clinical leads as they took by their own admission, a passive role in the audit process and rarely contacted auditors for progress updates or encouraged them to produce final reports.

It has also been suggested that audit is used as an exercise for doctors to gain entry to specialist training programmes7,8 rather than to improve service delivery. With this in mind, it is interesting to discover that the 2 most competitive specialities of Cardiothoracic and Orthopedic surgery10 are also those in which audits are most likely to be completed with findings reported to the audit office.

Perhaps surprisingly, the number of proposed audits has failed to increase over the past 5 years (Figure 2), despite significant moves towards providing accessible electronic patient records throughout the hospital.

Conclusions
This study provides additional evidence that clinical audit is falling short of its theoretical potential with a minority of studies identifying actions, implementing change, and

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**Figure 1 The audit cycle.**

<table>
<thead>
<tr>
<th>Step 1: Identify problem or issue</th>
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<tbody>
<tr>
<td>A “problem” is an area of practice that could potentially be made more efficient as a result of an audit. These should be areas where guidelines exist or areas of importance like high volume, high risk, and high cost</td>
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<tr>
<th>Step 2: Set criteria and standards</th>
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<tr>
<td>Criteria are the set of statements the audit will focus upon. Standards are the level to which the criteria should be met, usually expressed as a percentage</td>
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<th>Step 3: Collect data</th>
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<tr>
<td>Usually through local or national presentations and publications</td>
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<tr>
<th>Step 4: Compare performance with criteria and standards</th>
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<td>Demonstrates whether changes have been successfully implemented and improvements made</td>
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<th>Step 5: Implement change</th>
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<td>Usually through local or national presentations and publications</td>
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<th>Step 6: Reaudit</th>
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<td>Demonstrates whether changes have been successfully implemented and improvements made</td>
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completing an audit cycle. The explanation for this situation can be attributed, at least in part to a lack of communication between audit leads and the audit office. To improve the efficiency of clinical audit, it is suggested that auditors have access to adequate training in clinical audit methodology and that audit departments maintain an active role in facilitating the audit process at all times.

Disclosure

The author reports no conflicts of interest in this work.

References


Figure 2 Number of audits proposed by year.