Cambridge University Press 978-1-908-02001-7 — 101 Recipes for Audit in Psychiatry Edited by Clare Oakley , Floriana Coccia , Neil Masson , Iain McKinnon , Meinou Simmons Frontmatter <u>More Information</u>

# 101 Recipes for Audit in Psychiatry

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*Edited by* Clare Oakley, Floriana Coccia, Neil Masson, Iain McKinnon and Meinou Simmons

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# Foreword

A psychiatrist who cannot show that he or she has been involved in audit is going to be in difficulties. Short-listing panels for the appointment of trainees at CT1 or ST4 as well as those for the appointment of consultants already look for evidence of involvement in audit before ticking important boxes and the emerging criteria for revalidation of all doctors include completion of a number of audits during each 5-year revalidation cycle. We cannot avoid audit. Yet one of the biggest current contributors to wasted trainee and consultant time in psychiatry that I can think of is the conduct of audit projects that have been poorly thought through. These often mercifully stall. But even if they stutter on, those involved suffer frustration and pain before they are able only to deliver a product that nobody really wants to hear about. Conduct of a successful and satisfying audit requires expertise - in terms of both knowledge and experience as well as energy. Expertise in the planning and conduct of audits may be hard to access in many of the settings within which we work. In such circumstances, how useful it would be to have access to a series of recipes for audit projects that have been successfully completed by experts and whose results have been useful and interesting. This is the exact purpose of the book you are now reading. The expertise and experiences of our colleagues in all branches of psychiatry who have carried out audit projects that have worked and usefully informed practice and service design are encapsulated in a comprehensive range of easyto-follow recipes suitable for all, from the absolute beginner to the cordon bleu auditiste. I congratulate the editors for their vision and energy in putting this book together and thank all the contributors who supplied them with their audits. Psychiatrists will be happy and grateful to have this book to help them through the requirements of appointment panels and revalidation. But maybe, also, once helped to identify interesting and deliverable projects, psychiatrists will no longer feel they are wasting time on audit and will get some value and satisfaction out of the process.

> Professor Robert Howard Dean Royal College of Psychiatrists

# Preface

As Professor Howard outlines in his Foreword, audit is an essential activity for all psychiatrists and will need to be evidenced for revalidation and by trainees in their Annual Review of Competence Progression (ARCP). This book aims to help ease this process by offering tried and tested recipes for conducting audits in clinical services. All the audits in this book have been undertaken by the authors but not all had been repeated to complete the audit cycle at the time of publication. While we have endeavoured to include a range of audit topics from all the specialties of psychiatry, there are some areas that we have not been able to include, as we wanted to include only audits that had been done in 'real life' and were reliant on the submissions from our contributors to achieve this.

We would like to thank all those who have contributed audits to this book, to whom we are very grateful. We hope that readers of this book will benefit from their first-hand experiences.

> Clare Oakley, Floriana Coccia, Neil Masson, Iain McKinnon and Meinou Simmons

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# Introduction

Neil Masson and Meinou Simmons

# What is audit?

A standard definition of audit is an evaluation of a system or process. The National Institute for Health and Clinical Excellence (NICE), in *Principles for Best Practice in Clinical Audit* (2002), defines the process of audit as:

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. Aspects of the structure, processes, and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team, or service level and further monitoring is used to confirm improvement in healthcare delivery.

An important part of audit is that it is a cyclical process. Changes are made as a result of findings and then the same aspects of care are re-evaluated. Audit is a dynamic, ongoing process of review against standards and implementation of changes.

It appears that Florence Nightingale conducted the first documented clinical audit when she looked into standards of nursing staff hygiene during the Crimean War in the 1850s (Ashmore & Ruthven, 2008). It was not until the healthcare reforms of the late 1980s, however, that audit became widely integrated into modern healthcare, at least within the UK National Health Service (NHS) (Department of Health, 1989). Clinical audit subsequently became one of the six pillars of 'clinical governance', whereby NHS organisations were encouraged to introduce a variety of quality-improvement strategies within a coherent framework (Department of Health, 1997). As a result of these reforms, trusts appointed clinical governance advisors to help coordinate relevant audits. In recent years, audit has become an established aspect of clinical practice across the whole of the NHS.

### The audit cycle

The process of clinical audit begins with the selection of a suitable topic. After choosing a topic, the next stages of audit are as follows: selection of standards;

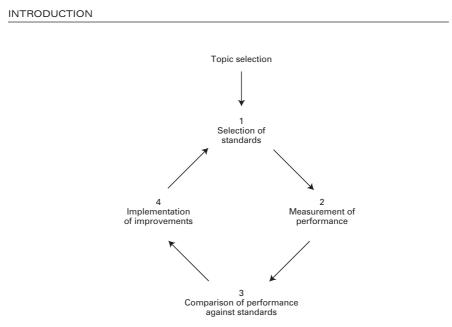


Fig. 1 The audit cycle.

measurement of performance; comparison of performance against standards; and implementation of improvements (Fig. 1). We explain the stages of the audit cycle in more detail in the next section, 'Completing an audit project' (p. 7). The stages of the audit process are repeated in a process known as the audit cycle. Re-auditing ensures that the audit continues to loop around the cycle. The steps to the successful completion of an audit project are considered in more detail in the next section.

# **Distinguishing audit from research**

Both audit and research involve a systematic process, topic selection, sampling, data collection and statistical analysis, and both can lead to a change in practice. However, there are some general differences between the two. Distinguishing features include the following (Wade, 2005; Gould, 2008):

- ▶ *Purpose*. The aim of research is often to develop new practice, whereas audit examines usual practice
- ▶ *Relationship between the variables measured.* Research often aims to explain the relationship between variables, whereas audit aims simply to describe such variables.
- ► *Generalisability*. Research results can be applied to a wider population, whereas audit results are often specific to the service examined.
- ▶ *Ethics committee approval.* Ethics committees must initially approve all clinical research studies; conversely, research ethics committees often exclude audit studies from their remit.

# Why is audit important?

The primary function of clinical audit is either to prove or to improve the quality of services offered to patients. Through this process, areas of good clinical practice can be demonstrated and rewarded, while areas of substandard practice can be identified, with subsequent modification of the service. Organisations often need formal evidence of substandard practice to prompt changes, and audit can be a powerful tool in demonstrating service needs. Audit can also lead to an overall improvement in the quality of health service data (Hatton & Renvoize, 1991).

Additional benefits of undertaking an audit may include improved communication between colleagues, increased professional satisfaction and the development of better administrative systems (Johnston *et al*, 2000). Psychiatrists form an integral part of services and through their contribution to audit they can directly inform best practice, and thus patient care. By contributing, psychiatrists can take ownership of their practice evaluation, and highlight service needs to managers and commissioners, which leads to them working within better systems.

Through participation in audit, psychiatrists can acquire a number of skills they will carry through their careers, as described below. In recognition of these benefits, the Royal College of Psychiatrists now requires psychiatric trainees to take part in clinical audit and the ability to conduct and complete a clinical audit is a learning outcome within the College's core curriculum for trainees (Royal College of Psychiatrists, 2009). The General Medical Council's document on revalidation is clear in stating that doctors need to continue to meet the standards appropriate for their specialty, and that audit will form an integral part of the revalidation process for doctors and will therefore be part of consultant job plans (General Medical Council, 2010). The revalidation guidance produced by the Royal College of Psychiatrists (2010) recommends psychiatrists undertake two completed audits of significant areas of clinical practice and at least one audit of record keeping in every 5-year revalidation period. With audit being a requirement for both trainees and consultants, there is an opportunity for shared working, with consultants supervising new audits and providing a longitudinal perspective on ongoing audits.

# What is best practice in audit?

The Royal College of Psychiatrists' revalidation guidance (2010) includes within it the criteria and indicators of best practice in clinical audit set out by the Healthcare Improvement Partnership:

- ▶ The topic for the audit is a priority.
- ▶ The audit measures against standards.
- ▶ The organisation enables the conduct of the audit.
- ▶ The audit engages with clinical and non-clinical stakeholders.
- ▶ Patients or their representatives are involved in the audit, if appropriate.
- ▶ The audit method is described in a written protocol.
- ▶ The target sample should be appropriate to generate meaningful results.

- ▶ The data-collection process is robust.
- ▶ The data are analysed and the results reported in a way that maximises the impact of the audit.
- An action plan is developed to take forward any recommendations made.
- ► The audit is a cyclical process that demonstrates that improvement has been achieved and sustained.

Also, Copeland (2005) has summarised good-quality clinical audit in the following dozen golden rules:

- Audit should form part of a structured programme.
- The audit topics chosen should preferably involve high risk, high volume or high cost, or reflect national clinical audits, national service frameworks or NICE guidance.
- Patients and other service users should be involved in the clinical audit process.
- ▶ Audits should be multidisciplinary in nature.
- Clinical audit should include assessment of both the process and the outcome of care.
- Standards should be set from good-quality guidelines and backed by research.
- ▶ The sample size chosen should be adequate to produce credible results.
- Managers should be actively involved in audit and especially in the implementation of recommendations.
- ► Action plans should address any barriers to change and identify those responsible for service improvement.
- ▶ Re-audit should take place to establish whether improvements in care have been implemented as a result of clinical audit.
- Systems and specific mechanisms should be available to monitor any service improvements once the audit cycle has been completed.
- Each audit should have a local lead.

# How can the results of audit lead to changes in practice?

The effectiveness of audit in bringing about change in practice is extremely variable, and depends on a number of downstream factors. Overall, the most successful audits are those where initial service performance was found to be poor and where there was intense feedback on that performance (Jamtvedt *et al*, 2006). This emphasises the importance of choosing to do an audit on a topic where change is needed and where feedback is possible. Other factors that have been found to be of importance in the success of an audit include effective training, dedicated staff, protected time, structured programmes and an environment where clinical audit is made a priority by a health board (Johnston *et al*, 2000; Benjamin, 2008). Several areas have audit leads or clinical audit departments which plan and coordinate audits.

Doctors are often unaware of systemic problems until they are uncovered through audit. Audits serve to highlight any deficits in how a system functions

and lead to suggestions for improvements. An example at local level might be an audit reviewing sedative medication prescribed on in-patient units. If sedatives are prescribed to in-patients without regular review, many may leave hospital dependent upon that medication. Regular auditing of this practice with effective dissemination of results could help effect positive changes in practice. An example of changes in practice that occur at a national level comes from the Prescribing Observatory for Mental Health (POMH), which has conducted audit on the prescribing of high-dose and combination antipsychotics (see audit 77, p. 185), as in-patient units can compare their prescribing habits with those in wards across the UK. Wards can then work towards providing good care in this particular domain. As the POMH is now increasing the number of audits it undertakes, national comparisons will be made easier.

# How can audit benefit doctors?

Audit is integrated within the everyday practice of mental health services. Many trusts employ clinical audit coordinators to oversee audits at trust level. Audits have a clear role in helping improve service provision. The process of audit also provides psychiatrists with a number of invaluable skills:

- researching the evidence base for guidelines, which can result in familiarisation with national guidelines and skills from researching relevant journal papers on the audit topic
- protocol-writing skills when putting together a protocol for implementation of the audit
- planning and organisational skills in implementing an audit within a given service framework (including assembling relevant resources, budgeting time and, often, joint working with clinical governance leads)
- skills in the use of spreadsheets and other statistical tools to process and analyse data
- ▶ *report-writing skills* when compiling a concise report, which may be published
- ▶ *presentation skills* when communicating the results of the audit to an audience
- negotiation skills with management or commissioners when seeking to implement findings, such as filling gaps within a service, or further staff training
- *evaluation skills* in assessing when to carry out a re-audit, and in evaluating how previous audits can be modified for different service structures
- ▶ skills in developing an understanding of healthcare structures and processes
- multidisciplinary team-working skills when the audit requires cooperation and dialogue with other staff groups.

# References

Ashmore, S. & Ruthven, T. (2008) Clinical audit: a guide. Nursing Management, 15(1), 18–22.

Benjamin, A. (2008) Audit: how to do it in practice. BMJ, 336, 1241–1245.

Copeland, G. (2005) A Practical Handbook for Clinical Audit. NHS Clinical Governance Support Team. Available from http://www. wales.nhs.uk/sites3/Documents/501/Practical\_Clinical\_Audit\_Handbook\_v1\_1.pdf (accessed October 2010).

Department of Health (1989) Working for Patients. HMSO.

Department of Health (1997) The New NHS: Modern, Dependable. HMSO.

General Medical Council (2010) Revalidation: The Way Ahead Consultation Document. GMC.

Gould, D. (2008) Audit and research: similarities and differences. Nursing Standard, 22(37), 51-56.

Hatton, P. & Renvoize, E. B. (1991) Psychiatric audit. Psychiatric Bulletin, 15, 550-551.

Jamtvedt, G., Young, J. M., Kristoffersen, D. T., et al (2006) Does telling people what they have been doing change what they do? A systematic review of the effects of audit and feedback. *Quality and Safety in Health Care*, **15**, 433–436.

Johnston, G., Crombie, I. K., Davies, H. T., et al (2000) Reviewing audit: barriers and facilitating factors for effective clinical audit. Quality in Health Care, 9, 23–36.

National Institute for Health and Clinical Excellence (2002) *Principles for Best Practice in Clinical Audit*. Radcliffe Medical Press. Available from http://www.nice.org.uk/media/796/23/BestPracticeClinicalAudit.pdf (accessed October 2010).

Royal College of Psychiatrists (2009) A Competency Based Curriculum for Specialty Training in Psychiatry. RCPsych. Available from http://www.rcpsych.ac.uk/PDF/Core\_Feb09.pdf (accessed October 2010).

Royal College of Psychiatrists (2010) Revalidation and Guidance for Psychiatrists (College Report 161). RCPsych

Wade, D. T. (2005) Ethics, audit, and research: all shades of grey. BMJ, 330, 468-473.

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# Completing an audit project

Floriana Coccia

In this section, each step in the completion of an audit is described in detail. As mentioned in the previous section, audit is conventionally described as a cycle. After completing each step of the audit process, the cycle should be repeated. This is to assess whether recommendations have been implemented and standards are now being met (or any other positive change can be recorded). As this process is ongoing, some authors describe the audit as a spiral rather than a cycle (Vasanthakumar & Brown, 1992) The re-audit is frequently omitted in clinical practice, especially where there is a high turnover of junior staff, as they are the most likely people to perform audits.

Although four general stages in the audit cycle were described in the previous section (Fig. 1, p. 2), there are more specific steps. In this section the audit cycle is broken into 11 steps. Not every step will be applicable to every audit, and some of the suggestions within this guide are just 'nice to haves':

- 1 Choose a topic
- 2 Consider forming a multidisciplinary team
- 3 Review the literature
- 4 Set standards
- 5 Choose an audit design
- 6 Collect the data
- 7 Analyse the data
- 8 Make conclusions and recommendations
- 9 Disseminate results
- 10 Implement change
- 11 Re-audit

### Step 1. Choose a topic

#### Consider which area to audit

In 1966 Donabedian described three areas which can be audited in the healthcare setting: the facilities available (structure), what happens there (process) and the result for the patient (outcome). All audits are likely to fall into at least one of these categories; some may fall into two or all three categories.

The dimensions of quality of care that can be assessed in mental health audits could include access to services, relevance to need, effectiveness, equity, social acceptability and efficiency (Maxwell, 1984; Hatton & Renvoize, 1991). Trusts are now required to meet the standards of quality and safety that are set out in two pieces of legislation: the Health and Social Care Act 2008 (Regulated Activities) Regulations 2010 and the Care Quality Commission (Registration) Regulations 2009. There are 28 specific regulations, which cover the care and welfare of people who use services, infection control, the safety of premises and consent to treatment.

It is important that the auditor liaises with the local clinical governance department from the start of the audit process, as that department will be able to advise on the needs of the trust, as well as on the complexity of the audit topic to be undertaken.

#### Be useful

Resources in the National Health Service (NHS) are limited. Therefore the audit topic should be an important one. It is generally considered the most efficient use of resources to choose audits that evaluate issues that are high frequency, high cost, high profile and or in high-risk areas (National Institute for Health and Clinical Excellence, 2002; Copeland, 2005). An identified problem is another good area to audit, for example following an incident or complaint. Each trust will have identified a number of audits that need to be completed in any one year (these audit priorities are likely to have been identified in national policies and guidance set by the Department of Health, or dictated by the above criteria). The trust should have an audit programme that covers all the audit topics set as priorities by its clinical governance committee and this would be a useful starting place in selecting an audit topic. The trust's clinical audit coordinator will be able to advise on the audits that need to be done locally.

#### **Be interested**

Pick a topic of personal interest. Audit is perceived by many as a tedious exercise and selecting a topic of interest will help ensure that the project is completed. It will also increase motivation and make it more likely that subtle differences and variations are noticed.

#### Be smart

As highlighted in the introductory chapter (Fig. 1), an audit is a complete cycle. For trainees in shorter placements, completing the full cycle is not always possible. Trainees may wish to consider doing the second cycle of an audit. If the first cycle of the audit was done correctly, all the information required, the standards and data-collection documents will already be available. This would be acceptable for trainees in the early stages of training, but higher trainees, consultants and career-grade doctors should see a whole project through to completion.

#### Be relevant

As most doctors will now be required to develop portfolios of evidence, it would be beneficial to consider doing an audit relevant to professional needs. More junior trainees may wish to do audits on broader aspects of care that will add value to their portfolios as well as contributing to the trust's clinical governance activity.

#### Be counted

Registering an audit with the clinical governance department will ensure that it contributes to improved clinical care and that the work is recorded.

#### Be practical

The audit project will have to be feasible. There will be a limited amount of both time and resources for the task. It is better to complete a small audit than to undertake an ambitious project only to run out of time or energy before it is completed. It is also recommended that some consideration is given to the sophistication of the statistical analysis that is going to be required for the results.

# Step 2. Consider forming a multidisciplinary team

The structure of modern mental health services means that most audits are likely to involve more than one professional group. If the findings are likely to affect other professionals, it is recommended that they be involved in developing the audit project from the outset. This improves the chances that any recommendations made are implemented, as all those affected feel involved from the start of the project. There is the added benefit of other perspectives on the same topic, potentially improving the quality of the audit. It also increases the pool of auditors, as other professionals may wish to assist with data collection.

The drawback to a multidisciplinary team is that resolving differences in opinion may delay the development of the audit standards and slow the process and reduce interest and enthusiasm; the audit results may be so outdated that they are of little value. To prevent such delays from occurring, it is recommended that an audit lead be appointed (Copeland, 2005) and just one or two additional members participate in the development of the audit protocol and tools.

The aim of any audit should be improved clinical care and the National Institute for Health and Clinical Excellence (NICE) therefore advises that patients and other service users are involved in the audit process (National Institute for Clinical Excellence, 2002). The most common method of patient involvement is through patient satisfaction questionnaires.

It should also be made clear from the start who is doing what aspects of the audit and what the time frame is. An audit proposal meeting, especially one involving the clinical governance department, may be helpful at this point to iron out any problems or differences of opinion early on.

The choice of project may not require the formation of a multidisciplinary team, but trainee psychiatrists should certainly discuss the suitability of the audit with their supervising consultant.

### Step 3. Review the literature

#### Why?

A literature review should be done to identify any national recommendations that may exist, for example guidelines produced by NICE, the Scottish Intercollegiate Guidelines Network (SIGN) or the Royal College of Psychiatrists (RCPsych). There may also be published reports of audits on the chosen topic that could provide ideas for methods and standards. Where there are no published standards, research papers or reviews may assist the setting of standards for the audit project.

#### Where?

- ► The NICE and SIGN guidelines are available on their websites (http://www. nice.org.uk and http://www.sign.ac.uk) as well as in local NHS libraries.
- ► Health Information Resources (http://www.library.nhs.uk) (formerly the National Library for Health) allows users to search databases such as MEDLINE, EMBASE and PsychINFO, as does Scotland's Knowledge Network (http://www.knowledge.scot.nhs.uk). Both require users to register with their local library for a user name.
- Professional bodies such as the RCPsych (http://www.rcpsych.ac.uk), the Royal College of Nursing (http://www.rcn.org.uk) and the British Association for Psychopharmacology (http://www.bap.org.uk) have some guidelines which may be accessed online or by contacting the organisation directly. Members of the RCPsych (including pre-membership psychiatric trainees) have access to the College library.
- ► The Cochrane Library (http://www.thecochranelibrary.com) provides access to reviews and meta-analyses.
- National service frameworks set quality requirements for certain areas of practice and are available on the Department of Health's website (http:// www.dh.gov.uk).
- ► There may be local trust guidelines on the hospital intranet site, or available from the trust's clinical governance department.
- ▶ If an audit recipe from this book is used, there will be standards set out and references to the relevant literature.

# Step 4. Set standards

Once a topic to audit within a service has been identified, 'best practice' guidelines (preferably national evidence-based guidelines, such as those produced by NICE, or possibly local guidelines, although the latter are likely to have a smaller evidence base) can be chosen on which to base audit standards.

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In audit, a 'criterion' will reflect a statement of good practice. For example, an audit criterion might be that all patients should have their weight measured. A 'standard' refers to how closely the performance of the service under study meets the given criterion. In this example, it might be '100% of patients have their weight measured'.

There are some practical problems selecting standards: it may be difficult to narrow down large sets of criteria; there may be lack of evidence in an area of practice; and the selection of arbitrary or non-evidence-based criteria will render the process less than robust (Hearnshaw *et al*, 2003). Thus, it is important to select standards carefully before the audit is begun.

Where there are guidelines available, these should form the basis of the standards. If they are not yet available, a combination of research evidence and clinical experience will provide the basis for developing an appropriate set. The standards should be written as short statements. To facilitate data collection, questions should be phrased so that adherence can be measured as either present or absent (yes/no). Where this is not suitable or feasible, a rating scale with scores of 1–5 could be an alternative. As part of the development of standards, the auditor needs to decide what qualifies as the standard being met.

For clinical data, standards are usually 100%. For other audits, for example trainees attending an induction programme, 75% might be appropriate. For a standard of less than 100% it will be necessary to decide what suitable exceptions may be applied (in the case of trainees attending induction, appropriate exceptions may be 'on night duty' or 'on annual leave').

Once the standards have been decided by all involved, the audit should be registered with the trust's audit department. In some trusts, the audit will need approval from the clinical governance committee before it can proceed. The committee will be able to highlight any potential problems early on.

### Step 5. Choose an audit design

There are several factors to consider in the design of an audit.

#### Will it be a prospective or retrospective audit?

Data can be collected either prospectively or retrospectively and which method is chosen may depend on the resources available, the nature of the audit selected and the availability of guidelines. Table 1 outlines the differences between the two.

#### What information will be collected?

There is often a temptation to collect as much data as possible and 'see what we can do with it'. This is time-consuming and does not add to the quality of the audit. It also contravenes the Caldicott principles pertaining to management of patient information: do not use the information unless absolutely necessary and use the minimum amount necessary (Department of Health, 1997). Although ethical approval is not required to perform an audit, the data collection should still be performed within an ethical framework.

Table 1 Differences between retrospective and prospective audit data collection

|                     | Retrospective  | Prospective   |
|---------------------|--|---|
| Definition          | Data collected after the event,<br>looking back over a period of time  | Data collected forward from a specified time  |
| When<br>appropriate | Following a major incident<br>Where clear guidelines are available   | Where no clear guidelines are available   |
| Advantages          | Most useful in the case of review of<br>critical incidents<br>Can provide a review of practice<br>Can be quicker, as the information is<br>already available | Accurate data which reflect current<br>practice<br>Information readily available<br>Data not available in notes can be<br>captured<br>Audit staff time allocated to analysis<br>of data |
| Disadvantages       | Patients already in contact with<br>service do not benefit<br>Data required may be incomplete  | Requires more data collectors<br>Can be time-consuming  |

Modified from Hardman & Joughin (1998) and Copeland (2005).

The Data Protection Act requires staff not to collect or keep any information about a person or people that is not needed. It is therefore advisable to use an alternative method of identifying patients, for example a file number. This will allow the case record to be reviewed if necessary without jeopardising patient confidentiality. This advice is consistent with the General Medical Council's advice contained in its booklet *Confidentiality: Protecting and Providing Information* (General Medical Council, 2000).

Many trusts are implementing electronic note-keeping systems and these may facilitate data collection as cumbersome sets of notes do not have to be collected and all data are available online.

If the work of professionals is being audited, the aim is to assess quality in general and not to single out any individuals as performing poorly.

The rest of the information gathered should pertain to the standards set in the previous step.

#### How will the data be collected?

Most people use a paper-based audit tool, as this is portable and easily available. The data can then be entered into an electronic database at a later stage for easier analysis. Alternatively, the data could be directly input to an electronic spreadsheet, which would make for a speedier audit. The drawback of this method is that there is no mechanism for cross-referencing in case of errors in data entry.

#### How will the audit sample be selected?

The number of cases selected should be small enough to be manageable and for the data to be collected in a reasonable amount of time (if only to avoid loss of interest) but large enough to be of value. The selection can be time driven or numerical.

If it is decided to evaluate all the events that occurred within a particular time frame, 1–3 months is usually sufficient (Copeland, 2005). An example may be

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all patients seen in out-patient departments between January and March. This is appropriate in situations where a sample population does not remain static.

If it is decided to collect a numerical sample, the number will depend on how common the event (illness, process or treatment) is and how many parameters are being assessed. Table 2 will give an idea of the numbers required (Royal Australian College of General Practitioners, 2008). The clinical governance department will be able to assist with sample size calculations.

|         |        | -        |            |            |                     |
|---------|--------|----------|------------|------------|---------------------|
| Tahla 2 | Number | of caepe | roquirod f | or various | categories of audit |
|         | number | 01 00303 | requireur  | or various | categories of addit |

| Frequency of event | Number of clinical parameters assessed in audit |       |           |  |
|--------------------|---|-------|-----------|--|
|                    | 1–2   | 3–6   | 7 or more |  |
| Common             | At least 50                                     | 20–50 | 5–20      |  |
| Uncommon           | 5   | 5     | 5         |  |

In research there is great emphasis on selecting non-biased samples; this is not always possible in audit, especially where sample sizes are small. Often patient populations are selected who have similarities – similar disorders, treatments or exposure to services. Wherever possible random sampling methods should be used. Each case is assigned a number and a random-number generator can be used to select from the sample (National Institute for Health and Clinical Excellence, 2002). If another method is chosen (every second file, the first files passed on by the medical records department, etc.) this may be acceptable as long as it is clearly documented in the audit report. This will ensure that the repeat audit follows the same method.

### Step 6. Collect the data

Before data collection begins, an appropriate tool should be developed. The tool should reflect the standards being measured. The simplest is a list or table presented on a single A4 sheet. There should be space for each of the following:

- a patient identifier for ease of cross-referencing if needed (this should be a number rather than a name)
- a list of all the standards being measured (ideally with yes/no responses that can be ticked or circled).

This tool should be submitted together with the audit proposal. The clinical governance department may be able to flag up any insufficiencies and the tool will be needed for the process of re-audit.

The tool should ideally be piloted first, to pick up any deficiencies in the pro forma, for example, so that the tool can be corrected before a large amount of data has been collected. This pilot will also give an idea of how much time the data collection is likely to take. Where there are to be two or more data collectors, the reliability of data collection should be checked. Each data collector should independently extract data from the same case records and compare findings.

Any discrepancies should be discussed and consensus reached on how further data will be documented (National Institute for Health and Clinical Excellence, 2002).

It will be necessary to liaise with the appropriate secretary or medical records department if any patient information is needed. Sufficient time should be allowed for within the audit schedule for the records to be delivered.

Each set of data or patient record should be reviewed to ensure that it meets the inclusion criteria.

It is good practice to use one data-collection sheet per individual, clinic or ward.

Set a deadline by which time the data collection needs to be completed. If patient notes are used, try to keep them for as short a time as possible, so that clinical care is not potentially compromised. In any case, an audit is more likely to be completed if it is done in a reasonably short space of time, before any of the data collectors lose interest or move to another job.

The ethical principles mentioned above should be borne in mind in data collection.

### Step 7. Analyse the data

In audit, the aim of data analysis is (generally) to compare how local practice compares with the standards set, or some sort of general level of practice in the area. Data can be analysed directly from the data-collection sheets, but most people will find it easier to enter the data into a computer-based spreadsheet.

Whereas research usually requires complex statistical analysis, audit frequently does not. If an audit does require more complex analysis, the local clinical governance department should be able to provide some support.

Most audits make use of summary descriptive statistics to answer the questions addressed:

- What is typical in our practice? The mean and/or median are likely to show this.
- How often are we meeting the standards? This is likely to be reported in the form of a rate or percentage.
- ▶ How widely does our practice vary? Here, the range will give an indication.

If an audit is being conducted before and after the introduction of a change, statistical tests may be required to demonstrate any true difference, one that cannot be attributed to chance alone.

Once the results of the audit have been compiled, they can be compared against the standards set earlier. It is not possible to foresee all possible outcomes at the outset of the audit. Where standards have not been met, the multidisciplinary team or auditors should discuss with each other in which circumstances it would be appropriate not to meet the standards. This will affect the denominator used; otherwise data will become difficult to interpret. There will be a range of possibilities for expressing the findings:

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- cases meeting criteria / total number of cases
- cases meeting criteria / (total number of cases appropriate exclusions)
- cases not meeting criteria / (total number of cases appropriate exclusions). Careful consideration needs to be given to how the data are presented – for

example as graphs or pie charts – to demonstrate findings more clearly in the report and for the dissemination of findings.

# Step 8. Make conclusions and recommendations

Conclusions are simply the summary of the results and a discussion of how local practice compares against the standards set. Before they make any recommendations, trainees should discuss the findings with their consultants.

In order for change to be implemented, the barriers to change have to be overcome. Grol (1997) recommended the following framework:

- ► The required change should be clearly defined, evidence based and presented in a way that is easy for staff to understand.
- The barriers to change should be identified by staff interview, team discussion and observations of work patterns.
- ▶ The implementation methods that are chosen should be appropriate to the circumstances, the change itself and the obstacles that need to be overcome.
- ► An integrated plan should be developed for the coordinated delivery and monitoring of the interventions. This plan should be described in the sequence in which interventions are to be made.
- ▶ The plan should be carried out, and progress evaluated, with modifications made to the plan or new interventions being introduced as needed.

Any recommendations should be practical and realistic. They should be presented clearly and concisely, to meet the above recommendations.

# Step 9. Disseminate results

#### **Present findings**

The findings of the audit, as well as the conclusions and recommendations, should be presented to relevant parties. The presentation should include an agreed action plan that sets out any changes in practice, the staff training required and changes in standards, especially if they are local standards.

Local teaching sessions or team meetings may be appropriate venues for presenting audit findings and in many trusts there are designated audit sessions. A verbal presentation with the use of a software package like Microsoft's PowerPoint is an appropriate method for conveying the information to a large audience.

A verbal presentation is not a substitute for a written report.

#### Write a report

In order for an audit to be deemed completed by a clinical governance department, it will usually require a full report to be submitted. This report should detail all

the steps of the audit, the standards, results, conclusions and recommendations. As outlined above, a copy of the audit tool should be included. The report should be sufficiently detailed to allow the audit to be repeated by another person in the next phase of the audit.

A copy of an audit report should always be kept in a portfolio, as it will be needed as evidence in annual reviews and appraisals.

#### Get published

It may be appropriate to share the findings with other services. This would be a valuable addition to any curriculum vitae. The simplest way to achieve these ends is with a poster presentation at a local, national or international conference. Each faculty within the RCPsych holds an annual conference with poster presentations. The College's annual meeting also has a display of different posters on each of its 4 days. Some of the RCPsych divisions hold audit competitions for trainees and new consultants and require the submission of an abstract and oral presentation at one of the divisional meetings.

A paper based on an audit is unlikely to be accepted for publication in a journal unless at least one audit cycle has been completed. *The Psychiatrist* (formerly called the *Psychiatric Bulletin*) has published many audits; *Clinical Governance: An International Journal* is dedicated to clinical governance matters, including audit.

### Step 10. Implement change

As outlined above, an audit is unlikely to lead to real change unless the resulting recommendations are clear and practical; furthermore, they should be of benefit to patients through improving clinical care. Be wary of making recommendations simply for the sake of making recommendations.

There is also a tendency simply to add a checklist to complete, within the clinical notes for example. There may be a need to use process improvements as a surrogate for an actual outcome measure, especially where clinical change may be slow or small. Where this is not the case, the outcome should be measured directly and evaluations should not be reduced to a paper exercise.

It is likely that the trust's clinical governance facilitator will be needed to assist in implementing change, as the relevant committees will have to approve of the recommendations.

Interventions can be made at a number of levels. A basic level of intervention would be to disseminate results to service employees, which could be done by scheduling a team presentation or by circulating an electronic audit report. A greater level of intervention for more serious issues could start with the construction of a formal 'action plan'. This process may involve a formal consultation with patients, staff and management. A cost–benefit analysis could be used to analyse the relative benefits of a change in practice.

Berk *et al* (2003) found that recommendations were more likely to be implemented if: they relied on activity across a selection of service areas, rather

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than a single department; they involved mental health service departments (as opposed to non-mental health departments); and they did not require any change in staff attitudes.

In the unusual case of the measured performance meeting all standards, there may be no need to implement change for that particular audit. However, because of the changing nature of organisations, re-auditing of important topics is still recommended, to ensure standards are maintained, particularly in areas where best practice standards are crucial to patient care, for example in monitoring the physical health of psychiatric patients.

### Step 11. Re-audit

Once changes have been implemented, a re-audit can determine whether the performance has improved. This is known as 'closing the loop' or 'completing the cycle'. The term 'audit spiral' is often used for repeat audits as it conveys a dynamic process of ongoing improvements. The process requires regular evaluation to ensure that standards are maintained. If the loop of the cycle is not followed through, the value of the audit as a practical tool is lost. The danger of 'one-off' audits is that best-practice standards are implemented temporarily and then forgotten about, a situation that has been called the 'atrophy and necrosis' phase of an audit (Hatton & Renvoize, 1991).

In order for the re-audit to be of value, there must be adequate time for any changes to be implemented. Six months may be sufficient if practice is meeting standards or only minor recommendations were made. Where a change in policy is recommended or there are multiple changes to be made, a delay of 12–18 months is likely to be appropriate.

If a good audit protocol and report have been prepared, a different individual can complete the re-audit. Trainees in most regions will be expected to complete a full audit loop by the end of their training. The establishment of a service-wide audit group can increase the number of audits in which the cycle is completed (Dogra, 2003).

Studies have shown that audits are not always carried out according to the full processes described above, thus not conforming to robust audit methods or established good practice (Greenwood *et al*, 1997; Nettleton & Ireland, 2000). One of the most common pitfalls is a failure to close the audit loop and re-audit.

# References

- Berk, M., Callaly, T. & Hyland, M. (2003) The evolution of clinical audit as a tool for quality improvement. Journal of Evaluation in Clinical Practice, 9(2), 251–257.
- Copeland, G. (2005) A Practical Handbook for Clinical Audit. NHS Clinical Governance Support Team.
- Department of Health (1997) The Caldicott Committee Report on the Review of Patient Identifiable Information. Department of Health.
- Dogra, N. (2003) Auditing audit. Clinical Child Psychology and Psychiatry, 8(1), 27–35.

Donabedian, A. (1966) Evaluating the quality of medical care. *Milbank Memorial Federation of Quality*, **44**, 166–208. General Medical Council (2000) *Confidentiality: Protecting and Providing Information*. GMC.

Greenwood, J. P., Lindsay, S. J., Batin, P. D., et al (1997) Junior doctors and clinical audit. Journal of the Royal College of Physicians of London, 31(6), 648–651.

Grol, R. (1997) Beliefs and evidence in changing clinical practice. BMJ, 315, 418–421.

Hardman, E. & Joughin, C. (1998) FOCUS on Clinical Audit in Child and Adolescent Mental Health Services. RCPsych. Available at http://www.rcpsych.ac.uk/publications/books/rcpp/1901242234.aspx (accessed October 2010).

Hatton, P. & Renvoize, E. B. (1991) Psychiatric audit. *Psychiatric Bulletin*, **15**, 550–551.
Hearnshaw, H. M., Harker, R. M., Cheater, F. M., *et al* (2003) Are audits wasting resources by measuring the wrong things? A survey of methods used to select audit review criteria. *Quality and Safety in Health Care*, **12**, 24–28.

Maxwell, R. J. (1984) Quality assessment in health. BMJ, 288, 1470-1472.

National Institute for Health and Clinical Excellence (2002) Principles for Best Practice in Clinical Audit. Radcliffe Medical Press.

Nettleton, J. & Ireland, A. (2000) Junior doctors' views on clinical audit – has anything changed? International Journal of Health Care Quality Assurance, 13, 245–253.

Royal Australian College of General Practitioners (2008) *Clinical Audit – Application Guide*. Available at http://www.racgp. org.au/Content/NavigationMenu/educationandtraining/QACPD/20082010Triennium/20082010TrienniumProgramforGPs/ GPformsandguides/docs/20082010ClinicalAuditApplicationGuide.pdf (accessed October 2010).

Vasanthakumar, V. & Brown, P. M. (1992) Audit spiral. Quality in Health Care, 1(2), 142-143.