

A Guide to Clinical Audit – Appendix 7

by Stephen Ashmore, Craig Chanter and Tracy Johnson.

What is Clinical Audit?

In its most basic form, Clinical Audit is improving the care of patients by looking at what you are doing, learning from it, and, if necessary, changing practice. This is not anything new; it is something that most health professionals – including pharmacists – have done for a long time now as part of every day practice.

The first Clinical Audit was allegedly undertaken by Florence Nightingale during the Crimean War in the middle of the nineteenth century; she was able to virtually eliminate patient mortality rates from British Army hospitals by measuring, monitoring and using her influence to implement sanitation measures in field hospitals. From the 1990s and ever increasingly, Clinical Audit should be viewed as an integral part of working practice, hence the audit requirements of the Pharmacy Contract. It is a means of quality assurance, ensuring that the best possible service to patients and customers is offered, and that the risk of errors are minimised.

The Principles for Best Practice in Clinical Audit document defines audit as: **“a quality improvement process that seeks to improve patient care and outcomes through systematic review against explicit criteria and the implementation of change”**.

A more basic definition of clinical audit is: **“ensuring best practice by reviewing what we are doing, compared to what we should be doing”**

The Community Pharmacy Contract and Clinical Audit

The community pharmacy contract states –

“Pharmacists and their staff should participate in clinical audit – at least one practice-based and one PCT determined multidisciplinary audit (to aid the development of team working) each year. The PCT must give reasonable notice to allow the pharmacist to leave the premises to participate in any local meetings relating to multidisciplinary audit. Both audits must have a clear outcome which will assist with developing patient care. The two audits should be capable of being completed within five days of pharmacist time” Clearly, clinical audit is here to stay and all pharmacists need to familiarise themselves with the process and undertake regular clinical audit projects.

Getting started with audit

The process of Clinical Audit is often described as the “Audit Cycle” as it follows a continuous cycle of quality improvement, most often represented by the image below:



There are six stages of the commonly-accepted audit cycle, each of which are detailed as follows:

1. Problem or objective identified

The first stage of any audit is to identify a problem or objective. As audit is a quality improvement process it should focus on problem areas where there is room for improvement. When choosing your audit topic you should ensure that the audit focuses on patient care, that it is a priority within the team, that data is accessible, and that likely changes can be systematically implemented. Audit topics should not be selected purely on the basis of a professional’s personal interest or expertise. If possible all team members should be encouraged to suggest audit topics as this promotes ownership within the organisation, facilitates team cohesion, and makes the team more amenable to implementing changes which will improve quality.

2. Criteria agreed and standards set

Criteria and standards are two pieces of clinical audit terminology that many healthcare professionals commonly misunderstand. A criterion can be defined as *“an item of care or an aspect of practice that we wish to examine”*. Criteria are written as individual statements that spell out an example of best practice which should be happening within day-to-day operations. An example of a criterion relevant to pharmacists would be:

Drugs supplied to patients should be in date

A standard can be defined as *“the success level that you would expect or evidence dictates should be achieved”*. Standards are written in percentage terms. An example of a standard that would be relevant to pharmacists is:

100% of drugs supplied to patients should be in date

Another good example of criteria and standards is one used in non-clinical practice by the Royal Mail: First class letters should reach their destination within 24 hours (criterion), 92.5% (standard). Criteria and standards should be evidence-based (where possible) and clearly

defined. If there is no evidence to suggest what criteria and standards apply to a particular area of practice once a topic has been identified, they should be decided by consultation with all team members participating in the audit project. It is advisable that the number of criteria and standards within an audit project are kept to a minimum: normally one or two are enough for a successful audit.

3. Audit – data collection

Data collection involves the retrieval of information in order to determine whether the criteria and standards are being achieved. Data collection can be carried out in many different forms, most commonly, retrieval of information from paper-based or electronic computer records. Clinical audit data needs to be relevant, accurate and representative. To ensure that data collection meets these criteria, most effective data collection exercises use a simple data collection form or specifically-designed questionnaire. A common flaw in designing data collection forms is to include too many questions. Make sure the data collection process doesn't collect information which isn't relevant to the agreed criteria and standards identified in the previous stage of the audit cycle.

Another important aspect of data collection is performance of a pilot – i.e. a small (five to ten questionnaires) "trial" of the data collection tool. This quickly establishes the effectiveness of the tool, and should go a long way to identifying any potential problems.

4. Analysis – Identifying areas for improvement

Data analysis involves the interpretation of clinical audit data that has been retrieved. Data analysis will inform how your practice and performance compares to the agreed standards. Data analysis will identify areas of over and underperformance.

There are various methods for analysing audit data. These range from sophisticated computer packages to more traditional tally chart methods. There is a common misconception that you have to be a statistician to carry out clinical audit analysis. In most instances audit data can be reported in the form of frequency counts and percentages using the most basic worksheet and graphical functions in Microsoft Excel. Analysis of

audit data in its basic form traditionally consists simply of counting either "yes" or "no" responses, and in this way calculating the percentage of incidents which meet the criteria, and thus comparing this result to the standards identified in stage two of the audit cycle.

Audit results should be shared with team members to encourage all staff to help advise on the change process and to increase staff involvement in the project. It is good practice to feedback these results to patients as well as staff involved in the audit.

5. Make necessary changes

Analysis of data in step four of the audit cycle will identify areas of underperformance that require improvement. Necessary and achievable changes should be implemented with a view to ensuring that the delivery of healthcare is improved and standards are met.

Changes tend to relate to the particular circumstances, but commonly audits lead to further training for staff, introduction of guidelines and protocols and/or development of new ways of working, etc. Effective change management involves good communication and ensuring that all team members are included in the process – ideally from the very outset of the audit project. It is advisable that changes are planned and documented in an action plan to determine responsibilities, actions, and timescales. It is also important to ensure that change is systematic – i.e. it becomes integrated into existing working practice and isn't some kind of unusual practice that will disappear immediately once the audit project is complete.

6. Re-audit

The re-audit phase completes the audit cycle and links back to the first stage of the cycle, i.e. problem or objective identified. Re-audit involves collecting a second set of data and analysing the results to determine whether the changes made in the previous step of the audit cycle have been effective and whether or not they have improved care.

Re-audit should be carried out between 3-12 months after all changes have been implemented and the data collected must be comparable to that of the first data collection – i.e. number of

samples and type of question should be comparable. In most cases this can be ensured by using the same data collection form for both the first and second data collections.

Ideas for Audit Projects

Most topics and processes can be audited, although some audits are easier than others to undertake. Here are a selection of audits that you may consider relevant to you:

- Out of Stock Drugs (Owings Audit)
- Patient Knowledge of Emergency Contraception
- Prescription Waiting Times
- Near Misses
- Completeness of Patient Medication Records
- Repeat Prescriptions
- Dosage Instructions for Patients

Where to access help

Royal Pharmaceutical Society

The Royal Pharmaceutical Society of Great Britain website contains example audits that pharmacists may find useful. More information can be found via www.rpsgb.org.uk

Exeter University

For information on significant event audit, Exeter University's website is an excellent and valuable resource – www.projects.ex.ac.uk/sigevent/

Centre for Pharmacy Post Graduate Education

CPPE provide a variety of learning opportunities on clinical governance. These include workshops on clinical effectiveness, audit and record keeping and risk management – www.cppe.man.ac.uk

Appendix 7

Six Tips for Carrying Out A Successful Audit Project

1. Start small

If you have limited knowledge and experience of clinical audit, it is advisable that the first audit that you undertake is small and relatively uncomplicated. Keep the number of audit criteria to a minimum and only collect relevant data. Avoid the temptation to extend the audit process by collecting 'interesting data'.

2. Get everyone involved

Clinical audit is most effective when it is carried out as a team activity. All staff should be asked to suggest topics for audit and staff should be made aware of audits being carried out and the results of each audit using feedback meetings, publications and/or posters. It is also advisable to appoint an audit leader to direct and oversee individual audit projects.

3. Make sure your audit is not a research project

Many NHS professionals struggle to grasp the difference between clinical audit and research. Research involves finding out what is best practice, for example, carrying out randomised control trials and data collections to establish which drugs, interventions and services benefit patients.

Clinical audit involves a collection of data to see if best practice (as defined by research) is being carried out. If you are collecting audit data without defined criteria and standards, it is likely that you are actually carrying out research.

4. Ensure that the data you collect is statistically significant

The community pharmacy contract states that *"two audits should be capable of being completed within five days of pharmacist time."* This does not mean that audits undertaken should only focus on data relating to five working days. In order for your audit to be representative and valid, sufficient data is required.

5. Be realistic and aim for continuous improvement

Audit is a quality improvement process and should be viewed as a mechanism for gradually improving patient care. Staff must be realistic when it comes to undertaking audit. Good audits take time to carry out and improvements rarely occur overnight. Properly undertaken, clinical audits should be systematically established and become an integral part of working practice.

6. Make clinical audit help you!

Although clinical audit is essentially about identifying weaknesses and improving patient care, audit can often be used as a mechanism for improving your own situation – not least for identifying areas of practice where you and your team are performing excellently. Audit is a well established process by means of which pharmacists can change practice to their own advantage and improve the service that they provide.