



PROFESSIONAL DEVELOPMENT

Clinical Audit

By

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WHAT IS CLINICAL AUDIT?

It is defined as: *"a quality improvement process that seeks to improve patient care through systematic review of current practice against explicit standards aiming at implementation of change"*

Clinical audit isn't the only activity that carries the 'audit' tag in medical worlds. There are financial, internal and organizational audits. However, all forms of audit share much common territory, for example:

1. They all involve examining, evaluating and reporting on findings
2. They are all concerned with ensuring things are done the best way
3. They can all examine the use of resources
4. They all involve time, effort and careful planning
5. They all involve comparing practice with standards

One important difference between clinical audit and other forms of audit is that the clinical audit process is (ideally) owned by healthcare professionals such as surgeons, physicians, and nurses as: they carry out the audit, they discuss results and make improvements to practice, etc. The other forms of audit, to a greater or lesser extent, involve someone coming in to 'audit'. Therefore, clinical audit is a specific form of audit that involves measuring clinical practice against standards. An audit within the clinical setting is not necessarily a clinical audit project.

CLINICAL AUDIT versus RESEARCH

"Research is concerned with discovering the right thing to do; audit with ensuring that it is done right"

Research is about creating new knowledge about what works and what doesn't. It provides the foundations for national and/or local agreement about the kind of clinical treatment and care we should be providing, i.e. helps to answer the question "what is best practice?"

Clinical audit asks whether we are doing the things we have agreed we *should* be doing or achieving the outcomes we have agreed we should be achieving, i.e. it answers the question "are we following agreed best practice?"

Research and audit projects may look very similar: what differentiates them is purpose. For example, a piece of research may examine outcomes of a particular form of surgery in order to arrive at a conclusion about what represents best practice. A clinical audit project might look the same, but the purpose would be to see if a recommended surgical method was producing the expected outcomes.

Research is about obtaining new knowledge; about finding out what is best practice. Clinical audit is about quality; about finding out if best practice is being followed.

Similarities between clinical audit and research

1. both aim to answer a specific question relating to quality of care
2. both can be carried out either retrospectively (looking at historical data) or prospectively (collecting data as care is given)
3. both involve careful sampling, questionnaire design and analysis of findings

Differences between clinical audit and research

Research	Clinical Audit
Creates new knowledge	Tests care given against knowledge gained from research
Is based on a hypothesis	Measures against standards
May involve experiments on patients and / or volunteers and will usually require submission to a Research Ethics Committee (REC) for ethical approval	Should never involve anything beyond normal clinical management. Abides by an ethical framework but doesn't usually require ethical approval
May involve random allocation to different treatment groups, including placebo	Never involves random allocation or placebo treatment
Usually carried out on a large scale over a prolonged period	Usually carried out on a relatively small population over a short time span
Rigorous methodology - power calculations for sample sizes, statistical tests etc	Different methodology from research - less need for large sample sizes and statistical significance of results
Results are generalisable and hence publishable, influencing the activities of clinical practice as a whole	Results are only relevant locally, influencing activities of local clinicians and teams.

The interface between Clinical Audit and Research

Without research we won't know what clinically effective practice is; without audit we won't know whether it is being practiced. More specifically:

1. Clinical audit can be legitimately viewed as the final stage of a good clinical research programme
2. Alternatively research could be viewed as a precursor to the clinical audit process
3. Research can identify areas for audit
4. Audit can pinpoint areas where the research evidence is lacking
5. The audit process assists with the dissemination of evidence-based practice

For example, Research might ask:

"What is the most effective way of treating peptic ulcers?"

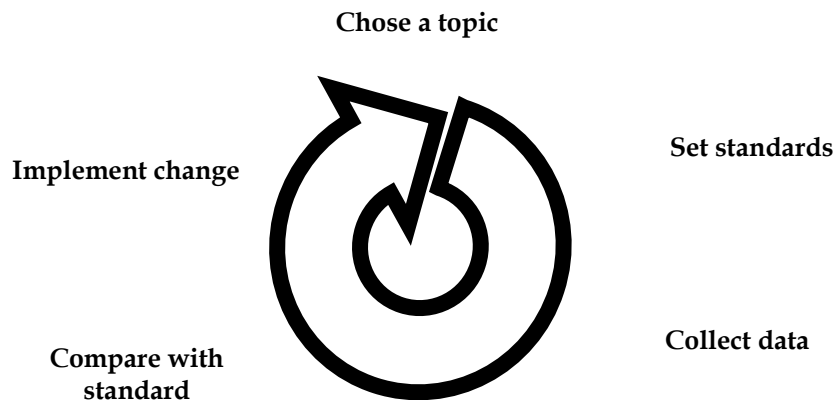
Clinical Audit would then ask:

"How are we treating peptic ulcers and how does this compare with accepted best practice?"

The piece of research would involve measuring outcomes as a way of finding out what the best treatment is. The audit would measure process (are we doing the things we should do?) but might also look at outcomes, in this instance to monitor the success of a treatment which is known to work, rather than to find out whether it works (a subtle but important difference).

HOW TO DO A CLINICAL AUDIT

Audit is formed as the following essential steps:



1. Choosing the audit topic
2. Defining the standards
3. Measuring current practice
4. Comparing current practice with standards
5. Changing practice
6. Re-auditing to make sure practice has improved

This process is known as the audit cycle.

UNDERTAKING A CLINICAL AUDIT PROJECT

1. CHOOSE AN AUDIT TOPIC

Projects usually focus on measuring adherence to healthcare processes (investigations, treatments or procedures) that have been shown to produce the best outcomes for patients. As resources for carrying out audit are limited, all topics chosen should be deemed to be important. A simple guide could be based on:

1. An identified **problem** (e.g. from complaints or adverse incidents)
2. **High volume, high risk or high cost** areas of practice
3. Published **evidence about clinically effective treatment**
4. The availability of **clinical guidelines**

Audits should not be undertaken simply because "it might be interesting to know whether...."

2. FORM AN AUDIT TEAM

Audits are generally described as being either unidisciplinary or multidisciplinary. If your audit has implications for professions or disciplines other than your own make sure they are consulted at the planning stage. If your audit is looking at the patient journey across different care sectors try to include staff representatives from these other organizations in your audit team. It is important that your project is supported by colleagues who have the authority and commitment to see any necessary changes as indicated by the audit results put into practice.

3. SET AUDIT OBJECTIVES AND STANDARDS

What are you trying to achieve with this project? Decide what your overall purpose is in doing this project and write this as either a statement that best expresses what you want to happen as a result of the audit, or a question that you want your audit to answer. Then consider what steps you will need to take to achieve this overall purpose and write as either a series of tasks or as different aspects of quality that your audit will focus on. Collectively these form your audit objectives.

Audit standards define the level of performance we compare with in order to find out whether we are doing what we should be doing, and should relate to your audit objectives. Standards should be evidence-based that means they should be derived from best available, most up-to-date evidence of what constitutes best practice.

First identify any standards that already exist, in the form of local or national evidence-based guidelines. If no guidelines (preferably recent) exist you will need to undertake a literature search, to identify best practice.

In either case, it is important to ensure there is consensus agreement with your standards locally before you audit – you will find it hard to improve practice without an agreement about what best practice is!

4. SELECT AN AUDIT SAMPLE

You are probably interested in a defined group of people who share certain characteristics: most typically having the same medical condition, or having received the same form of treatment. In an ideal world you would audit the care received by all your audit population, however this can be impractical. In most audits a 'snapshot' sample will be sufficient - this should be small enough to allow for rapid data acquisition but large enough to be representative of your population.

5. PLAN AND CARRY OUT DATA COLLECTION

The data you should collect is only what is required to measure practice against the audit standards. Any extra data means more time spent on your project without any additional benefit.

Is your audit going to be retrospective (looking back at what has happened in the past) or are you going to collect data prospectively (at the time care is given)? Is data going to be collected using an audit form or entered directly onto a computer?

Before you rush out and collect data for all your patients, take time to do a **pilot audit**. The purpose of the pilot is to try out your data collection tool on a small sample to make sure that it works - especially if someone else is going to be collecting the data for you. The pilot may reveal that some of your questions are ambiguous, that the form is difficult to complete or that you are simply not getting the information you wanted. Pilot audits take time but can save a lot of frustration later on!

6. ANALYSE YOUR DATA

Pull your data together in the most meaningful way and compare your results with your standards. How well have the standards been met? What were the reasons for failure to meet the standard in some cases?

7. PRESENT YOUR FINDINGS

Present your findings to colleagues and at this time agree an action plan:

1. Do we need to change practice?
2. Do local guidelines need to be updated?
3. Do staff need training/re-training?

8. WRITE A REPORT

It is important to write up your findings in a report as an official record of the project, ensuring sufficient detail is provided to enable the audit to be repeated in the future. The report should include an agreed upon action plan for implementing practice improvement based on the audit findings.

9. IMPLEMENT CHANGES AND RE-AUDIT

If an audit shows practice to be in need of improvement, making changes is important. Note that not all changes will be improvements - don't make changes for change's sake. Only change issues that you are sure will lead to improvement in practice. At an appropriate time, repeat the audit (re-audit) to ensure that changes have been implemented and that practice has improved.

10. GET PUBLISHED?

You may have produced an excellent piece of work that others would benefit from, so consider sharing your project externally by way of getting it published in a professional journal.

Editors are more likely to be interested in your piece of work if the methodology or lessons learned are generalisable - in publishing audit, it is the methodology that people can learn from, rather than the results (which won't usually be generalisable, like research).