# How to carry out a clinical audit project

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#### What is Clinical Audit?

It is, "A quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and 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 health care delivery" [1].

#### Why should clinicians conduct Clinical Audit?

It is expected of junior doctors in training to engage with quality improvements through the process of Clinical Audit by the United Kingdom General Medical Council, the Postgraduate Medical Education and Training Boards and the Royal Colleges [2]. It is vital for Trainees to undertake an Audit as this is often asked about in interviews for jobs. Besides it is an important practice to engage in Audit in order to contribute towards delivery of quality health care in the Department.

The basis of Audit is to improve bad systems, not finding bad people. Hence Clinicians should not shy away from having their work audited, either by themselves or by peers.

## **Proposed Audit Methodology**

#### a. The Audit Standard

Once you have chosen a topic to be audited, agree an Audit criterion such as, "All patients admitted through the Emergency Ward must have all observations carried out at admission". The target may be 100%, but it is unrealistic to set such a high percentage target since some people may not have their investigations for some reason. Hence a realistic target would be 95%. The third component of the Audit Standard is "exceptions". Exceptions are valid reasons for non-compliance with the criteria set for the Audit. This may include death on admission or perhaps refusal to have the investigations carried out. The fourth and last component of the Audit Model is "definitions".

You explain in brief detail what the observations to be carried out on admission are, where you get this

Table 1.	The differences between clinical audit and
research	[3]

Research	Audit
<ul> <li>Process which involves the scientific verification of a predicted, but not necessarily proven relationship between or among variables.</li> <li>It contributes to scientific knowledge about what constitutes appropriate care.</li> <li>Larger samples often needed in research studies.</li> </ul>	<ul> <li>Systematic peer evaluation of the quality of patient care based on explicit and measurable indicators of quality of care.</li> <li>Aimed at demonstrating and improving quality of patient care.</li> <li>Samples used are often small and collected by less rigorous methods.</li> </ul>

information from and within what period of time the observations should be carried out. This section is very important for non-clinical Audit Data Collectors who may be standing in for a Clinician. They need to know in explicit terms what to collect.

#### b. Data collection

Define the period within which the Audit will be carried out, for example, January 2013 to June 2013 inclusive. Contact the Medical Records Department and retrieve all notes within that period. Design a simple Audit Collection Form such as is shown in Table 3, and run the each Audit Criterion against each set of clinical notes. If a particular patient meets the criteria put a tick against each of the observations predefined in the Audit. Those who do not meet it will get a cross. The number of those who have met each criterion are added up and a percentage of all audited clinical notes are calculated. If this percentage is less than 95% it means that the Audit Criterion has not been met for this particular Audit.

#### c. Results

The ages of the patients, gender, the number of observations that have met the criteria and those that have not will be displayed as either bar or pie charts.

#### d. Recommendations

A set of recommendations is then drawn up by the Auditor and his or her Supervisor to inform those working in the Emergency Department, for example, about the importance of carrying out observations on all patients admitted to the Unit. The results of the Audit

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Table 2.	Audit standard	model used	l in	practice
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Criterion	Target	Exceptions	Definitions & Instructions.
All patients admitted to the Emergency Department must have observations made and recorded.	95%	<ol> <li>Death on admission.</li> <li>Refusal to have observations carried out.</li> </ol>	Observations include body core tempera- ture, pulse, BP, oximetry reading and nutritional as- sessment

may be presented to the hospital or to the Emergency Department in order to convey the essential message about the quality of care in this particular area of Clinical Practice. A poster may be made with the results of the Audit and the recommendations, disseminated throughout the Hospital in order to inform all healthcare professionals of the suggested changes. A date should be set for a re-audit to see whether the message contained in the recommendations has bedded into clinical practice.

#### e. Conclusions

- Audits are aimed at detecting "bad" systems, not bad people.
- Hospital Administrators, Managers, Clinicians, Patients and Patient Interest Groups, may be involved in Audit.
- Audit is not research.
- Develop an Audit Standard Model to facilitate the Audit process.
- Identify someone to see through the changes recommended by the Audit.



Figure 1. Audit cycle adapted from reference 1

Audit Criteria	Met (tick)	Not Met (tick)	Comments

• Re-audit in order to complete the Audit cycle (see Figure 1).

## Audit Data Collection (Table 3)

#### References

- 1. Principles of best practice in clinical audit. London 2002. National Institute of Clinical Excellence, www.nice.org. uk.
- 2. Tasker F, Thomson K, How to set up an Audit. BMJ Careers DOI 2012.
- 3. Smith R. Audit and Research. BMJ 1992; 305: 905 6.