

Clinical Audit

Dr Suman Shree R

MBBS, MD, DNB (ANAE), PGDHHM, PGDMLS, PGDYTD

Department Of Anaesthesiology, Nethradhama Super Speciality Eye Hospital

Introduction

Clinical audit is a key component of the clinical governance framework in an Eye Care Organisation (ECO).¹ It allows organizations to continually work towards improving quality of care by showing them where they are falling short, allows them to implement improvements, and re-audit or close the audit cycle to see if beneficial change has taken place.² It provides an opportunity to benchmark their services against the good clinical practice guidelines endorsed in evidenced based medicine. The clinical audit can be a pilot study in nature with either retrospective or prospective design. The organization needs to take care to differentiate clinical audit from research projects, see Table1.^{3,4}

Address for correspondence:

Dr Suman Shree R
Nethradhama Super Speciality Eye Hospital,
No.256/14, Kanakapura Main Road,
7th Block, Jayanagar,
Bangalore-560 070.
Email: papillondr@gmail.com

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Research	Clinical Audit
May involve experiments based on hypothesis	Audit never involves experiments and involves measuring against preexisting standards /guidelines
Systematic investigation	Systematic review of current practice
Involve Random allocation	Never involve random allocation
Could be new treatment	Never involves a completely new Rx
Creates new knowledge about effectiveness of Rx approaches	Answer the question "are we following best practices?"

Definition

Clinical audit is a quality improvement process that seeks to improve patient care and outcome through systematic review of care against explicit criteria and the implementation of change.^{5,6}

Aim

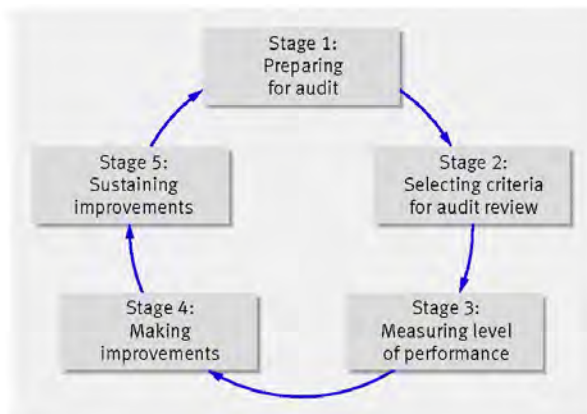
To measure the gap between ideal practice (determined from evidence/guidelines) and actual practice. Critical analysis of skills (self-improvement) and the system that delivers patient care (environment).⁷

The Clinical Audit Cycle

It can be described as a cycle that follows a systematic process of establishing best practice, measuring care against explicit criteria, taking action to improve care and monitoring to sustain improvement.⁸

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Different stages involved in Clinical audit, see Figure 1.



Stage 1. Preparing for audit and selection of topic

- Project management includes topic selection, planning, resources and communication
- Project methodology includes design, data issues, practicality, stakeholder involvement and provides support for local improvement.
- Selection of audit team-Multi disciplinary team including doctors, optometrists, nurses, pharmacists and hospital administrators.

Audit components

The quality of eye / health care provided can be audited by examining three interrelated components - structure, process, outcome.⁵

Structure: Physical attributes of health care, the setting and resources required.

- Environmental Factors (Physical Space)
- Personnel (adequacy, skill)
- Equipment (safety and calibration), medical records (completeness)

Process: Care given by a practitioner / service

- Actions and decisions taken by clinical practitioners together with users

Examples: Red eye management, post-operative pain management.

Outcome: Changes in patient’s current and future vision / health status as a result of intervention.

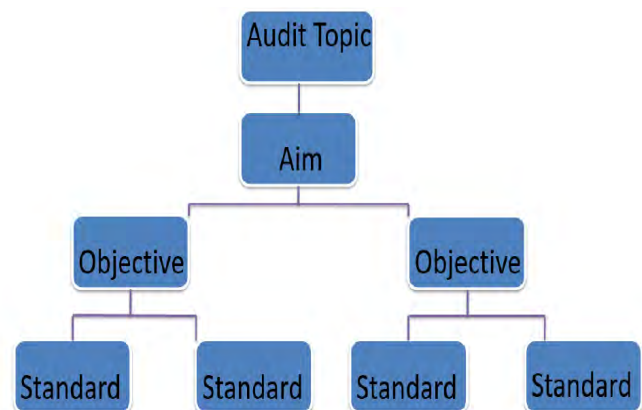
- Describe effectiveness of care

Example: visual outcome after cataract surgery, eye pressure control.

Choosing an Audit topic

- Topic should be well defined, focused and amiable to standard setting.
- It can be local clinical concern or known wide variance in clinical practice.
- It can be any good-practice guidelines / algorithm issued by a professional or governmental body
- It can be on any sources of information like voice of customer (VOC) –feedback, critical/adverse incident reports, direct observation of care etc.

Stage 2: Selecting Standard Criteria see Figure 2



Defining The Aim/Purpose: Once the topic for the clinical audit has been selected, the purpose or aim of the project must be defined, so that the suitable audit method can be chosen. The aim can be written as a statement about what you want to be happen as the result of the audit.⁵

The following series of verbs may be useful in defining the AIM of an audit.

- To improve
- To enhance
- To ensure
- To increase

Define The Objectives: Objective is the steps that need to be taken in order to assess whether or not the aim has been achieved. The objectives can be different aspects of quality that the project will address.

The Clinical audit project focuses on

Appropriateness- right treatment provided to right patients

Timeliness- treatment provided on time

Effectiveness- was the treatment given in the right way

Each AIM can have 2 objectives

Setting Standards: A standard is an explicit criteria statement describing the quality of care to be achieved, which is objective, definable and measurable. To be set prior to study. Each objective should have two standards.⁵

Standard = Target + Criterion

(% to be achieved) [Statement of what is being measured + Yardstick (Measurement boundary)]

Target: is expressed as a percentage and defines the level of performance considered acceptable and practical in relation to the chosen criterion.

Criterion: Sure aspect of care that can be used to assess quality.

Yardstick: Indicates the boundaries of the measurement (eg: time frame)

Exceptions/Exclusion is the justifiable reasons for not proving the level of care specified.

Example: Topic: Code Blue Drill / CPR mock drill.

AIM: To improve the resuscitation preparedness during code blue drill.

Objectives:

1.To ensure the timely initiation of CCLS

Standards

1. a. In 100% of the code blue drills a member of the rapid response team in each floor will initiate chest compression within 1 min from collapse.

1.b. In 100% of the code blue drills. The code blue team with defibrillator will arrive within 2 mins.

2.To ensure the steps of CCLS algorithm are appropriately executed.

Standards

2 a. In 100% of the code blue drills. The sequence of resuscitation steps shall be documented in Real-Time.

2b. In 100% of the code blue drills. The variations in code blue mock drill shall be analyzed and CAPA implemented within 2 weeks.

Stage 3 Measuring the Level of Performance

Plan data collection based on inclusion criteria with any exceptions noted. The time period of the clinical audit study depends on the number of cases treated on daily basis and the number needed to make a confident judgment of care provided.⁵

Sampling-with scientific approach. Process based clinical audit projects usually involve "snapshot" sample of roughly 20-50 cases.

Type of Data Analysis is to be identified at an early stage, as it influences both the type and amount of data collected.

Comparing with Standards Set

The final part of the analysis will entail calculating the percentage of cases meeting and not meeting each standard. Discussion with colleagues about specific cases may

highlight some situations in which it is considered clinically acceptable for standards not to be met.

Interpretations

- a) Deficiency of care recognized
- b) Specific solutions are proposed.
- c) Education impact is appreciated
- d) Planned programme for change
- e) All staff are involved
- f) Active feedback
- g) Audit is evaluated

Stage 4. Making Improvements

Communicating the Findings: The first in making improvements is communicating the findings to relevant stakeholders. A combination of passive feedback (written information) and active feedback (discussion of findings) is preferable when communicating the findings of the report.⁵

Action plan components (Kipling Method- 5W's and 1H)

- **Who** needs to take these actions
- **What** needs to change
- **When** the proposed actions will begin
- **Where** change could be achieved
- **Why** change is necessary
- **How** these actions will be monitored for effective implementation

Clinical audit is recognized as an effective means of changing clinical practice to bring about improvements in patient care, management and outcome.¹¹

Clinical audit report - Basic content

1. Title page/slide – Name of the organization, project title, project leads, date of report

2. Background - evidence base
3. Aim, objective and standards-overall purpose, individual steps and quantifiable statements
4. Methodology- population, sample size, prospective or retrospective, time period, data collection method
5. Results- to be presented
6. Conclusions- list key points that flow from the results
7. Action plan- the recommendations after presentation to be either accepted or revised. If required re-audit to confirm improvement
8. References- literature/source of evidence
9. Appendices- a copy of the data collection form to be included in appendix.

Stage 5. Sustaining Improvements

- Monitor and evaluate the change.^{8,12}
- Maintain and reinforce the change
 - Reinforcing or motivating factors built in by the management to support the continual cycle of quality improvement
 - Integration of audit into the organization wider quality improvement systems
 - Strong leadership

The benefits of Clinical audit to healthcare professionals, patients and organization are highlighted in Table 2.

HEALTH CARE PROFESSIONALS	PATIENTS	ORGANIZATION
Workable standards	Improves quality care & service	Improved care of patients
Resolves problems	Prompt changes in delivery of care	Enhanced professionalism of staff
Improves team work & communication	Highlights precise patient needs	Efficient use of resource
Increases knowledge & skills	Involves patient in decision making	Aids in continuing education
Identify Training need	Raises patients confidence in service & care levels	Aids in administration
Measure quality in current practice	Clarity about care and risks involved	Accountability to those outside the profession

Conclusion

- Clinical audit is not just a data collection exercise
- Involves measuring current patient care and outcomes against explicit audit criteria/standards
- Expected to improve practice with evidence.
- Document clinical audit report
- Implement action plan
- Reaudit to confirm improvement.

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Conflicts of interest

There are no conflicts of interest.

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