

# PHC

432 Team

## 10 Introduction to clinical audit



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## Objectives

1. What is Medical Audit
2. What is the difference between audit & research
3. What are the benefits of Medical Audit
4. How Medical Audit is done
5. How the data is presented

## **What is medical audit?**

“method used by health professionals to:

- *Assess*
- *Evaluate &*
- *Improve (the main target)*

... the care of patients in a systematic way to enhance their health and quality of life”.

## **Benefits of Medical Audit:**

- Reducing errors
- Improve efficiency / effectiveness
- Demonstrating good care
- Meeting patients' needs / expectations
- Stimulating education
- Bidding for resources
- Effective defense

## **Types of Audit:**

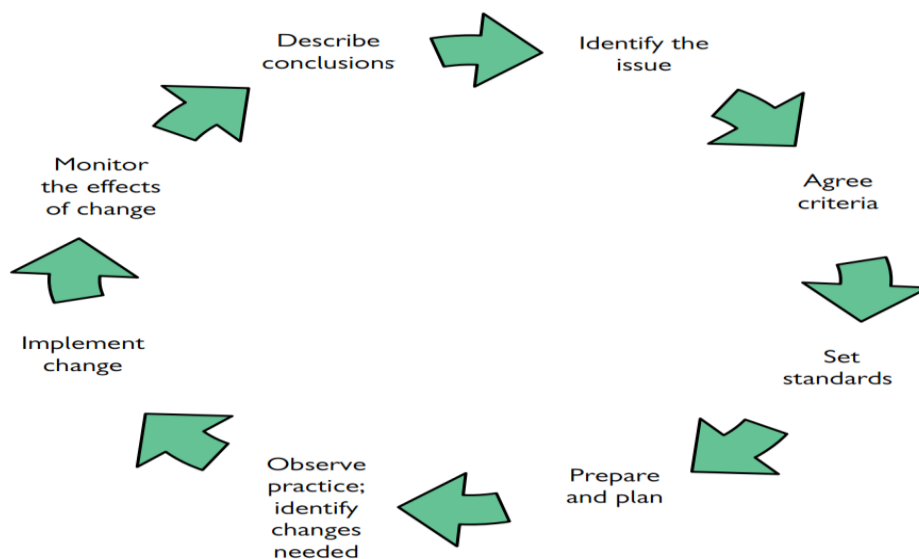
- Self Audit
- Peer Audit (Done by someone who is at the same level of the specialty)
- External Audit (Done by external 'independent' organization)

## A framework for assessing care:

Audit requires a framework in which the **description, measurement, comparison and evaluation** of the quality of health care can be made. Three constituents of quality are: **(important)**

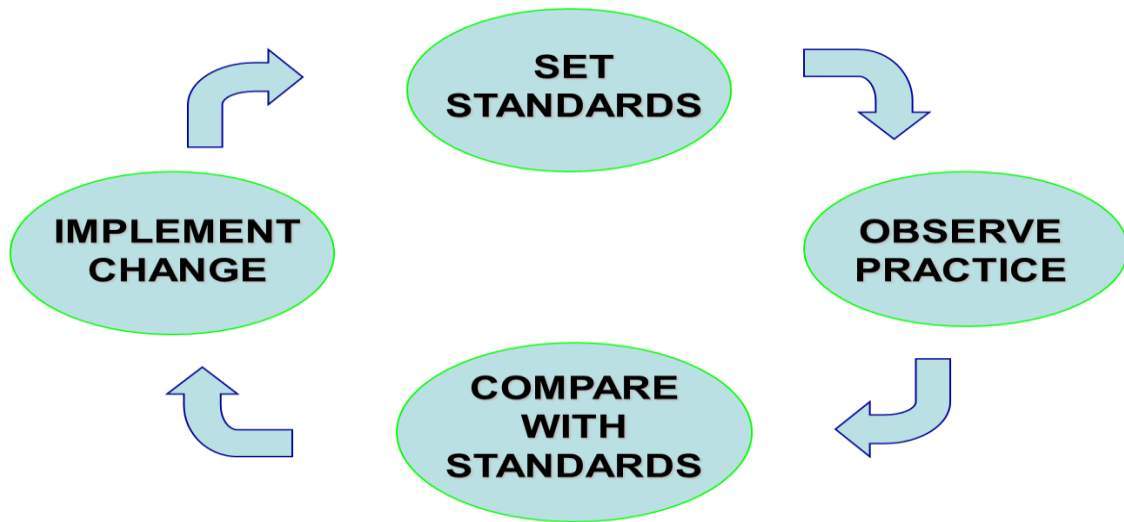
- 1- **Structure:** This includes the physical facility, equipment, and human resources.
- 2- **Process:** It is the sum of all actions that make up healthcare. These commonly include diagnosis, treatment, preventive care...etc
- 3- **Outcomes:** Contains all the effects of healthcare on patients or populations.

## The audit cycle:

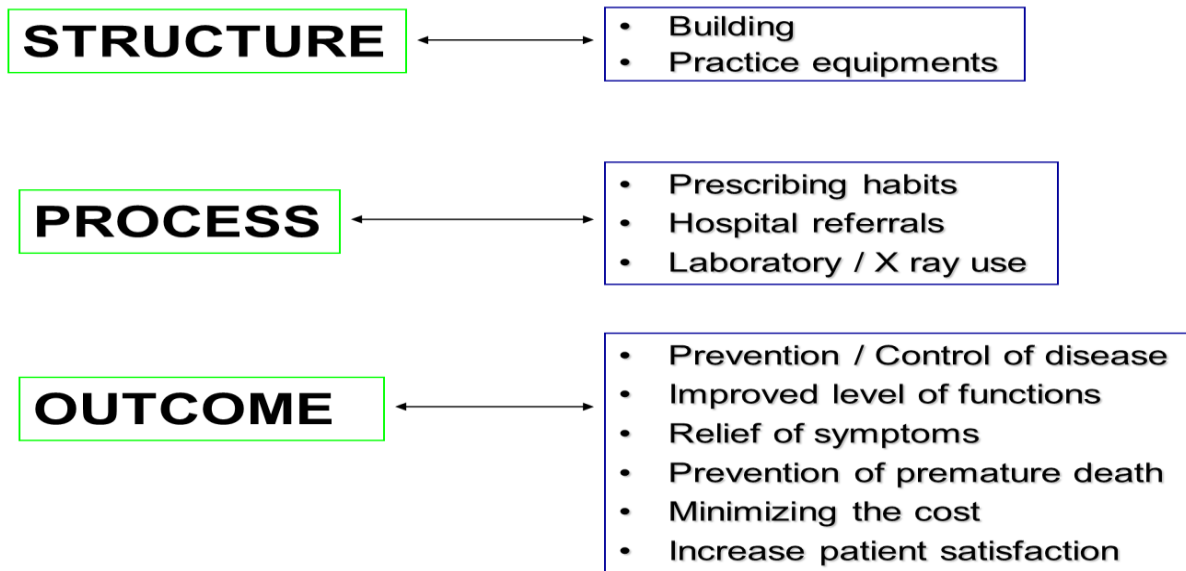


**Figure 4.3** The audit cycle

# Audit Cycle



## Scope of Audit



## Criterion and Standards

الفرق مهم جدا – اصل من فرع

The term '*criterion*' is used to describe a definable and measurable item of health care which describes quality, and which can be used to assess it.

– Example:

- Females of susceptible age should be immunized against rubella.
- All children requesting attention for acute problems will be seen on the same day.

## Criterion and Standards

A '*standard*' describes the level of care to be achieved for any particular criterion.

– Example:

- Females of susceptible age should be immunized against rubella. The standard might specify that 98% of the female population at risk should receive protection.

	Criterion	Standards
<b>Structure</b>	Patients' records will include summary cards.	Should apply to 50% of records.
<b>Process</b>	All patients attending outpatient clinics will have complete nursing assessments.	This should apply to: 50% - year 1, 75% - year 2, 95% - year 3,
<b>Outcome</b>	Patients with established HTN will have a diastolic level less than 90 mm Hg with in the first year of treatment.	The target level will be achieved in 80% of cases.

**Structure:**

- The term 'structure' describes the physical attributes of health care, **such as the building, equipments, the number of and kind of persons in the team, and the patient records.**
- Common sense suggests that health care is likely to be more effective if it is carried out in comfortable surroundings with the right equipments and by the most appropriate people.

### **Process:**

- 'Process' describes the care given by a physician (health care team) i.e., **what the practitioner does, the sum of actions and decisions that describes a person's professional practice.**
- Doctors and nurses tend to identify the process of care with quality because it describes what they do for their patients; it reflects their attitudes, knowledge and skills.
- **Unlike structure, the process of care usually relates directly to the benefits patients derive as a result of care.**

### **Intermediate Outcomes:**

- It describes measures that lie between true process and the definitive outcome. They are easier to measure yet they predict, or are assumed to predict, definitive outcome.
- **Example: The immunization rate is the sum of each injection given (process), which is easy to measure, yet it has an excellent predictive value**

### **Outcome:**

- Outcome is the change in a patients' current and future health status that can be attributed to antecedent health care.
- Outcomes are therefore the definitive indicators of health; they describe the effectiveness of care. For example, did the patient survive a potentially fatal condition, or were the effects of a potentially disabling condition prevented or alleviated?
  - **For example, did the patient survive a potentially fatal condition, or were the effects of a potentially disabling condition prevented or alleviated?**



### **Audit Questions - Examples:**

- Are the waiting times for hospital outpatient appointments acceptable?
- What are the complication rates of a particular type of surgery?
- Are the consultants to whom patients are referred kind and considerate?
- Which groups of patients are attending follow-up clinics unnecessarily?

### **The use of resources:**

- It is important to decide on the maximum level of resources a team is prepared to commit to an audit.
- In doing this it is also important to ensure that **the subject examined is appropriate** to the skills and resources available.
- Resources can be divided into several categories: **time, money, people.**

### **Ground rules for choosing an audit subject:**

Is the subject chosen:

- **likely to benefit patients and the practice?**
- relevant to professional practice and development?
- significant or serious in terms of the process and outcomes of patients care?
- **having potential for improvement?**
- capable of holding the interest and involvement of team members?
- likely to repay the investment of time, money and effort involved?

## **Planning an audit: 10 guidelines**

1. Define the nature of the perceived problem.
2. Produce a clear written statement of aims.
3. Select the most appropriate method.
4. Decide upon other basic design features.
5. Identify the main analysis to be made.
6. State who the audit will involve.
7. Start small.
8. Have a short time-scale.
9. Proceed step by step.
10. Indicate how the possible need for change is to be handled.

## **Data Sources:**

- Routine practice data
- External data : any source printed internationally like researches – and legal complains imp
- Medical records
- Practice activity analysis
- Prospective recording
- Surveys
- Interviews
- Direct observation
- Confidential enquiries

## Data collection grid

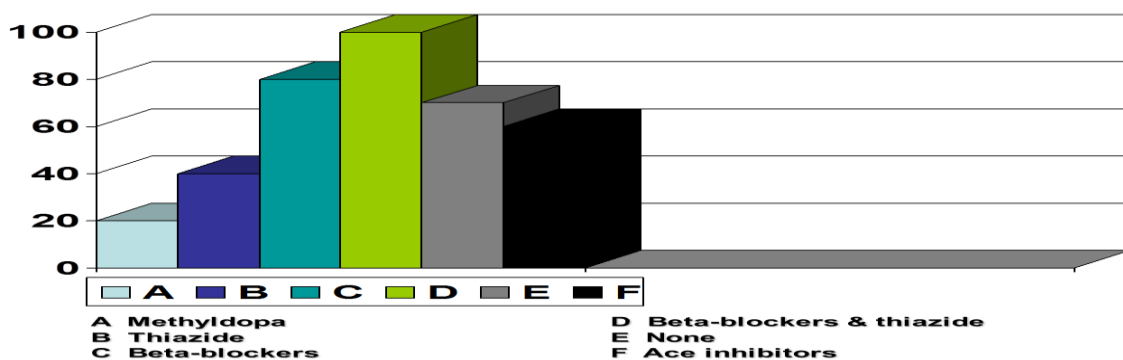
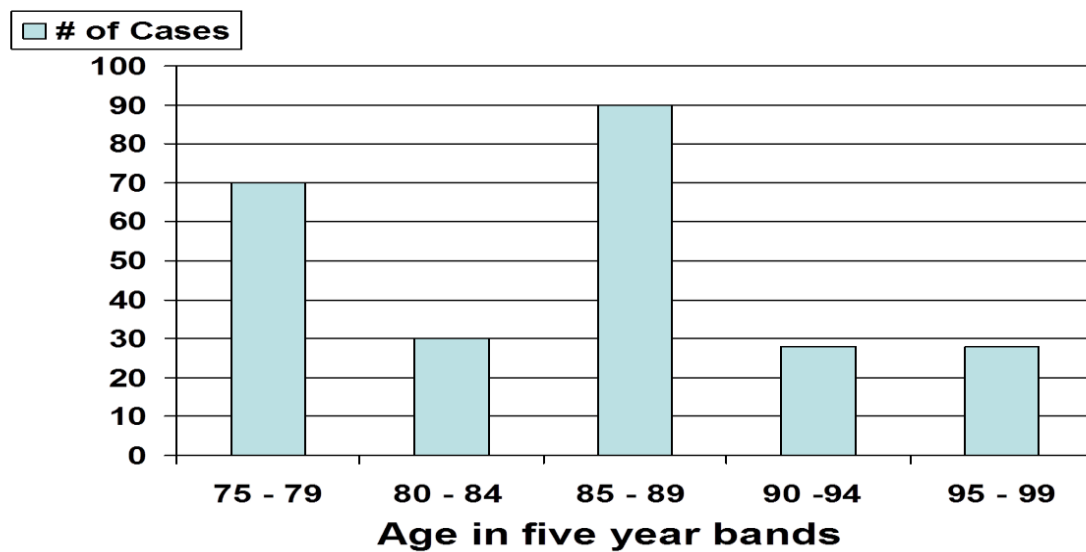
	1	2	3	4	5	→ 20
	Age	Sex	Drug	Marital Status	BP recorded	
Case 1	94	M	A	S	Y	
Case 2	90	M	B	W	Y	
Case 3	87	F	C	M	N	
↓						
40						

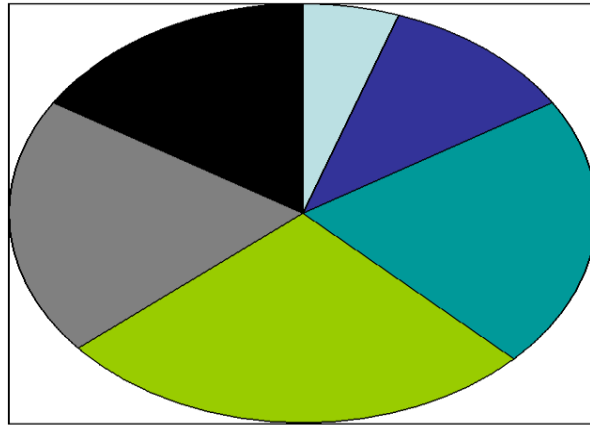
## Data presentation card

Age (years)	Married	Single	Total	BP recorded	Antihypertensive prescribed
75 – 79	9	3	12	13	0
80 - 84	4	2	6	10	1
85 – 89	3	7	10	2	1
90 – 94	2	6	8	1	0
95 – 99	1	3	4	2	
Total	19	21	40	28	2

## Presentation of data:

- The analysis of data produces results that need to be converted into information which the practice team can understand and to which they can relate
- Trends or insights must be presented in a visual way that communicates the information effectively.





**A** Methyldopa  
**B** Thiazide  
**C** Beta-blockers

**D** Beta-blockers & thiazide  
**E** None  
**F** Ace inhibitors

## Summary

- **Medical Audit is** “Method used by health professionals to *Assess, Evaluate and improve (Main target)* the care of patients in a systematic way to enhance their health and quality of life”.

### **Benefits of Medical Audit:**

- Reducing errors
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### **Types of Audit:**

- Self Audit
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### **A framework for assessing care:**

- Audit requires a framework in which the **description, measurement, comparison and evaluation** of the quality of health care can be made.

### **Three constituents of quality are: (important)**

- **Structure:** This includes the physical facility, equipment, and human resources.
  - **Process:** It is the sum of all actions that make up healthcare. These commonly include diagnosis, treatment, preventive care...etc
  - **Outcomes:** contains all the effects of healthcare on patients or populations.
- 
- **Criterion and Standards definitions:** go page 5
  - **Planning an audit: 10 guidelines:** go page 9
  - **Data Sources:** go page 9

## Questions

1) A primary care registrar performs a clinical audit on the medical records of a patient seen by another primary care registrar:

- a. External audit
- b. Institutional audit
- c. Peer audit
- d. Self-audit

2) You have been asked to organize the assessment and evaluation on the prescribing habits of the doctors working in your clinic. Which one of the following categories of medical audit will be involved in performing this task?

- a. Intermediate outcome
- b. Outcome
- c. Process
- d. Structure

### **432 PHC Team Leaders**

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#### **Answers:**

1st Questions:**C**

2nd Questions:**C**