

## Role of Medical Audit in Health Care Evaluation



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### History

The concept of quality assurance has been replaced by 'Medical Audit' which is dependent on retrospective study of medical records. Initially the quality assessment techniques were performance appraisal, statistical quality control, than the terms like quality assurance, continuous quality assurance, continuous quality improvement and now total quality management (TQM), just in time (JIT) and zero deficit day are in vogue especially in industrial set up. Japanese were first to introduce successfully quality systems in their organisation after world war II. The names of Kaizen, Theguchi & Deming are well known as they are considered to be quality management 'Gurus'. Later the concept was taken by U.S.A & other countries. The Crossby - zero deficit model is also very popular in quality circle.

The concept of medical audit has acquired two different interpretations. In one it is seen as the collection of numerical clinical data for evaluation through peer review against a background of predetermined criteria. The other supported by general medical council takes more educational approach and emphasises the assessment by individual doctors of their own clinical practice.

People learn best when they are helped to define their own problems, acknowledge and accept their strength and weaknesses, decide on a course of action and evaluate the consequences and their decisions.

"Medical Audit" is a planned programme which objectively monitors and evaluates the clinical performance of all practitioners, which identifies opportunities for improvement, and provides mechanism through which action is taken to make and sustain those improvements.

### NEED FOR MEDICAL AUDIT

1. **Professional motives**—Health care providers can identify their lacunae & deficiencies and make necessary corrections.
2. **Social motives**—To ensure safety of public and protect them from care that is inappropriate, suboptimal & harmful.
3. **Pragmatic motives**—To reduce patient sufferings and avoid the possibility of denial to the patients of available services or injury by excessive or inappropriate service.

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## PURPOSE OF MEDICAL AUDIT

1. To plan future course of action, it is necessary to obtain baseline information through evaluation of achievements for comparison purpose with a view to improve the services.
2. It is regulatory in nature ensuring full & effective utilisation of staff and facilities available.
3. Assess the effectiveness of efficiency of health programmes & services put into practice.

## PHASES OF MEDICAL AUDIT

Observations in Britain and overseas suggest that the introduction of medical audit is divided into four phases. In the first (Philosophical) phase the debate is whether doctors should be involved, in the second (organisational) phase who should lead and what resources are required, in the third (practical) phase what should be audited and exactly how, and in the fourth (invasive) phase ideas on audit are disseminated through publication and education.

## PRE REQUISITES FOR MEDICAL AUDIT

1. Hospital operational statistics
  - (a) **Hospital resources** : Bed compliment, diagnostic and treatment facilities, staff available.
  - (b) **Hospital utilisation Rates** : Days of care, operations, deliveries, deaths, OPD investigations, laboratory investigations etc.
  - (c) **Admission Data** : Information on patients i.e. hospital morbidity statistics, average length of stay (ALS), operation morbidity, outcome of operation etc.
2. The procedure of collection and tabulation of hospital statistics should be standardised.

3. Primary source of this data is medical records, hence accurate and complete medical record should be ensured.
4. A well trained Medical Record librarian should be present for carrying out quantitative analysis.
5. Hospital planning and research cell should be established at state level to tabulate and analyse data, with recommendations for improvement.

## METHODOLOGY

- (a) **Indirect** : Considers the \* '**Structure**' factors that influence efficiency of medical care e.g staff, equipment, physical facilities and material supplies.
- (b) **Direct** : Considers the \*\* '**Process**' & \*\*\* '**Out come**' factors i.e. qualitative & quantitative analysis of data from medical records.

\* **Structure** : Measurement concerned with scientifically planned and designed physical facilities, qualified and expert staff, proper job specification and contents, clearly defined duties and responsibilities, appropriate machines and equipment for making diagnosis and treatment and giving sound material management (Man, Machine and Supplies).

\*\* **Process** : Measures what a provider does to and for a patient (e.g. ordering ECG for patient with chest pain) It also means the 'way' a patient is moved through a medical care systems, either in macro or micro sense. The process criteria can be evaluated by outcome of procedures like standard of cleaning, reports and statistics of patients cured or indirectly by assessing equipment breakdowns, false laboratory tests, infection rates, development of bed sores, and patient dissatisfaction etc.



Some of the modern scientific management guidelines under medical audit are :

- (a) Nursing audit
- (b) Death review
- (c) X -Ray review
- (d) Tissue or surgical review
- (e) Medical case sheet review
- (f) Utilization review committee
- (g) Blood utilization committee
- (h) Infection control committee
- (i) Medical education committee etc.

\*\*\* **Out come** : reflects what happened to the patient in terms of palliation, treatment, cure or rehabilitation. It is expressed primarily as the result of medical treatment vs patients pre-hospitalisation state of health.

#### EVALUATION OF QUALITY OF CARE

It comprises of three things :

- (a) Quality of technical care.
- (b) Quality of art of care.
- (c) Administrative support enabling doctors to practise 'a' & 'b'.

It is very difficult to assess the quality of care. It is done at times through various hospital indices.

**No norms/criteria or performance indicators have been developed in our country.**

- (a) **Technical care** : can be assessed by adequacy of diagnostic and therapeutic processes.
- (b) **Art of care** : Manner and behaviour of provider in delivering care and communication with patient. A doctor is expected to know not only how to treat a patient but also treat dying patient.

- (c) **Administrative support** : Planning, organising & directing all resources for patients care to maximise productivity towards better patient care based on evaluation report.

#### ROLE OF HOSPITAL ADMINISTRATION IN MEDICAL AUDIT / QUALITY ASSURANCE

- (a) To facilitate and provide good working environment.
- (b) To provide physical facilities, resources and smooth supply.
- (c) To motivate to enable the medical care providers to work enthusiastically.
- (d) To attend patient complain, grievances by grievance redressal committee.
- (e) To edit & monitor media coverage/press notes.
- (f) Patient satisfaction surveys to reveal the grey areas.
- (h) To conduct exit interview & make changes as suggested.
- (i) To frame clear cut objectives & policies.

There should be quality assurance/ Medical Audit Committee in the hospital consisting of :-

- Chairman - Senior faculty (Director/Principal)
- Member secretary - Medical Superintendent
- Members - 1 or 2 representatives of hospital administration
- 1 or 2 representatives from clinical departments.
- Nursing representatives

The function of quality assurance/ Medical Audit committee shall be co-ordination, information, planning search for expertise & follow up.



### Conclusion

Thus medical care evaluation or medical audit is evaluation of medical care by clinicians through medical records. There should be set norms and standard laid down procedures for the various functions carried out in the hospital. The purpose of medical audit is self education, concurrent and future planning, evaluation, research and forestalling external audit. This needs to be introduced in all the hospitals of the country by trained experts gradually by motivating clinicians and administrators at all levels.

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