

Clinical Audits are Critical for the Care in Emergency Department

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Abstract

Globally, emergency medicine is an essential and fundamental division of healthcare system of healthcare facility of any country. The discipline of emergency medicine has confronted with significant challenges since beginning to its successful establishment in many countries and these encounters continue.

The emergency department is one of the key departments of hospital in healthcare delivery system. It is an entry point for the patients who require urgent and critical care to arrive hospital and get served. Worldwide, the emergency departments face with issues of overcrowding and budget constraints. The overcrowding is associated with increased incidence of some adverse outcome. Sustaining quality healthcare in emergency department is very critical and a challenge. Audits in healthcare are quality improvement measures and one of the seven basic pillars of clinical governance. Various types of audits are carried in hospitals to promote and uphold improvements in quality in healthcare services for example internal audit, external audit, clinical audit.

Clinical audit is one of the most valuable instruments to warrant safety of the patients and improve quality of care by measuring clinical outcome or process against explicit standards and established criteria of evidence-based medicine. Clinical audits are a cycle with six key steps; identify a problem, set standards/criteria, collect data, analyze data, implement change and re-audit.

Clinical audits with re-audits are vital for quality improvement in delivering safe and effective care to the patient in emergency department. For sustaining quality in care in emergency department, quality improvement through process of audit and re-audit is essential.

Keywords: Audit; Clinical Audit; Emergency Department; Healthcare; Hospitals; Quality Improvement

Introduction

Emergency medicine (EM) is an indispensable, basic and essential section of healthcare system of any healthcare institution of any country world over [1].

The emergency department is the face of any healthcare system. In other words, it is a first place of contact for many patients to meet their most urgent and serious health needs when they are intensively sick [2].

Maintaining a quality in patient care in emergency department is very critical. Assessment of quality in emergency care provided to the patients and improvement in care are of paramount significance for the daily emergency clinical practice and health policy planning. Various tools have been developed, for example incident analysis, health technology assessment and clinical audit for assessing the quality

of care in medicine. Clinical audit, a part of the continuous quality improvement process measures a clinical outcome or a process against set standards based on the evidence [3].

Emergency Department (ED)

The emergency department is one of the crucial departments of hospital in healthcare system. It is a gateway for the patients who require urgent care to enter the hospital and get served. ED is among the main areas of hospital care and the specialty of healthcare of intensive public and political focus. Patients and families perceive and believe ED an important place for the best and quality care to be available to them. If the patients and visitors get satisfied from the services of ED; this create a positive image of the hospital in the mind of the community of catchment area and powerful impact of its services on general public too [1,2,4].

In both developed and developing countries ED face with problem of overcrowding and budget constraints. The overcrowding is associated with increased incidence of some adverse outcome. The discipline of EM has faced significant challenges since its inception to its successful establishment in many countries [1,5-8].

Audit

The word "Audit" has a Latin origin. It is derived from word *audire* (audio) means to listen or hear. It indicates both active listening and the action of investigation and interrogation of the judiciary. Audit is "an official inspection of an organization's accounts, typically by an independent body" [3,9].

Currently, the term audit is generally used in different settings. It refers to procedures or processes intending to ensure and confirm that the activities carried out for a specific purpose are consistent, coherent, effective and successful for the accomplishment of objectives [3].

Audits in hospitals

Audits in healthcare are a quality improvement measures or gauges. These are one of the seven fundamental pillars of clinical governance. The audits are done for continual service improvement in medicine [4,10].

Different types of audits are generally carried in hospital care to promote and foster quality improvements in services [11].

Generally, three types of audits are done in hospitals [11-14]:

1. External audits: These are used to gain insight into hospitals' compliance with external criteria (for example accreditation, certification, external peer reviews).
2. Internal audits: These are often done for the preparation for an external audit.
3. Clinical audits: These are carried out on a voluntary basis by healthcare professionals for continued service improvement.

Clinical audit

Clinical audit is one of the most valuable tools to ensure the safety of patients and improve the quality of healthcare. This is a part of the continuous quality improvement (QI) process. It measures a clinical outcome or a process against well-defined standards and established principles of evidence-based medicine (EBM) [3,15,16].

Clinical audits differ from other types of healthcare audits as they are mostly initiated and done by healthcare professionals. This process takes place continuously as part of everyday routines in some of the institutions [11,17,18].

Clinical audits are a cycle with six important steps [3,10]:

1. Identify a problem (choose the audit topic)
2. Define or set standards/criteria
3. Collect data
4. Analyze data
5. Implement change (intervention)
6. Re-audit (check improvement or effectiveness).

Clinical audit has been a validated tool at all levels, from local hospitals to national hospitals. The task can be accomplished through appropriate design and meticulous preparation. An audit is complete only if re-audit takes place regularly on specified time interval. Clinical audit is in fact an investment in the quality of the services provided by the healthcare institution [15,16].

Certain factors categorically facilitate the clinical audit like clarity of design, appropriate data collection method, decent planning, support of institution, dedicated and devoted staff and collective analysis of the results. The scarcity of resource, increased workload, ambiguous methodology, lack of organizational support, reluctance to transform are likely the obstacles for conducting audit [3].

Clinical audit in emergency department

Clinical audits with re-audits are crucial for quality improvement in providing safe and effective care to the patient in ED. Providing highest standard of care in ED, most of the countries have developed quality framework for care to be provided in the ED of their hospitals. In this article, we very briefly outline the “quality framework for emergency departments” developed by Australasian College for Emergency Medicine especially on audits. The framework focuses on five fundamental areas i.e. clinical profile, research profile, education and training, administration profile, and professional profile. Audits are included as subareas of clinical profile. The audits include clinical audits, audit of procedural complications, audit of medical imaging, audit of pathology and audit of medication errors [19].

Audit team of health professionals has to identify the problems and then focus on particular problem. For example, in the ED, the triage process is the first point to examine the patients and document the patient’s data [4,20].

Clinical audits cycle with reference to emergency department is mentioned below [10]:

1. Identifying a problem in emergency department: For example, patients waiting too long in emergency department for triage.
2. Defining standards/criteria: For example, guidelines recommend that all patients should wait less than 15 minutes for triage.
3. Collect data: For example, record for a week “how long patients wait for triage” (determined that 80% of patients wait for less than 15 minutes).
4. Analysis of data: For example, 80% versus 100% target, areas for improvement to achieve 100% target.
5. Implementing change: For example, action plan to help reach 100% target.
6. Re-audit: For example, perform step 1 - 5 again.

Difference between clinical audit and research [21,22]

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

Conclusion

A clinical audit is a quality improvement process to improve patient care and outcomes with regard to review of patient care systematically against explicit criteria, implement change and assess its effectiveness. It focuses at identifying lacunae in the system. Providing standard quality care in emergency department is crucial and rewarding for the healthcare professionals and institution. For sustaining quality in care in emergency department, quality improvement through process of audit and re-audit is an essential.

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