CLINICAL AUDITS: A WAY TO IMPROVE CLINICAL OUTCOMES

What is a clinical audit? Wikipedia defines a clinical audit as "a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change".

Basically, it is a review (or audit) to ensure that the objectives of a given intervention or process are achieved, providing, at the same time, a framework enabling improvements to be made. In essence, the clinical audit process seeks to identify areas of improvement in clinical outcomes.

Once identified, actions to improve these clinical procedures are undertaken, which then have to be re-audited to ensure that the implemented changes had an effect. As part of a clinical audit, clinical outcome or processes are measured against well-defined standards, guided by the available literature and set on the principles of evidence-based medicine.

Historically, one of first clinical audits was undertaken during the Crimean War (1853–55) by the voluntary nurse Florence Nightingale.

She was concerned by the unsanitary conditions and high mortality rates among injured and ill soldiers. Florence applied strict sanitary routines and hygiene standards to the military hospitals in which she served. She was also a talented statistician, keeping meticulous records of the mortality rates among hospitalized soldiers. Following her clinical interventions the mortality rate fell from 40% to 2%.

Clinical audits have since been formally incorporated into the healthcare systems of several countries, beginning with the United Kingdom's National Health Service (NHS) in 1993, with the aim of improving the standard of clinical practice.

A clinical audit can be described as a cycle of stages following the systematic process of establishing best practice by measuring against defined criteria, taking action to improve care, and monitoring improvements.

STAGE 1: IDENTIFY THE PROBLEM OR ISSUE

This stage involves the selection of a clinical issue to be audited, and is likely to involve measuring adherence to healthcare processes that have been shown to produce best outcomes for patients, or can be related to a concern that has been raised.

STAGE 2: DEFINE CRITERIA AND STANDARDS

A series of statements or tasks that the audit will focus on will form the audit criteria. These criteria are explicit statements that define what is being objectively measured based on the best available evidence. These allow compliance with best practice to be monitored statistically.

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STAGE 3: DATA COLLECTION
Sample sizes for data collection are often a compromise between the statistical validity of the results and pragmatical issues around data collection.

STAGE 4: COMPARE PERFORMANCE WITH CRITERIA AND STANDARDS
The data collected are compared with the established criteria and standards. This reveals how well standards are being met, and enables the identification of reasons why standards have not been met.

STAGE 5: IMPLEMENTING CHANGES AND RECOMMENDATIONS
Once the results of the audit are known, recommendations for changes have to be given.

RE-AUDIT: SUSTAINING IMPROVEMENTS
After an agreed period, the audit should be repeated. The same strategies for identifying the sample, methods and data analysis should be used to ensure comparability with the original audit. The re-audit should demonstrate that the changes have been implemented and that improvements have been made. Further changes may then be required, leading to additional re-audits.

I am pleased to announce that in the interests of furthering best practice dissemination, papers on clinical audits will also be considered for publication in Clinical Trials in Dentistry.

In other news, in July we heard that Clinical Trials in Dentistry has finally been indexed in SCOPUS. We are currently awaiting similar confirmation from both PubMed and Web of Science.

Happy reading.

Marco