

EBP Step 5. Evaluation

HealthConnect International
Irina Ibraghimova
ibra@zadar.net
2009

Evaluation Approaches

- Self-evaluation
- External evaluation

Self-evaluation

- Evaluating performance in asking answerable question
- Evaluating performance in searching
- Evaluating performance in critical appraisal
- Evaluating performance in integrating evidence and patients values
- Evaluating performance as teachers
- Evaluating performance in continuing professional development

Self-evaluation in Asking Answerable Question (1)

- Am I asking any clinical questions at all?
- Am I asking well-formulated (3-4 part) questions?
- Am I using a "map" to locate my knowledge gaps and articulate questions?
- Can I get myself unstuck when asking questions?
- Do I have a working method to save my questions for later answering?
- Is my success rate of asking answerable questions rising?

Self-evaluation in Asking Answerable Question (2)

Am I modeling the asking of answerable questions for my learners?
Are we incorporating question asking and answering into everyday activities?
How well am I guiding my learners in their question asking?

Self-evaluation in Finding the Best External Evidence

Am I searching at all?
Do I know the best sources of current evidence for my clinical discipline?
Have I achieved immediate access to searching hardware, software and the best evidence for my clinical discipline?
Am I finding useful external evidence from a widening array of sources?
Am I becoming more efficient in my searching?
Am I using MeSH headings, Limits, and free text when searching MEDLINE?
How do my searches compare with those of research librarians ?

Self-evaluation in Critical Appraisal of Evidence

- Am I critically appraising external evidence at all?
- Are the critical appraisal guides becoming easier for me to apply?
- Am I becoming more accurate and efficient in applying some of the critical appraisal measures? (Such as likelihood ratios, and NNT)
- Am I creating any CATs?

Self-evaluation of Integrating Critical Appraisal in Practice

- Am I integrating my critical appraisals into my practice at all?
- Am I becoming more accurate and efficient in adjusting some of the critical appraisal measures to fit my individual patients?
- Can I explain (and resolve) disagreements about management decisions in terms of this integration?
- Have I conducted any clinical decision analyses?
- Have I carried out any audits of my diagnostic, therapeutic or other EBM performance?

Self-evaluation in Teaching EBM

- Am I helping my trainees learn how to ask answerable questions?
- Am I teaching and modeling searching skills?
- Am I teaching and modeling critical appraisal skills?
- Am I teaching and modeling the generation of CATs?
- Am I teaching and modeling the integration of best evidence with my clinical expertise and my patients' preferences?
- Am I developing new ways of evaluating the effectiveness of my teaching?
- Am I developing new EBM educational material?

Self-evaluation of Continuing Professional Development

- Am I a member of an EBM-style journal club?
- Have I participated in or tutored at one of the workshops on how to practice or teach EBM?
- Have I joined the evidence-based health e-mail discussion group?
- Have I established links with other practitioners or teachers of EBM?

External Evaluation

- Clinical decision analyses
- Clinical audits

Clinical Decision Analyses

- Provide a formal structure for integrating the evidence about beneficial and harmful effects of treatment options with the values or preferences associated with these effects
- Use formal, mathematical approaches to analyze decisions faced by clinicians in the course of patient care
- Address global questions of health care policy
- Are built as decision trees

Decision Tree

Decision Tree with Probabilities

Clinical Audit

- Definition
- Types
- Cycle

Definition



Clinical audit is 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. Aspects of the structure, processes, and outcomes of care are selected and systematically evaluated

against explicit criteria

Types of audit

- Generic
- Problem-specific
- Activity-specific

Audit Cycle

Stage One: Preparing for Audit

- Involving users in the process
- Topic selection
- Defining the purpose of the audit
- Providing the necessary structures
- Identifying the skills and people needed to carry out the audit, and training staff and encouraging them to participate

Stage Two: Selecting Criteria

- Criteria can be classified into those concerned with:
 - Structure (what you need)
 - Process (what you do)
 - Outcome of care (what you expect)

Stage Three: Measuring Level of Performance

- To make sure that the data collected are precise, and that only essential data are collected, certain details about what is to be audited must be established from the outset. These are:
 - The user group to be included, with any exceptions noted
 - The healthcare professionals involved in the users' care
 - The time period over which the criteria apply

Stage Four: Making Improvements

Change can occur at different levels:

- Organizational change
- Group change
- Individual change

Barriers to Successful Audit

- lack of resources
- lack of expertise in project design and analysis
- lack of an overall plan for audit
- poor relationships between professional groups or agencies and within teams
- organizational problems, such as lack of a supportive relationship between clinicians and managers

Factors That Promote the Success

- Sound leadership
- A conducive/supportive organizational environment
- Structures and systems to support audit, including mechanisms to make data collection easier
- A well-managed audit program
- Addressing a range of issues important to the trust and individual clinicians
- Giving adequate attention to all stages of audit

Stage Five: Sustaining Improvement

Any systematic approach to changing professional practice should include plans to:

- Monitor and evaluate the change
- Maintain and reinforce the change

Evidence-based Information Cycle

<http://www.cche.net/info.asp>

ASSESS clinical or policy problems and identify key issues;
ASK well-built questions that can be answered using evidence-based resources;
ACQUIRE evidence using selected, pre-appraised resources;
APPRAISE the validity, importance and applicability of evidence that has been retrieved;
APPLY evidence to clinical or policy problems.

EBM Readiness Assessment

- Eskinid Biomedical Library's "Evidence Based Knowledge Portal"
- questionnaire for health care professionals
- questionnaire for information professionals
- free registration
- *<http://www.mc.vanderbilt.edu/biolib/ebmportal/>*

References

- Strauss Sh., et al. Evidence-Based Medicine: How to Practice and Teach EBM. 2005
- Users Guides to the Medical Literature: Essentials of Evidence-Based Clinical Practice. 2002
- Principles for Best Practice in Clinical Audit. National Institute for Clinical Excellence. 2002
http://www.nelh.nhs.uk/nice_bpca.asp