

## Section 4 Evidence Component

### Appraising Evidence Part 2:

#### Appraising Individual Pieces of Evidence

##### Overview

The goal of this session is to introduce participants to principles and steps of critical appraisal.

##### Objectives

- Describe the steps for critically appraising evidence.
- Identify resources and tools for critical appraisal.
- Appraise different types of evidence.

##### Key Points

- To critically appraise means to judge quality and applicability. *Quality* refers to the believability and trustworthiness. Level of quality is usually judged using a ranking scale such as “Poor, Fair, Good” or “Low, Moderate, High”. *Applicability* refers to whether the evidence applies to a patient or group of patients.
- Critical appraisal is the process used to judge evidence quality. Critical appraisal involves the following steps: (1) Identify individual pieces of evidence by type; (2) Evaluate individual pieces of evidence for quality; (3) Synthesize the body of evidence based on quality, quantity and consistency; and (4) Assign the body of evidence a grade representing its overall strength.
- No matter what type of evidence is being considered, it is essential to use pre-established criteria to assess quality. These criteria have been established systematic reviews, clinical guidelines, research (based on the design of the study), QI, and EBP projects.
- The quality of other types of evidence is primarily based on the confidence one has in the origin or source.
- A number of forms/tools and resources are available to help with critical appraisal (see handout for a partial listing). The appraisal team should select tools that are user friendly, clear and logical.
- To reduce individual subjectivity and bias, critical appraisal is done by an appraisal team or group, not just one person. It is essential that at least two people independently read and appraise each piece of evidence.
- This module links to ONS Roadmap 1 questions 12a, 12b, 13a, and 13b.

##### Suggested Activities

###### ONS EBP Video Exercise

After viewing the video, discuss the following questions:

1. How do I know if evidence is truthful or believable?
2. How do I know if research results apply to my patients?

Evidence-Based Practice



##### Practice Application Exercise

Critical Appraisal Exercise 1: Provide the group with an example of each of the following along with a copy of the appropriate critical appraisal tool.

- Systematic Review
- Clinical Guideline
- Original Research Articles
- Quality Improvement Article

For each piece of evidence, answer the following questions:

1. What is the type of evidence?
2. What criteria were used to judge quality?
3. Is the evidence credible (believable & trustworthy)? Why or why not?
4. Using a ranking scale (such as “Poor, Fair, Good” or “Low, Moderate, High”), what is the quality of the evidence?
5. Is the evidence applicable in your practice setting?

##### Personal Commitment to EBP Exercise

1. Ask the participants to share some of the important take-home points that they have learned in this lesson.
2. How will you use what you learned today in your practice?

**Materials** are available through the provided hyperlink:

Handout [EBP Appraisal Tools and Resources](#)

ONS EBP Video 6 [Committing to Our Evidence-Based Practice Vision through Appraising the Evidence Part 1](#)

**Other Resources** Computer with ability to show video – requires access to ONS intranet website.

**Suggested Time** 60 minutes