

## ACR Appropriateness Criteria<sup>®</sup> Literature Search Process

### I. Background Information

The ACR Appropriateness Criteria<sup>®</sup> (ACR AC) are evidence-based guidelines to assist referring physicians and other providers in making the most appropriate imaging or treatment decision. These guidelines — in the form of ratings on the appropriateness of various diagnostic and therapeutic procedures for each condition — are created by expert panels in diagnostic imaging, interventional radiology, and radiation oncology through an evidence-based process. This document describes the literature search process used in identifying the evidence that serves as the basis for the appropriateness ratings.

### II. Process Overview:

- Identify keywords and other search parameters for literature search.
- Conduct literature search.
- Identify relevant articles to include in the topic.
- Summarize each relevant study using evidence tables (ETs). These tables categorize each study using an existing typology of study type, as well as rating of the strength of evidence in each study.
- Send ET to the topic author for review. (The ET is also sent to the panelists to use to assign appropriateness ratings.)

### III. Literature Search Procedure:

- A. The Medline literature search is based on keywords provided by the topic author. The two general classes of keywords are those related to the condition (eg, ankle pain, fever) and those that describe the diagnostic or therapeutic intervention of interest (eg, mammography, MRI).
- B. The search terms and parameters are manipulated to produce the most relevant, current evidence to address the ACR AC topic being reviewed or developed. Combining the clinical conditions and diagnostic modalities or therapeutic procedures narrows the search to be relevant to the topic. Exploding the term “diagnostic imaging” captures relevant results for diagnostic topics.
- C. The following criteria/limits are used in the searches.
  1. Articles that have abstracts available and are concerned with humans.
  2. Restrict the search to the year prior to the last topic update or in some cases the author of the topic may specify which year range to use in the search. For new topics, the year range is restricted to the last 5 years unless the topic author provides other instructions.
  3. May restrict the search to Adults only or Pediatrics only.
  4. Articles consisting of only summaries or case reports are often excluded from final results.
- D. The search strategy may be revised to improve the output as needed.
- E. The completed search protocol is saved.
- F. The abstract list is sent to the author. The search strategy is included in the e-mail.