Appropriate Use Criteria (AUC) Methodology

Appropriate use criteria (AUC) are developed in order to define areas of appropriate use, along with identifying potential overuse and underuse of procedures. The RAND/UCLA Appropriateness Method (RAM) has been utilized extensively as a means to integrate the best available scientific evidence with the clinical judgment of experts. The methodology below is based upon the RAM method.

The ISIS Appropriate Use Criteria (AUC) Task Force
The ISIS AUC Task Force will be comprised of members of the Standards Committee, EBM-trained members of the Research Committee, and interested Board members. For each topic, a subset of the Standards Committee and Research Committee will participate on both the Evidence Panel and Rating Panel. Board members will serve on the Rating Team.

Step 1: Identify Topic and ISIS AUC Task Force Member Assignments
The AUC Task Force will identify the procedure to be addressed. The AUC Task Force members will disclose any potential conflicts of interest related to the topic. Members with conflicts relative to the selected topic will not be permitted to participate on the Rating Panel. Following appropriate disclosure of conflicts, members may be permitted to participate on the Evidence Panel.

Step 2: Invite Other Medical Specialty Societies and Consumer Groups to Participate
The AUC Task Force will identify other specialty societies to invite to participate. Societies to consider include, but are not limited to: North American Spine Society, American Academy of Pain Medicine, American Society of Anesthesiologists, American Academy of Physical Medicine and Rehabilitation, American Academy of Orthopaedic Surgeons, and American Association of Neurological Surgeons/Congress of Neurological Surgeons. Additionally,
invitations should be extended to other societies representing specialties that do not perform the procedure being addressed (eg, American College of Physicians, American Academy of Family Practice). The AUC Task Force can also consider inviting representatives from societies outside of the United States to participate. Societies will be invited to designate one representative to participate in the development of clinical scenarios and literature review/synthesis (Evidence Panel), and another representative to participate on the Rating Panel. In addition, an appropriate patient advocacy group should be identified and invited to designate an EBM-trained representative to observe and participate, to the extent possible, in the AUC development process.

**Step 3: Convene Introductory Conference Call**
Members of both panels will review the AUC development methodology and expectations. Once completed, the Rating Panel will be excused and the Evidence Panel will formulate the literature search strategy.

**Step 4: Conduct and Review Literature Search Results**
Search terms/parameters as identified by the team will be used to identify studies of relevance. Search results will be sent to all members of the Evidence Panel to identify best available evidence that merits review.

**Step 5: Development of Clinical Scenarios and Definitions**
While the literature search is being conducted and studies identified, the Evidence Panel will develop a comprehensive list of clinical scenarios/indications for consideration and rating by the Rating Panel. Additionally, the Evidence Panel is tasked with developing a list of definitions for all terms used in the indications list.

**Step 6: Development of Evidentiary Tables**
The Evidence Panel will review the studies identified in the literature search and complete evidentiary tables summarizing relevant results and identifying the quality of each study (study design and critique of study methodology).

**Step 7: Schedule Rating Panel Meeting**
Once the Evidence Panel is compiling tables, an anticipated timeframe for the Rater Panel to convene will become apparent. Depending upon the number of
scenarios and quantity of literature, this meeting should be scheduled for 1 - 1.5 days over a weekend (see Step 10).

**Step 8: Development of Rating Sheets/Electronic Surveys**
Sheets or electronic surveys will be developed to assist raters in assessing appropriateness of the procedure for all scenarios identified.

**Step 9: Raters Independently Assess Appropriateness**
Raters will be given 4-6 weeks to review the evidentiary tables/evidence synthesis, definition of terms, and rate the appropriateness of the procedure for all scenarios identified.

**Step 10: Face-to-Face Meeting of Rating Panel**
All raters will meet in-person to participate in a second round of rating. Anonymous results of the first round of ratings will be reviewed and there will be an opportunity for discussion. Raters will then have another opportunity to rate anonymously the scenarios during the meeting. No effort will be made to achieve consensus.

**Step 11: Recommendations About Appropriate Use**
For scenarios where there is consistent agreement (80% or better) that a procedure is appropriate (ratings of 7-9 on a scale of 1-9), it will be designated as such. Where there is 80% or better agreement that a procedure is inappropriate (ratings of 1-3), it will be designated inappropriate. For scenarios where there is no clear consensus on appropriateness, they will be designated as uncertain.

**Step 12: Review and Endorsement of Findings**
The ISIS AUC Task Force Chair and Vice Chair, with the assistance of the ISIS Director of Research and Quality Improvement, will develop the Appropriate Use Criteria document. The document will be submitted for review by both panels of the AUC development team. No changes will be made to the ratings at this stage. The report will be finalized and shared with participant societies for review and endorsement.

**Step 13: Promotion to Stakeholders**
The report will be submitted for publication in a peer-reviewed journal (eg, Pain Medicine), published online, and shared with relevant and interested
stakeholders (eg, payers, NGC, patient groups). Patient materials may be developed, as appropriate, as well as decision-making tools for use in electronic health records.

**Step 14: Review/Update**
The criteria will be reviewed every 3-5 years, and updated as needed based upon changes in the evidence base.