Introductory Packet for Clinical Practice Guidelines (CPG)/Systematic Review (SR) Work Group Members

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Welcome and thank you for volunteering to participate in the AAOS guideline development process. AAOS appreciates your time and effort. We hope this process will be rewarding and informative.

AAOS strongly believes that evidence-based medicine is part of healthcare decision-making and we are fortunate to have dedicated clinicians who are committed to the process of developing guidelines based on the most current and best available evidence. The members of the work group give “voice” to the guideline on behalf of the AAOS and help it to gain acceptance with the membership. Involving work group members with a variety of background interests can also help to disseminate the final product. We expect that the results will improve the quality of healthcare.

Please be aware that your participation on a guideline development group requires you to attend a one-day introductory meeting and a two to three day final meeting. If you are participating on a systematic review, you will only be required to attend a one-day introductory meeting.

This document is constantly evolving. Revisions are intended to supersede the existing contents. By the time you have participated in the process of completing a guideline, it is likely this introductory packet will have been updated.

Additionally, the AAOS does not accept commercial financial support for the development of clinical practice guidelines.

Common Acronyms used in this packet:
1. EBM: Evidence-based Medicine
2. GDG: Guideline Development Group
3. CPG: Clinical Practice Guideline
4. SR: Systematic Review
Guideline Development Group Structure

**Oversight Chair**
Member of the AAOS Evidence-Based Quality and Value Committee. Provides methodological oversight/assistance as a non-voter and ensures adherence to AAOS process.

**Guideline Development Group (GDG)**
Responsible for posing the questions that define the scope of the systematic literature review and synthesizing the evidence into clinically applicable recommendations.

**AAOS Evidence-Based Medicine Unit Staff**
Conducts systematic literature review. Provides, administrative and expert methodological support to the GDG during, prior, and after introductory and final meetings.
Chapter 1 – CPG and SR Development Overview

First Steps

1a. Nominate CPG/SR Topics – Open to all via electronic survey.

1b. Select a topic - EBQV Committee prioritizes the nominated topics via an electronic topic ranking form.

1c. The EBQV Committee decides which of the high priority topics should move forward as a guideline (follow CPG Process) or a systematic review (follow Systematic Review Process).

During Step 7 of the CPG process, the workgroup may decide that the quality or quantity of the included evidence lends itself more to a SR rather than a CPG. At this time, the workgroup may decide to proceed with a SR starting on Step 7 of the Systematic Review Process Flowchart. The workgroup may not, however, choose to construct a systematic review for some recommendations and a clinical practice guideline for other recommendations.
Chapter 1 - CPG Development

Clinical Practice Guideline Process Flowchart

2. Solicit for Work Group (WG) members

3. Apply/Nominate WG Members. AAOS/BOS/BOC/ Other organizations as appropriate

4. Appoint WG Members (no relevant conflicts allowed)

5. Formulate Questions, Set inclusion criteria ~completed by WG at Introductory Meeting

6. Review Literature (staff); Appraise Quality; subgroups review included literature for their assigned recommendations.

7. Literature Assessment
   Workgroup members review all included literature and hold teleconference to discuss and vote to pursue one of two options:
   - Create guideline (continue CPG process)
   - Create a systematic review (stop CPG process and start at Step 7 in SR Process)

8. Prior to final meeting workgroup members construct preliminary recommendations, rationales, risk/harms statements and future research needs for their assigned recommendations. Chairs should write intro section prior to meeting

9. Develop Final Recommendations; Review quality appraisals and evidence tables. Assign a grade/rating for each based on evidence ~Completed by WG at final meeting

10. Chairs and AAOS Staff review and respond to peer reviews; revise as needed; any revisions to recommendation language require Work Group Approval

11. Public Comment ~ Officially 30 days

12. Review Comments and revise if needed; any revisions require Work Group Approval

13. Approval Process

14. Communication, Dissemination, Implementation

The final CPG is reviewed and approved by:
- Work Group
- Committee on Evidence Based Quality and Value (EBQV)
- Council on Research and Quality (CORQ)
- AAOS Board of Directors
Chapter 1 – SR Development

Systematic Review Process Flowchart

2. Workgroup Solicitation

3. Apply/Nominate WG Members
   AAOS/BOS/BOC/Other organizations as appropriate

4. Appoint WG Members (no relevant conflicts allowed)

5. Formulate Questions, Set inclusion criteria ~completed by WG at Introductory Meeting

6. Review Literature (staff):
   Appraise Quality; workgroup members review included literature for their assigned review questions

7. Workgroup members complete their writing assignments for assigned questions. AAOS Staff collates their work into a systematic review.

8. Workgroup approves systematic review for journal submission and/or peer review via teleconference(s).

9a. Submission to Peer Reviewed Journal
   After journal submission, workgroup may construct writing panel materials for accompanying AUC.

9b. Peer Review from Relevant Societies

10a. Communication, Dissemination, Implementation

10b. Chairs and AAOS Staff review and respond to peer reviews; revise as needed; any revisions to recommendation language require Work Group Approval

11. Public Comment ~ Officially 30 days

12. Review Comments and revise if needed; any revisions require Work Group Approval

13. Approval Process (in following order: Workgroup, EROV, CORQ, BOD)

14. Communication, Dissemination, Implementation
Chapter 2 - AAOS Orthopaedic Disclosure Program
*Click Image to View Chapter*

1. Why do I have to disclose?  Pages 9-10


3. How is “conflict of interest” defined?  Pages 12-13

4. What are my options in the event that I am determined to have relevant conflicts?  Page 14
To preserve the integrity of the AAOS guideline development process, work group members must be free of relevant conflicts of interest since these types of external factors are often a major cause of bias on one's views. In addition, members are not permitted to engage in activities that might constitute relevant conflicts during development of the guideline and for a minimum of one year following approval and publication. Each work group member will be asked to sign an attestation indicating agreement with the above stipulations until the guideline is approved by the AAOS Board of Directors (please see Attestation Form).

The AAOS holds all guideline work group members to the same high standard of disclosing conflicts of interests as the AAOS Board of Directors. What does this mean? The disclosure form work group members are required to complete is more detailed than the general form Academy members are currently required to use and requires monetary disclosure of all financial conflicts of interest. A very limited number of individuals (necessary AAOS volunteers, leaders, and a few staff) will have access to the detailed information you provide while the majority of other individuals will see only whether a potential conflict of interest exists. Managing potential conflicts of interests of work group members follows the Institute of Medicine’s standards for developing trustworthy clinical practice guidelines.
AAOS Orthopaedic Disclosure Program
Why do I have to disclose? - Part 2 of 2

1. **The Guidelines Section Leader, EBQV Committee Chair, and Oversight Chair will review** the enhanced disclosure information of applicants interested in serving as Chair or member of a work group charged with developing a Clinical Practice Guideline (CPG) prior to appointment. No member of the work group developing a clinical practice guideline may have any relevant financial conflicts of interest related to the respective CPG during development of the guideline and for at least one year post approval of the AAOS Board of Directors.

2. **When the AAOS publishes a CPG**, such document will list the disclosures of all work group members and note that they have signed an affidavit declaring they have no relevant conflicts of interests. (Please see section VII. Attestation).

3. **All future peer reviewers and public commentators** of AAOS CPGs must disclose their relevant conflicts of interest on the structured review form. The comments and AAOS responses to reviewers’ comments will be posted on the website with their declared relevant financial conflicts of interest.

All AAOS conflict of interest policies are available on the Academy’s website (www.aaos.org). Voluntary participation in the AAOS disclosure program is encouraged for the membership of orthopaedic surgeons at large.
AAOS Orthopaedic Disclosure Program
How Do I Disclose?

- You may disclose your conflicts of interest via the AAOS website after staff has updated your disclosure status to requiring “full disclosure”. Once you are in the system, you will be automatically prompted for updates every six months. Mandatory disclosure is required verbally at the start of the introductory meeting, where a general disclosure report of the entire work group is also circulated, and again online approximately one month prior to the final meeting.

- Automating the disclosure program online has streamlined the process and improved transparency in the Academy. If you have questions concerning how the information is collected or used, or about our retention and privacy policies, please visit the AAOS website.

- If you are not a member of AAOS, you will still be required to disclose your conflicts of interest. A customer identification number and password can be used to log in, access the system, and complete the disclosure form once staff has updated your disclosure status to “full disclosure.” Even if your disclosure has been recently completed it may still need updating due to the greater detail required. If you do not have a customer identification number and password, you may contact AAOS Member Services to have one created for you (847-384-4307); and if you have any difficulties, you may contact the AAOS Evidence-Based Medicine Manager, Jayson Murray at jmurray@aaos.org for assistance.
A conflict of interest exists when there is a current or past financial relationship with a business entity (e.g., drug or implant manufacturer) AND the use of the product(s) manufactured by this business entity may be directly affected by the guideline recommendations.

“Financial relationships” include:

- Research sponsored by the manufacturing company (For disclosure, list all grants, dates, and dollar amounts)
- Ownership of shares or stock options (For disclosure, list amount and if held by you or family members). Mutual fund holdings are exempt from this rule
- Seat on Board of Directors or Advisory Board (For disclosure, list stipend paid for board membership)
- Speaker fees (For disclosure, list frequency of speaking and total amounts received)
- Royalty payments (e.g., from patents or consultative agreements, etc.)
- Consulting agreements
Guideline work group members cannot have any relevant or perceived conflict of interest, as determined by the AAOS Committee on Outside Interests.

In order to clarify a perceived relevant conflict, the AAOS Committee on Outside Interests will require a written clarification detailing pertinent facts. It is important to observe the requested deadlines in providing this information because this committee will review all disclosures for a given guideline during a single meeting. If you have not responded with clarification prior to the materials being sent to the Committee on Outside Interests, you will forfeit your opportunity to appeal and be ineligible to serve on the work group. Applicants will be notified as to the disposition of their disclosures.

We realize that members who are actively involved in evidence-based medicine projects might perform numerous functions within the AAOS as well as other organizations. Any possibly conflicting incentives arising as a result of one’s multiple-role participation that will jeopardize the integrity of the guideline development process must be declared and the work group member must recuse him/herself from the process at the point where the conflicting interest becomes apparent. All members of the approving bodies of a guideline [currently the AAOS Committee on Evidence-Based Quality and Value (EBQV) and the Council on Research and Quality (CORQ)] who participate in a guideline work group, are not permitted to vote during the approval process. These members can participate in discussions but must declare their COIs at the time the vote is taken.

Managing conflicts of interest will be addressed throughout the development of clinical practice guidelines as a part of the AAOS’ approach to explicitly limiting bias and increasing transparency.
AAOS Orthopaedic Disclosure Program

What are my options if I am determined to have relevant conflicts?

1. **Divestment**: An applicant denied participation in a Guideline Development Group has the option of divesting himself/herself of the financial or nonfinancial conflict. Once the conflict is divested, the applicant should advise AAOS staff responsible for the CPG and request a reconsideration of his/her application.

2. **Appeal**: An applicant denied participation in a Guideline Development Group due to perceived relevant financial or nonfinancial conflict may appeal the decision. The CPG Oversight Chair and the Guideline Development Group Chair shall discuss the situation with the Chair of the Committee on EBQV and the Chair of the CORQ. If they cannot or elect not to make a determination, the matter will be referred to the Committee on Outside Interests, via the Office of General Counsel. The Committee on Outside Interest’s decision regarding whether a relevant financial or nonfinancial conflict of interest exists and whether an individual is eligible to serve or remain a member of the Guideline Development Group shall be considered final.

3. **Consultant**: There may be an important role for a Consultant ("Consultant") in the CPG process. A Consultant is an individual who has unique knowledge about the topic of the CPG, but who has a relevant financial or nonfinancial conflict of interest. The addition of a Consultant to assist the Guideline Development Group shall be determined by the CPG Oversight Chair, the Guidelines Oversight Section Leader, Chair of the Committee on EBQV, and the Chair of the CORQ. For example, a Consultant might:
   - Act as a subject matter expert aiding the Guideline Development Group in generating topics of PICO (Population, Intervention, Comparison and Outcome) questions for the CPG as well as helping to determine outcomes of interest and search criteria restrictions;
   - Be invited, at the discretion of the CPG Oversight Chair, to contribute topic suggestions or provide input prior or during the first Guideline Development Group meeting. If participation by the Consultant during the first Guideline Development Group meeting is desired, the CPG Oversight Chair will determine whether the Consultant should attend in person or participate remotely via telephone or webinar; and
   - Be included in the discussion of development of PICO questions.

However, the Consultant may not participate in the following: final selection of PICO topics; the systematic review of the literature; review of evidence; or drafting or rating recommendations. In addition, the Consultant will not be invited to participate in the final Guideline Development Group meeting.
ATTESTATION

Attestation Statement for Potential Clinical Practice Guideline (CPG) Work Group Members with No Relevant Conflicts

If you wish to be considered as a candidate to serve on a Work Group that develops AAOS Clinical Practice Guidelines, please know that you will be required to disclose potential conflicts of interest at the same level as the AAOS Board of Directors prior to beginning work on any CPGs. This disclosure is more detailed than regular member disclosure and includes specific financial details.

By signing this affidavit, I am stating that I have no relevant conflicts concerning the subject matter of the CPG titled:

_________________________________________

I attest that I will not enter into relationships that might create a conflict of interest situation (i.e. becoming a consultant to an orthopaedic or medical company, etc.) both during the time the CPGs are being developed and for one year after the AAOS Board of Directors approval of the CPGs.

Please Print:

Member Name ____________________________________________

Member Signature _________________________________________

Date____________________________________________________
Chapter 3. Evidence-Based Medicine CME Courses
Completion of Both Educational Modules Required Prior to Introductory Meeting

<table>
<thead>
<tr>
<th>Book Title</th>
<th>Author</th>
<th>Course #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing an Evidence-based Clinical Practice Guideline</td>
<td>James O. Sanders, MD</td>
<td>Required Course #1</td>
</tr>
<tr>
<td>Evidence-based Guidelines: What do a Study's Results Mean?</td>
<td>James O. Sanders, MD</td>
<td>Required Course #2</td>
</tr>
</tbody>
</table>

Click the desired book to complete the CME module. All guideline development group members must complete both CME modules.
Chapter 4. Details of Clinical Practice Guideline (CPG) and Systematic Review (SR) Construction

**Step 1: Introductory Meeting: Defining the Scope/Questions for the Literature Review**  
*Pages 18-19*

**Step 2: Literature Review**  
*Pages 20-21*

**Step 3: Final Meeting: Synthesis of Evidence into Recommendations**  
*Pages 22-25*

**Step 4: Peer Review and Public Comment**  
*Pages 26-27*

**Step 5: Approval and Publication**  
*Pages 28-29*
Date of Meeting and Attendance

- The introductory meeting date is confirmed via an availability poll sent to the GDG. The one-day meeting is held in Rosemont, IL.
- **Attendance at the introductory meeting is mandatory for all guideline work group members participating in the process. Participation in the work group is contingent on the panel members’ availability on the date that is selected.**

Work to be Completed Prior to the Introductory Meeting:

1. AAOS staff will survey the GDG, along with patients and other clinicians to solicit their thoughts on what topics should be addressed by this CPG or SR. Staff will aggregate the responses and provide the list to the GDG. The GDG will be asked to prioritize the suggested topics prior to #2 below.
2. A teleconference/webinar will be held to discuss GDG charges, review the prioritized topics, and answer any questions.
3. Using the prioritized topics, the GDG will be asked to email AAOS staff preliminary PICO questions to catalyze the discussion during the meeting.

Work to be Completed During the Introductory Meeting

1. GDG will develop approximately 10-20 PICO questions (1-5 questions if performing a SR) that may range from diagnostic, preoperative care, conservative treatment, operative treatment, postoperative care, and/or rehabilitation.
2. GDG will develop additional inclusion criteria (e.g. publication date cutoff for literature that should be reviewed)
3. GDG will create a list of relevant organizations/specialty societies who should be contacted to peer review the final CPG or SR.
4. For each PICO questions, two members of the GDG will be assigned as the clinician contacts for AAOS staff.

After the Introductory Meeting

1. AAOS staff will conduct the literature search/review based on the criteria defined by the GDG at the introductory meeting.
2. A web-based community will be set up for the GDG to access relevant materials and communicate with one another throughout the process.
3. The GDG will also be given access to PEER (see more about this web-based tool here), which will allow them to view the progress of the literature review and interact with AAOS staff during the review.

Click Here to View GDG Tutorial on Developing PICO Questions
What is a PICO Question?

- **PICO:**
  - **Patient or Population:** Describe the most important characteristics of the patient. (e.g., age, disease/condition, gender)
  - **Intervention; Prognostic Factor; Exposure:** Describe the main intervention. (e.g., drug or other treatment, diagnostic/screening test)
  - **Comparison (if appropriate):** Describe the main alternative being considered. (e.g., placebo, standard therapy, no treatment, the gold standard)
  - **Outcome:** Describe what you’re trying to accomplish measure, improve, affect. (e.g., reduced mortality or morbidity, improved memory, accurate and timely diagnosis)

- **These parameters provide further clarity** in defining inclusion criteria for the literature review and evaluating the evidence
1. **Search**: The AAOS medical librarian uses the criteria developed by the GDG at the introductory meeting to develop a search strategy. Staff may request assistance from the GDG in providing additional search terms for various PICO questions, if necessary. Typically, AAOS searches for literature in PubMed, EMBASE, the Cochrane Library, and the ACP Journal Club. On occasion, additional resources may be used.

2. **Abstract Review**: AAOS EBM Research Analysts (epidemiologists) will review the abstracts returned from the search and recall the full-text PDFs of any study abstracts that appear relevant to the PICO questions.

3. **Full-Text Review**: AAOS EBM Research Analysts will review the full-text studies that were recalled and, if relevant to one or more PICO questions, the analyst will mark the study as “included”. If the study is not relevant to any of the PICO questions, they will mark the study as “excluded” and list the reason why.

4. **Appraisal of Study Quality**: For all included studies, the EBM research analysts will evaluate the quality for the study design using standardized study quality appraisal forms based on modified GRADE, QUADAS, and PRECIS instruments. There are various forms depending on whether the study is a randomized control trial, an observational study, a diagnostic study, or a prognostic study. Studies appraised as “very low quality” will not be included for use in recommendation development. [Click here to view the AAOS Study Quality Appraisal Methods.](#)

5. **Data Extraction & Analysis**: EBM research analysts will extract data from all included studies and the AAOS statistician will work with the analysts to produce a formal report of findings. If data is available, meta-analyses will be provided to the GDG (pending there are 3 or more studies evaluating comparable treatments & outcome measures).
AAOS does not include the following types of information:

- Animal studies, cadaveric studies, in vitro studies, or biomechanical studies
- Meeting abstracts, case reports, or reviews
- Studies of <10 patients in any arm
- Studies published in a foreign language
- Studies that do not report patient-oriented outcomes
- Retrospective case series studies without a comparative or control group
- The level of evidence for an underpowered study is inconclusive unless that study is used in a *de novo* meta-analysis by the EBM unit
- Studies that are not the “best available evidence”

Inclusion Criteria is based on relevance, dates of desired studies (some studies may be so dated that their results are unlikely to reflect current practice), study design (controlled versus uncontrolled studies).

Please note that work group members consider the best available evidence (not all available evidence) to determine the rating. EBM staff will search for and include the best available evidence. Hence, if there are studies available with a high strength of evidence score, then studies with moderate or low strength of evidence scores would not be needed to determine the rating. AAOS bases the strength of evidence on the studies we have the most confidence in or that which is most reliable.
Final Meeting

The final meeting will be held in Rosemont, IL over the course of 2-3 days.

Attendance for this meeting is mandatory for all GDG members

Prior to the Meeting

1. AAOS staff will hold one or more webinars with the GDG to reiterate their charges and ensure that all relevant literature has been included.

2. Using the PEER tool, the GDG will be responsible for reviewing the included and excluded literature for their assigned PICO questions. If the GDG believes that, a) an article in the excluded list should be moved to the included list due to relevance, or b) an relevant article was missed by the search, they are free to suggest the article for inclusion by emailing the title and author of the study to Jayson Murray at jmurray@aaos.org.

3. The GDG will be responsible for assembling a draft recommendation and rationale for their assigned recommendations to catalyze the final meeting discussion. Click here to view the tutorial on how to assemble a recommendation and rationale.

4. The GDG chair and co-chair will be responsible for constructing the CPG/SR introduction. Click here to view the tutorial on how to assemble an introduction.

During the Final Meeting

1. With the help of AAOS staff and the oversight chair, each GDG member will present the data findings and present their draft recommendations and rationales for their assigned recommendations. The GDG will discuss the data findings and wordsmith the final recommendations and rationales, as needed. The strength of evidence will determine the AAOS predefined language stem that is used for the recommendation. The GDG chairs will hold a vote by hands (an anonymous ballot is also an option at the discretion of the chairs) to solicit approval of the final wording for the recommendation of interest. A simple majority (i.e. 60%) is needed to approve the final recommendation. After approval, the GDG moves to a new recommendation and repeats this process.

2. All word-smithing for recommendations, rationales, benefits and harms sections, and future research sections should be completed by the end of the meeting.
## Strength of Recommendation Descriptions

<table>
<thead>
<tr>
<th>Strength</th>
<th>Overall Strength of Evidence</th>
<th>Description of Evidence Strength</th>
<th>Strength Visual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong</strong></td>
<td>Strong</td>
<td>Evidence from two or more “High” strength studies with consistent findings for recommending for or against the intervention.</td>
<td>★★★★★</td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
<td>Moderate</td>
<td>Evidence from two or more “Moderate” strength studies with consistent findings, or evidence from a single “High” quality study for recommending for or against the intervention.</td>
<td>★★★★☆</td>
</tr>
<tr>
<td><strong>Limited</strong></td>
<td>Low Strength Evidence or Conflicting Evidence</td>
<td>Evidence from one or more “Low” strength studies with consistent findings or evidence from a single moderate strength study for recommending for or against the intervention or diagnostic test or the evidence is insufficient or conflicting and does not allow a recommendation for or against the intervention.</td>
<td>★★★★☆</td>
</tr>
<tr>
<td><strong>Consensus</strong></td>
<td>No Evidence</td>
<td>There is no supporting evidence. In the absence of reliable evidence, the work group is making a recommendation based on their clinical opinion. Consensus recommendations can only be created when not establishing a recommendation could have catastrophic consequences.</td>
<td>★★★★☆</td>
</tr>
</tbody>
</table>
## Recommendation Language Stems

<table>
<thead>
<tr>
<th>Guideline Language</th>
<th>Strength of Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong evidence supports that the practitioner should/should not do X, because...</td>
<td>Strong</td>
</tr>
<tr>
<td>Moderate evidence supports that the practitioner could/could not do X, because...</td>
<td>Moderate</td>
</tr>
<tr>
<td>Limited evidence supports that the practitioner might/might not do X, because...</td>
<td>Limited</td>
</tr>
<tr>
<td>In the absence of reliable evidence, it is the opinion of this work group that...</td>
<td>Consensus*</td>
</tr>
</tbody>
</table>

*Consensus based recommendations are made according to specific criteria. These criteria can be found in Appendix VII.*
Whenever possible, AAOS will perform meta-analyses to combine like evidence and increase the power of the literature findings.

If an MCID (Minimally Clinically Important Difference) is available or can be calculated for the outcome of interest, it will be used to determine clinical significance, rather than statistical significant differences at a p<.05 level.

If the MCID is not available for the outcome of interest, the measures listed below will be considered in the order that they are listed in.
Peer Review & Public Commentary

Peer Review and Public Commentary has two purposes:

- **First**, it will enhance the quality of our guidelines. Peer review is a measure of an evidence-based guideline’s quality (cf. the AGREE II Instrument).
- **The second purpose** of review is to afford interested parties who are not directly involved in the development of our guidelines the opportunity to comment on them before they are released.

**Peer Review will begin when** the draft guideline is complete and ready for review.

Peer reviewers will be comprised of:

1. The Committee on Evidence-Based Quality and Value
2. Members of outside specialty organizations nominated by the work group.
   - Outside specialty organizations will be invited to provide peer reviewers for each guideline and will consist of experts in that guideline’s topic area. Many experts will be chosen by professional societies other than AAOS. Preferably, members chosen by the outside specialty organizations to provide peer review will have training and/or experience in evidence-based medicine. Typically, 10-15 members from a variety of outside specialty organizations are invited to provide peer review for each guideline.

Peer reviewers will receive the entire guideline and all of its supporting documentation, including the evidence report. A structured review form will be provided. However, these reviewers will be allowed the option of reviewing only that portion of a guideline in which they are expert. Because peer reviewers will receive several hundred pages of material to review, they will be given approximately one month to review the document. This time frame will depend on the guideline topic, amount of supporting documentation, and the schedule for Board of Directors meetings. Reviews must be written. Verbal reviews will not be accepted. Further, peer reviewers must agree to declare their conflicts of interest and agree to allow those conflicts to be made public with their comments concerning the guideline they review.
Public Commentary will begin when documentation about the disposition of reviewer comments has been sent to peer reviewers. Generally, thirty days will be allowed for public commentary; again this is dependent on the guideline topic, amount of documentation, and the schedule for Board of Directors’ meetings. Commentators will consist of:

1. Members of the AAOS Board of Directors (BOD)
2. Members of the Council on Research and Quality (CORQ)
3. Members of the Board of Councilors (BOC)
4. Members of the Board of Specialty Societies (BOS)

- Commentators will receive the guideline and evidence report if they request it when polled for interest.
- All comments will be reviewed and any changes that result in a change in the guideline will be documented. The work group chairs will approve any change. Preparing the appropriate documentation will require approximately one to two months.
Four Stages of Guideline Approval

Stage 1: Approval by CPG Work Group

Stage 2: Approval by AAOS Committee on Evidence-Based Quality and Value (EBQV)

Stage 3: Approval by Council on Research and Quality (CORQ)

Stage 4: Approval by AAOS Board of Directors

Guideline Approved!
Guideline Approval Stages of Guideline Development

- Each person serving on one of these bodies will receive the guideline, evidence report, peer review and public comment documentation structured forms, and any responses that document a guideline change that resulted from a commentator’s review.
- Approval will proceed in the order shown on the previous page and the guideline will not proceed from one body until the previous one has approved it.
- Should any of these bodies not approve a guideline, that guideline’s work group could be reconvened, the work group could be reconvened with the possible addition of one or two new member additions, or a totally new work group could be convened. You should also be aware that the CPG Oversight Chair representing the AAOS oversight bodies may decide at any time, based on varying circumstances, to discontinue work on any given guideline. This includes if time and budget constraints dictate a change in priorities, if the work group cannot or will not follow the AAOS methodology, or if other circumstances dictate unforeseen rescheduling. The Guidelines Oversight Section will be responsible for determining the make-up of a reconvened guideline work group, for appointing any additional members and for determining the disposition of any guideline and work group.
- The guideline will be updated (or withdrawn) in five years based on the requirements of the National Guideline Clearinghouse (see the AAOS procedure for updating existing AAOS guidelines).
Chapter 5: Links and Descriptions for AAOS EBM Online Tools

AAOS EBM Tools & Links

OrthoGuidelines (www.orthoguidelines.org)
The publicly available OrthoGuidelines app houses all currently published AAOS Evidence-Based Clinical Practice Guidelines and Appropriate Use Criteria in a user-friendly format.

PEER – Presentation and Evaluation of Evidence-based Research (www.aaos.webauthor.com)
Access to this tool is limited to guideline development group members. The PEER tool is an all-in-one systematic literature review tool created by the AAOS EBM Unit that affords the guideline development group the ability to review the progress of the literature search, access full-text articles for each PICO question, and communicate with staff.
Chapter 6: Additional Quality Products Developed after Guideline & Systematic Reviews

Appropriate Use Criteria (AUC) & Checklists (Click Here to View Process Document)

- The purpose of this AUC is to help determine the appropriateness of clinical practice guideline recommendations for the heterogeneous patient population routinely seen in practice. The best available scientific evidence is synthesized with collective expert opinion on topics where gold standard randomized clinical trials are not available or are inadequately detailed for identifying distinct patient types. When there is evidence corroborated by consensus that expected benefits substantially outweigh potential risks, exclusive of cost, a procedure is determined to be appropriate. The AAOS uses the RAND/UCLA Appropriateness Method (RAM).¹ Our process includes these steps: reviewing the results of the evidence analysis, compiling a list of clinical vignettes, and having an expert panel comprised of representatives from multiple medical specialties to determine the appropriateness of each of the clinical indications for treatment as “Appropriate,” “May be Appropriate,” or “Rarely Appropriate.”

Performance Measures (Click Here to View AAOS Performance Measures Website)

- Orthopaedic surgeons are the most qualified professionals to develop and evaluate quality of care measures for patients with musculoskeletal conditions. It is crucial that orthopaedic surgeons retain a leadership position in defining quality of orthopaedic care. Through the Performance Measures Committee, AAOS is leading the development of orthopaedic quality measures.