

**AMERICAN ACADEMY OF ORTHOPAEDIC
SURGEONS**

**INTRODUCTORY INFORMATION
FOR
TASK FORCE MEMBERS
PARTICIPATING IN TECHNOLOGY OVERVIEW
DEVELOPMENT**

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I. INTRODUCTION

Dear AAOS Task Force Volunteer,

Welcome and Thank-you for volunteering to participate in the AAOS technology overview development process. AAOS appreciates your time and effort and we hope this process will be rewarding and informative.

AAOS strongly believes that evidence-based medicine is part of our future and we are indeed fortunate to have dedicated volunteers who are committed to the process of developing technology overviews based on the most current and best available evidence. The results will most certainly improve the quality of healthcare.

Please also note that this document is constantly evolving. New revisions will supersede all other revisions. Once you have participated in the process and completed an overview, it is likely the introductory packet given to you at the beginning of this process will be obsolete.

CONFLICT OF INTEREST

AAOS Task Force members are held to a high standard of disclosure concerning conflicts of interest. In fact, they are held to the same standard as the AAOS Board of Directors. A very limited number of AAOS staff will have access to the detailed information you provide while the majority of other individuals may see only if a potential conflict of interest exists. Moving the disclosure program online has streamlined the process and improved transparency throughout the Academy. If you have additional questions concerning the information collected, how this information will be used, retention of the information and privacy, please visit the site. Once you are in the system, you will be automatically notified for updates and will only need to fill this information out once every six months.

You are required to disclose both verbally and in writing your conflicts of interest prior to beginning work on the guideline. You may disclose in writing via the AAOS website in member services at http://www3.aaos.org/education/disclosure/disclose_intro.cfm. You will be asked to verbally disclose any new conflicts of interest on the first teleconference to develop the technology overview.

Mandatory disclosure applies to all participants in technology overview development. If you are not a member of AAOS, you will still be required to disclose your conflicts of interest. If you have a customer identification number and password established these numbers can be used to login, access the system and disclose the necessary information.

If you do not have a customer identification number and password, you may contact AAOS Member services and they will be created for you. As always if you have any problems with disclosure, you may contact the AAOS Guidelines Manager for assistance.

The criteria for disclosure are copied below for your information:

In December 2006, the AAOS Board of Directors adopted, upon the recommendation of the Council on Research, Quality Assessment and Technology, requirements for financial conflicts of interest for the AAOS Task Force Chairs and members. The Board also adopted these requirements for itself. These requirements provide as follows:

*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:

- 1. Research sponsored by the manufacturing company (For disclosure, list all grants, dates and dollar amounts).*
- 2. 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.*
- 3. Seat on Board of Directors or Advisory Board (For disclosure, list stipend paid for board membership)*
- 4. Speaker fees (For disclosure, list frequency of speaking and total amounts received).*
- 5. Royalty payments (e.g., from patents or consultative agreements, etc.)*
- 6. Consulting agreements.*

II. TASK FORCE

APPOINTMENT OF THE TASK FORCE CHAIRPERSON

The Task Force Chairperson is appointed by the AAOS Guidelines Technology Oversight Committee Chairperson (GTOC). The Task Force Chair must have taken the AAOS educational course on evidence based practice or an equivalent training course.

Once a Task Force chair is selected an introductory teleconference will be scheduled with the GTOC Chair and the AAOS Director of Research. The AAOS Clinical Practice Guideline Manager will help coordinate this date with all those involved. Following the introductory call, the Task Force Chair will in turn invite the task force members to participate in the process.

Technology Overview Task Force groups consist of four to five physician members who serve at the discretion of the Technology Overview Chair and the AAOS GTOC Chairperson. In most cases, it is expected that the Task Force will be diverse, consisting of multi-specialty participation. It is helpful if the chair of the Task Force personally makes the initial contact soliciting members to participate in the process. Once members have agreed to participate on the Task Force, formal invitations (welcome) will be sent by AAOS staff and an introductory call will be arranged based on the schedules of the majority of the group.

The Task Force Chairperson, in conjunction with the GTOC Chairperson and AAOS staff, guides the development process based on sound evidence-based methodology. Evidence-based methodology is a rigorous process and well defined. ***We ask the Chair and Task Force members to not supersede this process by beginning with an exchange of articles or other literature. This may/could introduce significant bias. We respectfully ask that no work begin until the Task Force Chairperson, GTOC Chairperson, Evidence-Based Practice Chairperson, AAOS Director of Research and Clinical Practice Guidelines Manager convene an introductory conference call to discuss the rigorous AAOS development process.***

The Chairperson also convenes conference calls with the assistance of AAOS staff, makes any Task Force assignments and oversees the final material compiled for the technology overview document. The Chair will declare when the final product is moved forward through the approval process (Appendix 1: Task Force Chairperson Checklist).

REQUIREMENTS OF THE TASK FORCE MEMBERS

TIME COMMITMENT

Task Force members are expected to have some training in evidence-based medicine. Task Force members should have taken AAOS' evidence analysis course. If you have questions concerning the AAOS evidence-based analysis course, please contact the AAOS Evidence-based Medicine Coordinator or the Clinical Practice Guidelines Manager.

The first teleconference with the task force will be devoted to establishing the scope of the overview. This will be accomplished by constructing key questions, literature search terms, and inclusion criteria (see Step 1A below). Generally, it will take one to two teleconferences to define the scope of the overview. Conference calls are generally scheduled to last for one and one-half hours increments and are scheduled during the week at 7:00 pm central time to accommodate participants on both coasts.

Once the literature searches are completed the Task Force members are expected to review the literature search strategies and provide appropriate input. Similarly, members are expected to review the list of articles that will be included in the overview, and note whether any articles that met the inclusion/exclusion criteria were missed. Conference calls will be scheduled to address these issues. The Task Force Chair may also be periodically contacted if questions arise as literature is searched for and data is abstracted.

Again, it should be noted that the Task Force members serve at the discretion of the Chairperson. The Task Force Chairperson and Guideline Technology Oversight Chairperson may consider the removal of any Task Force member who does not contribute to or appropriately participate in the development process. Task Force members may be terminated for reasons including, but not limited to failure to disclose conflict of interest, failure to work as a team member, inability or failure to complete assignments and/or nonparticipation. In addition, The American Academy of Orthopedic Surgeons has established policies promoting a productive work environment and rejecting discrimination, harassment and sexual harassment of any kind. Violation of these policies may cause dismissal of the task force member.

Once the research analysts have abstracted, analyzed and compiled the data, the draft overview is forwarded to the Task Force Chair for review. It is then forwarded to the Task Force for additional review.

DOCUMENT SUPPORT INFORMATION/ DISSEMINATION TO THE TASK FORCE

Because the evidence that supports a technology overview may be long, copies may not be able to be e-mailed to members. If this is the case, materials will be posted to the Academy Sharepoint Portal. The link to the portal is <http://teamwork.aaos.org>. Your login is academy\XYYYYYYY where X is the first letter of the member's first name and YYYYYY is their last name. The member password is aaosgls.

TASK FORCE RESTRICTIONS

As stated above, in most cases, it is expected that the task force will be diverse, consisting of multi-specialty participation.

We also ask that members of a technology overview not publically advertise their participation on the task force until the final draft has been developed and reviewed within the peer review and public commentary process. We request anonymity for several reasons. The participation of well known "thought leaders" on a technology overview

development team can elicit bias in the review and approval process. These members are often well known and published and their very participation in the process may influence the reviews. Hence, we blind the identity of a task force for all drafts to the reviewers. In addition, industry and the media may pursue members who participate on particularly controversial technology overview task force. Draft documents are subject to change and those interested in the content of a technology overview need to have the final BOD approved document before comments can be made. If there are questions concerning dissemination of AAOS technology overviews, they should be directed to the AAOS Evidence-based Medicine Coordinator.

THE GUIDELINE UNIT

The Guideline Unit is responsible for preparing the evidence portion of the technology overview. The Chairperson will assist the analyst with clinical input and write the introduction portion of the overview.

The technology overview report is a systematic review of the evidence that addresses each key question. In addition, the Clinical Guideline Unit manager is available to answer all questions and will be present on all conference calls during the technology overview development process.

III. PROCESSES

STEP 1: FRAME THE SCOPE OF THE OVERVIEW

1. The first step in developing a technology overview is framing its scope. Technology Overview developers are faced with the challenge of wanting to include everything of clinical interest in an overview and the need for timely publication of the overview. This balance is at the forefront of framing a guideline's scope.
2. A technology review is a smaller endeavor than a guideline. It includes a focused literature search and provides a summary of that literature for a specific and usually relatively new technology. The review takes a topic, reviews the pertinent literature and summarizes it. Since the technology topics generally review new technologies, the literature reviews are smaller and more focused than that of a clinical-practice guideline. They are usually not evidence based since there is usually a paucity of high level data in the early evaluation of new technology.
3. A technology review does NOT make treatment recommendations but rather provides informational statements on the data supporting or lacking support for a new technology.

STEP 1A: PREPARE KEY QUESTIONS

We will begin framing a technology overview's scope by asking each of the task force members to construct key questions. Key questions should be concise and focused possibly identifying:

[What] indications exist for a new technology. Ex. Locking plates

[Whom] the technology may be applicable to (patient population). Ex. Gender specific Knee

[When] should a technology be used. Ex. Failure rates, cost-effective comparisons, total vs partial techniques etc.

STEP 1B: VOTE ON WHICH KEY QUESTIONS THAT SHOULD BE INCLUDED

When the Guideline Unit has received all of your key questions, we will collate them and the task force members will discuss whether any of the questions should be excluded. Please remember to consider the overview's scope and projected timeline when you consider each question.

When we arrive at the final set of three to five key questions, we will sometimes ask each member of the task force to rank each question from most to least important. AAOS staff will compute an average rank for each key question. This average ranking will often determine the order of our work. The order of work will sometimes determine whether a key question is vital to the systematic review.

STEP 1C: SPECIFYING ARTICLE INCLUSION/EXCLUSION CRITERIA

Next, we will ask you to assist in framing criteria for determining which articles should be included and which articles should be excluded from consideration. Obviously, some of these criteria will be based on relevance. Other criteria may be based on the dates during which a study was conducted (some studies may be so old that their results are unlikely to reflect current best practice). Typically, inclusion criteria should also consider study design. We will almost never include retrospective studies.

Please note that we will never include all available evidence. Wherever appropriate, we will search for and include the best available evidence. Hence, if Level II evidence is available, we will not search for or include Level III evidence or lower unless there is very little Level II evidence, and a great deal of Level III evidence.]

We will never include the following types of information:

1. Animal studies, cadaveric studies, in vitro studies, or biomechanical studies
2. Letters, historical articles, editorials, commentaries, meeting abstracts or case reports
3. Studies of <10 patients in any arm
4. Studies published in a foreign language
5. Studies that do not report patient-oriented outcomes

6. Retrospective case series or chart review studies

7. Underpowered studies

Studies must be full- text articles that report quantified results and are published in peer- review literature.

STEP 2: SEARCHING FOR STUDIES

STEP 2A: CONSTRUCTING THE SEARCH STRATEGIES

The AAOS medical librarian will be responsible for constructing search strategies. She/he will ask you for assistance in developing the searches by requesting relevant terms from you. Typically, we will search for literature in PubMed, EMBASE, the Cochrane Library, and the ACP Journal Club. On occasion, additional sources may be used.

STEP 2B: REVIEWING THE SEARCH RESULTS

When the searches are complete, we will ask you to review them to see if there are any relevant articles that they did not identify. Because these searches are designed to find as much relevant information as possible, they will also contain many irrelevant articles. In fact, over half of the articles in these searches are likely to be irrelevant. If there are too many articles missed by our searches, we will modify our search strategies.

STEP 3: DETERMINING WHETHER ARTICLES MEET THE INCLUSION CRITERIA

AAOS staff will determine whether articles meet the inclusion criteria. When they have finished this task, we will send you a list of the articles that were included and a list of the excluded articles and the reason(s) for excluding them. You may receive this material all at once or partitioned depending on the scope of the overview. If partitioned, you will receive it at logical break points, such as when all of the articles for a certain key question have been evaluated.

After examining this information, please feel free to ask AAOS staff to revisit inclusions or exclusions, and to submit any additional articles to AAOS staff for consideration for inclusion.

STEP 4: EXTRACTING DATA

AAOS staff will extract the relevant information from each article and enter it into a database. This process will take some time, and during this time, we will probably not have many conference calls. Once this work is complete, you will know that we are nearing the end of the development of the overview.

STEP 5: EVALUATING THE DATA

AAOS Staff will assign a Level of Evidence to each study, but we will ask you to review these levels. AAOS staff will also compile the data into evidence tables but we will not conduct meta-analyses, and/or analyze statistical power or significance. We may construct appropriate graphs to help interpret the data.

STEP 6: EVIDENCE REVIEW

AAOS Staff will help construct a preliminary draft and distribute the draft and all other relevant materials for Task force review. The Task Force Chair will write the introduction to the draft and determine when the final draft is complete. Once complete this draft will be forwarded to the AAOS formal review process.

IV. REVIEW OF TECHNOLOGY OVERVIEWS

PURPOSE

This document describes potential review processes for AAOS' technology overviews. This review has two purposes. First, it will enhance the quality of our overviews. Second, technology overviews will be forwarded to the manufacturers for initial review. This 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.

This document also describes AAOS processes for technology overview approval.

REVIEW

MANUFACTURER REVIEW

Manufacturer Review will begin when the Chair of a technology overview task force indicates that the draft document is complete and ready for review. Manufacturer reviewers will be determined prior to the development of the overview. Manufacturers will have thirty days to review the technology overview.

TECHNOLOGY OVERVIEW APPROVAL

The approval process for any given technology overview will begin when manufacturer reviews are completed. There will be four AAOS bodies involved in the approval process:

1. The Evidence-Based Practice Committee
2. The Guidelines Oversight Committee
3. The Council on Research, Quality Assessment, and Technology
4. The Board of Directors

Each person serving on one these bodies will receive the technology overview and any manufacturer review letter that documents a change that resulted from review.

Approval will proceed in the order shown in the above bullet points, and an overview will not proceed from one body until the previous one has approved it.

Should any of these bodies not approve a technology overview, that overview's task force will be reconvened with the possible addition of one or two new member additions to review the evidence. The Guidelines Oversight Committee will be responsible for appointing these members. Should any of these bodies not approve a technology overview, that task force could be reconvened, the task force could be reconvened with the possible addition of one or two new member additions, or a totally new task force could be convened. You should also be aware that the Oversight Chairs representing the AAOS oversight bodies may decide at any time, based on varying circumstances, to discontinue work on any given technology overview. This includes if time and budget constraints dictate a change in priorities, if the task force cannot or will not follow the AAOS methodology or if other circumstances dictate unforeseen rescheduling. The Guidelines and Technology Oversight Committee will be responsible for determining the

make-up of a task force, for appointing any additional members and for determining the disposition of any technology overview and task force.

V. APPENDIX 1: TASK FORCE CHAIRPERSON CHECKLIST

As stated previously, the Task Force Chairperson, in conjunction with the GTOC Chairperson and AAOS staff, guides the development process of the overview. The following items provide a checklist for the Chair and also include a description of items that will need to be garnered from the introductory teleconference calls.

1. Introductory Teleconference/Strategic Planning
AAOS staff will coordinate an introductory strategic planning teleconference between the Task Force Chairperson, GTOC Chairperson, the AAOS Research Director and AAOS Guideline Manager.
2. Introductory Teleconference with the Task Force
The Chairperson will establish a date for the introductory teleconference and a common night for weekly teleconference calls to develop the list of key questions.
3. The task force will develop the list of key questions.
The initial list of key questions serve as placeholders until supporting evidence is presented by the AAOS Guidelines Unit.
4. The task force will develop the list of inclusion criteria for the retrieval of primary studies.
As stated above, the inclusion criteria may include dates as related to specific development of techniques or change in practice. Also stated above, we search for the best available evidence and generally do not include studies with < 10 patients in a study arm, foreign language studies, case series or animal studies.
5. The task force will assist the Medical Librarian construct and review the list of search criteria for primary studies.
The task force Chair or individual task force members may be contacted intermittently as these searches progress and “in process” questions arise.
6. The task force will review the list of included and excluded articles.
Even though the task force will be given the opportunity to review and suggest additions to the list of included articles, all articles suggested for inclusion must meet the a priori criteria established prior to the search in order to be included.
7. The task force will attend the teleconference calls.
The importance of member participation cannot be understated.
8. The Chairperson will write the pertinent sections in the technology overview.
9. The Chairperson will review and edit the final document.
AAOS staff will construct the draft document less the introduction and send to the Chairperson for review, edits, and approval. The assembled document will then be sent to the task force for review.
11. The Task Force Chairperson will approve the final document and submit for manufacturer review and to the EBPC, GTOC, Council on Research Quality Assessment and Technology and the Board of Directors for approval. This process takes approximately two months.