Clinical Practice Committee
Statement Protocols (4/2014)

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Instructions for authors
These general guidelines for the preparation of AAEM Clinical Practice Statements should be used when submitting to the committee for review. There should be no more than two primary authors. (Under certain circumstances, a third author may be considered.)

Overview of the statement
In 2008, the Clinical Practice Committee was tasked with developing brief clinical policy statements on current issues that impact emergency medicine physicians. These statements should be limited to two pages excluding the reference and article-grading pages.

Since many of the statements have been submitted for peer review and publication in the Journal of Emergency Medicine, the authors have two options in writing their paper:
1. Work on the 2 page CPC paper alone.
2. Work on both the CPC paper simultaneous with an expanded format in preparation for submission to JEM for publication.
   (The final product for CPC should be only a concise two-page statement.)
   *We strongly recommend doing #2 if considering JEM publication.

The statement should provide concise answers around a single question with the following format.
- Introduction
- Executive Summary
- Conclusion

- References and article grading
  - Following the AAEM Clinical Practice Committee methodology for literature (see the attached Statement Search/Grading Process), a clinical question and search terms are decided and explicitly stated. The results of this inquiry should be presented in the executive summary.

<table>
<thead>
<tr>
<th>Publications</th>
<th>Grade</th>
<th>Quality</th>
<th>Comments</th>
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Timing:
- The authors shall submit their paper for peer review by a subcommittee consisting of two to three committee members, within 6 weeks of receiving (and accepting) their assignment. The subcommittee will be chosen by the chair once volunteers have been solicited from the committee at large. The subcommittee will be provided with the initial draft to be critiqued during this time period.
- The CPC subcommittee will have ten business days to review the paper.
- Upon receiving the critique, if any changes are requested, the authors will make appropriate changes to the paper, or respond to the reviewers with a rebuttal as to why they feel changes are not necessary within an additional ten business days.
- At that time the final version will be submitted to the chair for submission to the board of AAEM.
- Any paper not completed within 120 days of assignment will be re-assigned at the discretion of the chair of the CPC.

Statement Literature Search /Grading Process

The process by which literature searches are performed to evaluate specific clinical questions can be quite labor intensive. Data which is most informative to clinical practice will often be reported in clinical trials and other prospective studies. When such research is well conducted and of high impact, it will likely be reported in major (or core as designated by Pubmed) clinical journals. This document provides an algorithm to streamline the literature search process for the AAEM CPC to quickly identify the most relevant studies. This process should allow for greater transparency and efficiency for this portion of the CPC practice statement development.

AAEM Clinical Practice Committee – Statement Literature Search / Grading Process – (Revision Version 3.0 September 2011)

Rationale: The process by which literature searches are performed to evaluate specific clinical questions

Proposed Process:
1. Clinical question and search terms are decided and explicitly stated.
2. The timing of the search should be pre-specified and may vary by type of question (example last 20 years for stroke thrombolysis studies.) In general, the initial search should be limited to the last 5 years. If inadequate results are yielded within 5 years, additional 5 year increments can be added at the discretion of the author.
3. Once a strategy has yielded an adequate number of published high quality research manuscripts, movement to lower tier evidence is not necessary.
4. For clinical treatment questions (addressed by trials) the following process can be employed. (All searches should be performed using Pubmed.gov, as it is freely available.) Other search engines may be used at the discretion of the author, assuming that the searches can be limited in similar fashion to below schema.
A. Tier 1: Search for systematic reviews. (Can add search term AND systematic[sb] {n.b. the sb in brackets alerts pubmed to search the study type field to determine whether it is a systematic review} or use the “Clinical Queries” choice on left hand side of menu on pubmed.gov website.) All relevant, well designed systematic reviews should be included and added to citations revealed in lower tiers. **Be sure to remove systematic review (systematic[sb]) as search term for next search.**

B. Tier 2: Perform search with pre-specified search terms and add the following limits: Humans, English, Randomized Controlled Trial, and Core Clinical Journals. The latter two are under “Type of Article.”

C. Tier 3: If B does not yield sufficient citations to review – change limits and remove the limit for “Core Clinical Journals”

D. Tier 4: If C does not yield sufficient citations to review – change limits and remove the limit for Randomized Controlled Trial and add a limit for “Clinical Trial”

E. Tier 5: If D does not yield sufficient citations to review – change limits and remove all except Humans and English.

F. If E does not yield sufficient citations – either sufficient evidence is not currently available or search strategy needs to be revised.

G. In addition, the references from recent published guidelines or recent review articles relevant to the clinical question may be scanned for screening of additional relevant articles. Other strategies (such as Google Scholar or another “forward search” that provides articles that have cited the ones identified in this process.)

5. When clinical questions are not well addressed by randomized trials certain types of epidemiological studies may be of the highest yield. The below process can be used when the type of question is not likely to be addressed by a clinical trial (example: association between smoking and lung cancer). This algorithm places higher weight on multi-center observation studies and cross sectional studies. The searches should be performed with pubmed.gov or other appropriate search engine.

A. Tier 1: Search for systematic reviews. (Can add search term AND systematic[sb] or use the “Clinical Queries” choice on left hand side of menu on pubmed.gov website.) All relevant, well designed systematic reviews should be included and added to citations revealed in lower tiers. **Be sure to remove systematic review (systematic[sb]) as search term for next search.**

B. Tier 2: Perform search with the pre-specified search terms and add the following limits: Humans, English, Core Clinical Journals and under “Type of Article”: Clinical Trial (included so as to evaluate relevant observational data on subject gained from clinical trials), Multicenter study, comparative study.

C. Tier 3: If B does not yield sufficient citations, remove Core Clinical Journals from the limits.

D. Tier 4: If C does not yield sufficient citations, remove all “Types of Articles” from limits (effectively a keyword search limited to Humans and English language publications.)

E. If D does not yield sufficient citations – either sufficient evidence is not currently available or search strategy needs to be revised.
F. In addition, the references from recent published guidelines or recent review articles relevant to the clinical question may be scanned for screening of additional relevant articles. Other strategies (such as Google Scholar or another “forward search” that provides articles that have cited the ones identified in the above process.)

Examples:
Using the above strategy (4 a – g) with the keywords acute ischemic stroke thrombolysis yields the following (raw numbers from pubmed – not necessarily all relevant manuscripts):
Tier 1(Systematic Reviews): 38
Tier 2: 30
Tier 3: 53
Tier 4: 148
Tier 5: 699

Using the above strategy (5 a – f) with the keyword “Taser” yields the following (raw numbers from pubmed).
Tier 1: 0
Tier 2: 2
Tier 3: 10
Tier 4: 70

Grading of evidence: The existing CPC process for evaluating the quality of included manuscripts will be used. For each reference identified above assign a grade of evidence using the following scale.

<table>
<thead>
<tr>
<th>Grade A</th>
<th>Randomized clinical trials or meta-analyses (multiple clinical trials) or randomized clinical trials (smaller trials), directly addressing the review issue</th>
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<tbody>
<tr>
<td>Grade B</td>
<td>Randomized clinical trials or meta-analyses (multiple clinical trials) or randomized clinical trials (smaller trials), indirectly addressing the review issue</td>
</tr>
<tr>
<td>Grade C</td>
<td>Prospective, controlled, non-randomized, cohort studies</td>
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<tr>
<td>Grade D</td>
<td>Retrospective, non-randomized, cohort or case-control studies</td>
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<tr>
<td>Grade E</td>
<td>Case series, animal / model scientific investigations, theoretical analyses, or case reports</td>
</tr>
<tr>
<td>Grade F</td>
<td>Rational conjecture, extrapolations, unreferenced opinion in literature, or common practice</td>
</tr>
</tbody>
</table>

Then, assign a quality ranking for each above reference using the following scale.

<table>
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<tr>
<th>Ranking</th>
<th>Design Consideration Present</th>
<th>Methodology Consideration Present</th>
<th>Both Considerations Present</th>
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<tbody>
<tr>
<td>Outstanding</td>
<td>Appropriate</td>
<td>Appropriate</td>
<td>Yes, both present</td>
</tr>
<tr>
<td>Good</td>
<td>Appropriate</td>
<td>Appropriate</td>
<td>No, either present</td>
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<tr>
<td>Adequate</td>
<td>Adequate with Possible Bias</td>
<td>Adequate</td>
<td>No, either present</td>
</tr>
<tr>
<td>Poor</td>
<td>Limited or Biased</td>
<td>Limited</td>
<td>No, either present</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>Questionable / None</td>
<td>Questionable / None</td>
<td>No, either present</td>
</tr>
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</table>

An example of this process can be found at the TASER statement.

**Recommendation:**
The authors should provide a recommendation based on the clinical question in one of the following three categories (please note that the exact phrasing of the recommendation will vary whether a treatment, diagnostic or other type of clinical question is being addressed):

- **Yes**, the clinical question is supported positively by the available high quality evidence.
- **No**, the clinical question is not supported positively by the available high quality evidence or significant high quality evidence exists to the contrary of the clinical question.
- **Neutral**, the available high quality evidence is conflicting and future additional data would be helpful to provide further guidance on this subject.

**Validity of this methodology:**
The validity of this methodology should be checked by comparing this process to literature searches performed on prior clinical questions such as pneumonia and determining the sensitivity and specificity for each strategy for studies of acceptable and good quality. We plan to examine the performance of this literature search strategy by comparing the overall yield of high quality evidence based on this to existing comprehensive strategies utilized by other medical organizations. The results of this, in combination with feedback from the CPC and clinical advisory authors will lead to further improvement of this strategy as appropriate.

**Reference format following the JEM guideline**
Type references double spaced and number them consecutively in the order in which they are first mentioned in the text, not alphabetically. Identify references in the text, tables, and legends by Arabic numerals in parentheses. References cited only in tables or figure legends should be numbered in accordance with a sequence established by the first mention in the text of the particular table or figure.

The authors are responsible for the accuracy and completeness of the references. For journal articles the following information should be included:
(a) all author names (if more than 6 authors, list the first 3 authors and et al.), surnames followed by initials without periods, (b) the title of the article with the same spellings and accent marks as in the original, (c) the journal title abbreviated as it appears in the Index Medicus or spelled out if it is not listed there, (d) the date of publication, (e) the volume number and (f) inclusive page numbers.
For books, be sure to include the chapter title, chapter authors, editors of the book, title
of the book (including volume and edition number), publisher's name and city, year of publication, and appropriate page numbers. Examples of the correct format are as follows:


"Unpublished observations" and "personal communications" should not appear in the references, but should be inserted in parentheses in the text. Information obtained from manuscripts that have been submitted for publication but not yet accepted should be cited in parentheses in the text: include authors and manuscript title followed by "submitted for publication." Manuscripts that have been accepted for publication but have not yet been published may appear in the reference list: include the authors, manuscript title, and name of journal followed by "in press" in brackets.