National Association of EMS Physicians Standards and Clinical Practice Committee
Policy on Development of Position Statements and Resource Documents

This policy serves as the guidance document for the development of position statements and resource documents for the National Association of EMS Physicians. The process outlined below describes the use of systematic literature search and review, determination of levels of evidence, and the application of language meant to illustrate the strength of recommendations made by NAEMSP. This process is meant to enhance the value of these documents and provide important background information to our members and to others seeking guidance in these important EMS Medicine topic areas.

Focused Position-Based Questions
1. Develop study questions for the specific topic.
2. Each study question should be as specific as possible to focus on a single point relevant to the overall topic.
3. Develop a PICO question for each unique study question.
4. Perform a systematic search of the literature using each PICO question.
5. Identify manuscripts for analysis for each study question.
   • Title and abstract review of the literature search, used to identify manuscripts for analysis, may be performed by only one reviewer if the search is significant in size and resources necessitate only one reviewer for this stage of the review.
   • Review of full manuscripts, to determine the manuscripts that will be used in the final analysis, must be performed by two reviewers with discrepancies resolved by a third reviewer.
6. Abstract both objective and subjective data from identified manuscripts.
7. Analysis of manuscripts should also include an identification of the study biases and confounders.
8. Objectively analyze and summarize the data.
9. Share preliminary results with PEC editorial staff.

Assignment of Levels of Evidence
1. The article selection, evidence judging, data extraction and data interpretation processes will be performed in a way that minimizes potential reviewer biases. Using at least two independent reviewers at these critical steps, with an additional independent reviewer resolving discrepancies, is the most common and widely accepted method of controlling reviewer bias and will be used by the Committee whenever possible/appropriate.
2. A table will be created for working review by the S&P committee and will be shared with Prehospital Emergency Care (PEC) editorial staff after review by the Committee and/or Chair and Vice-Chair of the Committee (use for Resource Document when appropriate).
   • In some limited circumstances, there may be positions worthy of development for which there may be no standard scientifically-developed manuscripts. In this case this component of the process may not apply.

Assignment of Strength of Recommendation for each statement bullet point

Latest Revisions - 6/26/2014
1. Level of evidence table(s) will be used to derive the overall strength of each recommendation (position statement bullet points) and to guide discussion by the NAEMSP S&P committee.
   - In cases where levels of evidence cannot be determined, there will be no strength modifiers added to the statement points.

Create Position Statement
1. Develop position statement bullet points from analysis of the abstracted data.
2. Share preliminary results with NAEMSP Board and PEC editorial staff after review by the Committee (or in some cases by the Chair and Vice-Chair).

Creation of resource documents
1. Manuscript preparation with authorship (workgroup members and other authors having provided an appropriate level of contribution).
2. Manuscript should be suitable for publication in a high-quality peer-reviewed journal as a stand-alone systematic review.
3. Body of the manuscript will follow this format:
   - Title Page
     - Listing authors and referencing that the manuscript is from the NAEMSP S&P Committee
   - Abstract
   - Introduction
     - Description of the study question(s) and background to the study question(s)
   - Methods
     - Description of the PICO questions, literature review process, data abstraction and data summarization
   - Results
     - Discussion of the manuscripts identified from the literature review with summation table showing relevant results and levels of evidence (when appropriate)
   - Limitations
     - Discussion of existing gaps in, and limitations of, the available literature
   - Conclusion
     - Bullet points of the position statement with strength of recommendation
   - References
4. The manuscript will be submitted for review to the PEC editor assigned to review position statements and resource documents.

Publication of Position Statements and Resource Documents
1. NAEMSP position statements will be published as stand-alone bullet points without authorship.
2. NAEMSP position statement resource documents will be published with authorship.
3. Some positions statements may not have the need for a resource document and the position statement will be submitted for publication independently. In all other instances, the position statement and resource document will be submitted for simultaneous publication.

References
1. Process developed by the American College of Chest Surgeons for assigning levels of evidence to reviewed studies
3. US Preventative Health Services Grades of Recommendation

Note: for the initial implementation of this policy, the Committee will be charged with increasing awareness of the derivation and purpose of this new process. With the consent of the Board the Committee will:

1. Prepare a manuscript for publication describing the derivation and justification of the process.
2. Prepare a presentation for the Annual Meeting to explain the new process to the membership.
3. Prepare orientation materials for members (and potential members) of the Standards and Clinical Practices Committee.
## Levels of Evidence Table

<table>
<thead>
<tr>
<th></th>
<th>Therapeutic Studies</th>
<th>Diagnostic Studies</th>
<th>Economic/Political Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level I</strong></td>
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<tr>
<td></td>
<td><em>Multiple individual high quality randomized controlled trial, all reaching consistent conclusions</em>&lt;br&gt;<em>Systematic review of Level I randomized controlled trials with homogeneous study results</em></td>
<td><em>Testing of previously developed diagnostic criteria in series of consecutive patients with universally applied established reference standard(s)</em>&lt;br&gt;<em>Systematic review of level I studies</em></td>
<td><em>Sensible costs and alternatives with values obtained from many studies</em>&lt;br&gt;<em>Systematic review of level I studies</em></td>
</tr>
<tr>
<td><strong>Level II</strong></td>
<td><em>Systematic review of Level I studies with heterogenous or inconsistent results, or systematic reviews of Level II studies.</em>&lt;br&gt;<em>A high quality randomized controlled trial (statistically significant or not statistically significant with narrow confidence intervals)</em>&lt;br&gt;<em>Lesser quality randomized controlled trial poor follow up, no or inadequate blinding, wide confidence intervals, improper or unsuccessful randomization)</em>&lt;br&gt;<em>Prospective comparative study</em></td>
<td><em>Systematic review of Level II studies</em>&lt;br&gt;<em>Development of diagnostic criteria on the basis of consecutive patients with universally applied reference standard(s)</em></td>
<td><em>Systematic review of Level II studies</em>&lt;br&gt;<em>Sensible costs and alternatives with values obtained from limited studies</em></td>
</tr>
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<td>Level</td>
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<tr>
<td></td>
<td>Examining the results of a type of treatment</td>
<td>Investigating a diagnostic test or procedure</td>
<td>Statements</td>
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</table>
| Level III | • Case control study  
            • Retrospective comparative study  
            • Systematic review of level III studies | • Study of nonconsecutive patients without consistently applied reference standard(s)  
            • Systematic review of level III studies | • Analysis based on limited alternatives and costs  
            • Systematic review of level III studies |
| Level IV  | • Case series | • Case control study  
            • Poor reference standard | • No sensitivity analysis |
| Level V  | • Expert opinion  
            • Editorial  
            • Non-peer reviewed published in a trade journal | • Expert opinion  
            • Editorial  
            • Non-peer reviewed published in a trade journal | • Expert opinion  
            • Editorial  
            • Non-peer reviewed published in a trade journal  
            • Government documents  
            • White papers |
### Strength of Recommendation

<table>
<thead>
<tr>
<th>Recommendation Types Wording</th>
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<tbody>
<tr>
<td>“NAEMSP strongly recommends ….”</td>
<td>There is good evidence that the practice improves overall health outcomes or has a significant benefit to the EMS system, and the benefits substantially outweigh any potential harms.</td>
</tr>
<tr>
<td>“NAEMSP recommends ….”</td>
<td>There is fair evidence that the practice improves overall health outcomes or has benefit to the EMS system, and the benefits outweigh any potential harms.</td>
</tr>
<tr>
<td>“NAEMSP makes no recommendation for or against the adoption of the practice.”</td>
<td>There is some evidence that the practice can improve health outcomes or benefit EMS systems, but the balance of potential benefits and potential harms is currently too close to justify a general recommendation.</td>
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<tr>
<td>“NAEMSP recommends against ….”</td>
<td>There is fair evidence that the practice is ineffective or that the potential harms outweigh the benefits.</td>
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<tr>
<td>“NAEMSP concludes that there is insufficient evidence to make any recommendation about ….”</td>
<td>Evidence supporting the practice is lacking, of poor quality, or conflicting, and the balance of benefits and potential harms cannot be determined.</td>
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</tbody>
</table>

This language would be used to illustrate the strength of each bullet point within a position statement. This determination would be based on the “grade” of each point’s supporting references.