Requirements for the Development of:
Clinical Practice Guidelines,
Clinical Practice Guidelines Synopsis, and
Translation into Practice (TIP) Recommendations
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Overview: ENA provides three types of research-based clinical practice resources 1) Clinical Practice Guidelines, 2) Clinical Practice Guidelines Synopsis and 3) Translation into Practice Recommendations. The following table provides a comparison.

<table>
<thead>
<tr>
<th>How are they created?</th>
<th>Clinical Practice Guidelines (CPGs)</th>
<th>CPGSynopsis</th>
<th>Translation into Practice (TIP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Systematic review of the literature with critical analysis of the existing evidence.</td>
<td>Created by the CPG committee after full CPG developed to summarize recommendations.</td>
<td>Review of the literature and best practices applied to clinical processes and/or procedures</td>
</tr>
<tr>
<td>What is it?</td>
<td>Comprehensive and detailed information on a particular clinical or emergency care topic</td>
<td>Executive summary of the full CPG.</td>
<td>Quick “how-to” reference often in situations with limited evidence or pre-appraised evidence.</td>
</tr>
<tr>
<td>Who creates them?</td>
<td>Clinical Practice Guidelines Committee</td>
<td>Clinical Practice Guidelines Committee</td>
<td>ENA Committees/ Work Groups with review by the subject matter experts to address levels of evidence and specialty content.</td>
</tr>
<tr>
<td>Who Validates them?</td>
<td>Clinical Practice Guidelines Committee and then IENR Advisory Council</td>
<td>Clinical Practice Guidelines Committee and then IENR Advisory Council</td>
<td>Committee/Work Group creating the document and then IENR Advisory Council</td>
</tr>
</tbody>
</table>

Further delineation of the development and dissemination of each of these three ENA clinical practice resources are provided in this document.
INTRODUCTION

Clinical Practice Guidelines (CPGs) are evidence-based documents that facilitate the application of current evidence into everyday emergency nursing practice. CPGs are created by the Clinical Practice Guideline Committee ("Committee") following the rigorous process described in this document. These Guidelines may also serve as a resource for others engaged in implementing evidence-based practice in emergency nursing. ENA believes that CPGs will have a positive impact on patient care and emergency nursing practice by bridging the gap between practice and current available evidence.

CPGs contain recommendations based on a systematic review and critical analysis of the literature about a clinical practice question. Preparing a CPG is a complex process involving critical thinking throughout the entire process. In order to minimize the potential for bias and inconsistency in the development process, it is important that methods are established and documented in advance. This document outlines the approach used to develop CPGs which ensures consistency of the evidence appraisal process and incorporation of current, best available evidence for practice. Further, this document provides the foundation for the development of future CPGs and serves as a resource for nurse researchers and other ENA committees by offering a systematic approach to the review and recommendation for emergency nursing practices.

A. CONTENT DEVELOPMENT

A six-step approach is used to develop the content of CPGs:

1. Selection of Topics
2. Define clinical question(s) in the topic area using the PICOT format
3. Search relevant literature for review
4. Critically appraise the literature to grade the level and quality of evidence
5. Develop the Evidence-Appraisal Table
6. Interpret summative evidence and determine level of recommendation for practice

The purpose of the six-step approach is to provide: a) a consistent method for evaluating evidence and grading recommendation based on the strength of the underlying evidence, and b) a structure to communicate the strength of the evidence to users of CPGs.

1. Selection of Topics

The selection of topics for CPGs is based on information culled from a variety of sources including the ENA ListServes, membership surveys, General Assembly resolutions, and other sources, and reflects ENA’s organizational priorities and membership needs. Most importantly, topics emphasize independent as well as collaborative nursing practices which can be identified as interventions based on clinical experience and forecasting of nursing knowledge (i.e., placing a confused patient close to the nursing station for safety). Considerations regarding the applicability to practice, nursing-sensitive patient outcomes, and available evidence are also addressed in the selection of topics. The Committee identifies and recommends topics to the ENA Board of Directors for consideration each year. The ENA Board approves the topic(s) to be addressed based on ENA’s priorities. A preliminary review of the literature on selected topics will be conducted to determine if sufficient evidence exists for the
development of a CPG. This preliminary review is conducted by the Committee chair, Board liaison staff liaison and one to two senior members of the Committee in the first month of the committee year. The final topics will be provided to the full Committee for development as soon as possible and no later than February 28.

2. Define Clinical Questions in the Topic Area Using the PICOT Format

Designated topics are developed into clinical questions using the PICOT format (see Appendix A for PICOT question development). Creation of a clinical question is often the most challenging step of the process. The question must be researchable, pertinent to emergency nursing practice, answerable, and have a measurable outcome. The creation of a clinical question helps limit the amount of potential inherent bias that occurs in every patient care situation (Fineout-Overholt, Melynk, & Schultz, 2005). It is important to identify whether the clinical question is one of meaning (qualitative) or intervention (quantitative) in order to state the PICOT question. The PICOT may need to be revised and refined based on the findings of the initial literature review.

3. Search Relevant Literature for Review

A literature search is conducted for studies, meta-analyses, systematic reviews and existing guidelines relevant to the clinical question that have been published with a preference for those published within the last five years. Classic studies or meta-analyses from earlier years are also included in this review. The search of the literature must be exhaustive to provide the best information/evidence to make reliable recommendations. Assessment of study eligibility and extraction of information from study reports will be conducted independently by a CPG Subcommittee (“Subcommittee”) (consisting of a minimum of two Committee members).

The working definitions of the key concepts relevant to the clinical question will also be developed and documented as the literature is being reviewed and topics refined. Final definitions, keywords, background, and significance to practice will be included as part of the Resources.

The following databases may serve as potential sources for a literature search:

- U.S. Agency for Healthcare Research and Quality (AHRQ) [http://www.ahrq.gov]
- National Institute for Health and Clinical Excellence [http://www.nice.org.uk]
- Subject Specialist Databases (e.g., CINAHL, OVID, etc.)
- Cochrane Reviews [http://www.cochrane.org]
- British Medical Journal Evidence Centre [http://group.bmj.com/products/evidence-centre]

Additional resources are included in Appendix B.
All articles pertinent to the topic will be listed on the Reference Table – see Appendix C. The Reference Table is not published as part of the CPG but is the comprehensive listing of literature reviewed and the results of that review. It remains on file at ENA to address any questions that may arise about a CPG and to serve as a starting point for future revisions of the CPG.

4. **Critically Appraise the Literature to Grade the Level and Quality of Evidence**

The critical appraisal of the literature is conducted using the Critical Appraisal of Evidence Guide as a reference (see Appendix D). This guide provides detailed information on how to evaluate a research report and review an article. Elements of the guide include the following:

- **Scope and Purpose** – Is the aim of the study clear, is it significant, and the population relevant?
- **Literature Review** – Is the background information and literature current and logical?
- **Theoretical Framework** – Are the concepts/theories logical, sufficient and clear?
- **Research Question** – Is the research question stated? Does it guide the methods used?
- **Methodology** – Is the research approach (qualitative or quantitative) appropriate for the study and to answer the research question?
- **Quality of Research** – Does the research have scientific merit?
- **Major Findings** – Do the findings, data presented, conclusions and limitations explain the results and support the purpose of the study?
- **Implications** – Are the findings relevant, applicable and generalizable?

5. **Develop the Reference, Evidence, and Other Resources Tables**

The Reference Table template (Appendix C) is completed as literature is reviewed. Specific columns are used when analyzing and synthesizing research studies, meta-analyses, systematic reviews, and clinical practice guidelines. The Evidence Table (Appendix E) is a subset of the Reference Table and is created after the Committee reviews and grades the literature. The Evidence-Table provides key information concerning the quality of evidence, the magnitude of effect of the decision options/interventions examined, and the sum of available data on all important outcomes for a given comparison. Essential elements included in the table are:

- **Reference**: Author, Year and Title
- **Research Purpose/Questions/Hypothesis**
- **Design/Sample/Setting**
- **Measures/Variables/Analysis**
- **Findings/Implications**
- **Overall Quality of Research including comments**
- **Level of Evidence including comments**.
Each Subcommittee member independently reviews all identified literature and completes the Reference Table for the topic assigned. The Committee must reach consensus on strength and quality of evidence scores. If needed, worksheets (e.g., AGREE worksheet) for critiquing research studies (Appendix F) and evaluating practice guidelines (Appendix G) are also available to use to help complete the evidence table. If a research paper is not chosen for inclusion on the Evidence Table, the reason for not including it should be noted in the last column of the Reference Table.

The Other Resources Table (Appendix H) is also created as a subset of the Reference Table and includes articles that do not contribute evidence directly but may be helpful to nurses who are learning more about a topic or implementing a practice change. Review articles are commonly included in the Other Resources Table.

6. **Interpreting Summative Evidence and Making Recommendations: ENA’s Conceptual Model**

The recommendations reflect the summative interpretation of evidence along with the clinical judgment and experience of emergency nurses. Each recommendation is assigned a level which indicates the strength of evidence upon which the recommendations is based. This differs from levels of evidence in that the entire body of work is analyzed in making a decision regarding recommendations for practice. Utilizing concepts presented in the Advancing Research and Clinical Practice through Close Collaboration (ARCC) model (Melnyk & Fineout-Overholt, 2014), ENA developed a conceptual model for determining the level of recommendation for practice. The model consists of three components: 1) summative levels of evidence, 2) summative quality of evidence and 3) relevance and applicability to practice based on clinical judgment and experience of emergency nurses.

a. **Background**

The ENA model reflects the concepts of the ARCC model that guides the evaluation and ultimate determination of recommendations for practice. The ARCC model represents the incorporation of research into clinical practice (Fineout-Overholt, Melynk, & Schultz, 2005). The key components of the ARCC include: a) research evidence, b) evidence-based theories, c) clinical expertise and evidence from the assessment of the patient and healthcare resources and d) patient preferences and values. In emergency nursing, practice depends on emergency nurses balancing expert clinical judgment with patient preferences. Without the use of all of the components of the ARCC model, the application of evidence would only be research utilization. Thus, the ENA model incorporates not only the levels and quality of research evidence but also the relevance and applicability to practice based on the experience and expertise of emergency nurses.

b. **Assumptions and Premises for Determining the Level of Recommendation for Practice**

ENA’s model for grading level and quality of evidence is consistent in principle with other evidence grading systems (Guyatt et al., 2006) including the grading system utilized by the American College of Emergency Physicians (ACEP) (Schriger, Cantrill, & Greene, 1993; Jagoda et al., 2008). The ENA model reflects the following assumptions and premises:

i. Grading of the recommendations is a separate function from judging the quality of the evidence.

ii. There is a need for the simplicity and transparency of grading for the consumers of CPGs.

iii. There must be an adequate number of “grading” categories.

iv. Grading criteria need to be explicit.
c. Major Components to Determine the Level of Recommendation for a CPG

The ENA model for determining the level of recommendation of the CPG for practice includes three components to provide structure and transparency in the recommendations for the final CPG.

i. Grading levels of the evidence. This component provides an objective description of the design and types of studies supporting a CPG. ENA adopted the Melnyk and Fineout-Overholt model for categorizing levels of evidence (see Table 1). The Melnyk and Fineout-Overholt model is known for its clarity of categories for ranking the type of research designs. The model is easy to understand and apply as a critical appraisal system. The summative level of evidence provides the link between the recommendations and evidence base of a CPG.

ii. Grading the quality of the evidence. This component provides a means to delineate the overall summative quality of the body of evidence that is available for a CPG (see Table 1). This component considers the relative strengths and weaknesses of available evidence, as well as any conflicting or heterogeneous findings from multiple studies. Grading of the quality of the evidence evaluates issues that can affect quality (e.g., blinded versus non-blinded outcome assessment, direct or indirect outcome measures—including reliability and validity, biases, sufficient sample sizes etc.).

iii. Grading the clinical relevance and applicability of the evidence to emergency nursing practice. The clinical relevance and applicability of the evidence is determined by consensus of the Committee. Although research provides the basis for examining the evidence, it is recognized that research is not the single determinant of use of evidence in practice. Sound clinical decisions need to address other considerations such as clinical expertise, patient expectations and preferences, social circumstances, resources availability (e.g., time, equipment, personnel) in the clinical setting, community support services available, access to care, ethical issues and medico-legal risks. Clinical relevance and applicability of the evidence to practice is determined based on the experience and expertise of emergency nurses. This component in determining the level of recommendation acknowledges the expert opinion of emergency nurses to assess the strength or generalizability of the evidence, while considering the tradeoffs between benefits and harm to patients. The goal of this component is to be explicit and transparent regarding the use of clinical expertise in the final determination of the level of recommendation. Incorporating clinical expertise of emergency nurses assures the applicability of the CPG to clinical practice.
d. Description of Levels of Recommendation for Practice.

ENA’s levels of recommendation are summarized in a table that classifies evidence as high, moderate, weak or not recommended for practice. A description of each level of recommendation is provided in Table 2. The levels of recommendation reflect the general principles of grading evidence for practice used by other professional groups such as ACEP. The level of recommendation for practice for each CPG is determined by the Committee based on the level of the evidence, quality of the evidence, and the clinical relevance and applicability. As a note of caution, regardless of the recommendation for practice, it is still the responsibility of individual clinicians to use their judgment and consider patient circumstances when making individual decisions regarding the use of a CPG for practice.

B. MANAGEMENT OF THE DEVELOPMENT PROCESS

1. Timeline

The anticipated timeline for each CPG is approximately 12 months (six months for preliminary content development and six months for review, refinement, and production of final product).

2. Subcommittees

A minimum of two individuals are assigned to conduct the initial literature review. A nursing research expert with both clinical expertise and doctoral (PhD) academic preparation also reviews the literature and works with each Subcommittee as a consultant. Conference calls with Subcommittee members and staff are held as necessary to discuss progress and facilitate the Subcommittee’s work. All members of a Subcommittee independently complete an exhaustive review of all identified literature, complete a separate evidence table for each topic (if possible), and then reconvene to reach consensus. Each Subcommittee prepares a description of the topic, definition, background, significance, and evidence table. All articles and documents are uploaded to the Committee teamsite for easy retrieval by everyone involved with the development process. The Subcommittee identifies and assigns preliminary scores for quality and strength of evidence, and describes conclusions based on the review of the body of evidence. Each Subcommittee also serves as “second readers” for another topic; this assures an in-depth look at the literature by two Subcommittees. The entire Committee reads the articles and reviews the evidence-appraisal tables for each topic and then finalizes implications for practice and the levels of recommendation.

3. Documentation

All documentation (search strategy, electronic copies of each article, reference table, etc.) are completed and submitted to the Committee with written recommendations. Documentation that occurs in the development of the CPG that is not published is archived by ENA staff.

4. Finalizing Documents

All documents will be formatted according to the American Psychological Association (APA) Guidelines, 6th edition. Working drafts of the narrative document will have line numbers inserted to facilitate Committee discussion. The documentation is submitted electronically to the Committee team site. The meetings and
conference calls encompass a discussion of the evidence, determination of the strength and quality of the evidence, recommendations for practice, and consensus to continue with development of the CPG or refocus it as necessary. The Subcommittee will refine the evidence tables based on Committee consensus. The Institute for Emergency Nursing Research (IENR) Advisory Council reviews the final document for overall validity and provides feedback as appropriate using the CPG Evaluation Worksheet (Appendix G). Reviews and feedback are sent to the Subcommittee to evaluate and incorporate, as appropriate. A Clinical Practice Guidelines Synopsis (“Synopsis”) created (pp 14) after the full CPG is completed. ENA staff creates the final products for publication with input from the Committee (see Table 3 for CPG Development Process). The following components appear in the final Committee document:

- Title: PICOT Question
- Authors
- Disclaimer and an assessment of the benefits and harms of recommended care and alternative care options
- Dates of publication
- Content
  - Title
  - Background/significance
  - Literature search strategies
  - Description of decision options/interventions and the level of recommendation
  - Evidence Table
  - Other Resources Table
  - References
  - Acknowledgements
- Clinical Practice Guidelines Synopsis (Refer to p. 14 for Clinical Practice Synopsis)

C. DISSEMINATION OF CPGs

CPGs are disseminated by multiple methods, including but not limited to:

- Electronically on the ENA Website and via other electronic media, if appropriate
- Print versions (as indicated)
- Journal of Emergency Nursing
- Submission to the National Guidelines Clearinghouse

D. REVIEW AND REVISION OF CPGs

CPGs will be reviewed and or revised a minimum of every four years to ensure the content is current. Updates involve a search for new studies and may involve revision of the question of interest and incorporation of new information. The review will be completed by the Committee, IENR Advisory Council, and/or the ENA staff (refer to Table 4).
Bibliography


University of Glasgow; Department of General Practice. (n.d.). *Critical appraisal checklist for an article on qualitative research*. Retrieved from http://www.gla.ac.uk/media/media_64038_en.pdf
CLINICAL PRACTICE GUIDELINES (CPGs) SYNOPSIS

Overview: The Synopsis is an evidence-based document that facilitates the application of current evidence into everyday emergency nursing practice. The Synopsis contains recommendations based on a systematic review and critical analysis of the literature about an emergency care related topic based on a clinical question.

1. The Synopsis is created by the Committee to summarize recommendations contained in the full CPG.

2. The Synopsis will include the following components:

   A. **Clinical question.** The specific question to be addressed; including scope of evidence to be addressed by using PICOT format will be used.

   B. **Problem Statement.** A brief background of the significance of the problem/rationale for the Synopsis as it pertains to the clinical question will be briefly stated. Selected references are embedded in this section.

   C. **Evidence-based Recommendations.** Delineate the description of the decision options/interventions stated as clinical practice guideline recommendations. Include the level of evidence for each recommendation.

   D. **Overview and Purpose of CPG’s and the Key for Level of Evidence.** The link for the full CPG is included in this section which includes the full references for the document. Delineate the level of evidence for each stated CPG recommendation, based on leveling as described in the ENA Guidelines for Development of Clinical Practice Guidelines. See below:

   G. Include ENA Disclaimer
3. The final version of the Synopsis will be peer reviewed by the Committee and, IENR Advisory Council.
TRANSLATION INTO PRACTICE (TIP) RECOMMENDATIONS

Overview: Review of the literature and best practices applied to clinical processes &/or procedures

1. The ENA TIP recommendations that reflect current “best-practice(s)” for specific care pertaining to clinical processes and/or procedures to be addressed.

2. The components of the ENA TIP recommendations will include the following:
   A. **Clinical Significance (Evidence supporting Significance) and Level of Evidence.** Specifically state the recommendation from evidence-based literature that supports the significance of clinical practices delineated in the TIP recommendations.
   B. **Population(s).** Indicate the inclusion / exclusion of populations (e.g., pediatrics, behavioral health) pertaining to the TIP recommendations.
   C. **TIP recommendations.** Summarize the recommended clinical practices for the ENA TIP recommendations. Indicate the level of evidence for TIP recommended practices, based on leveling as described in the *ENA Guidelines for Development of Clinical Practice Guidelines*. See below.
   D. **Figures and/or Tables.** Include relevant images when indicated.
   E. **Supporting Rationale.** Provide bullet-points that support the need for the use of the evidence-based guidelines or procedure in emergency nursing practice (e.g., “talking-points”).
   F. **References.** Delineation of reference(s) for full documentation of all references used to derive the Translation into Practice recommendations.
   G. **Key for Level of Evidence.** Delineate the level of evidence for each stated TIP recommendation, based on leveling as described in the *ENA Guidelines for Development of Clinical Practice Guidelines*. See below:

   **Key for Level of Evidence Recommendation**
   
   ![Key for Level of Evidence Recommendation]

   **A. Level A (High) Recommendation:** Based on consistent and good quality of evidence; has relevance and applicability to emergency nursing practice.
   **B. Level B (Moderate) Recommendation:** There are some minor inconsistencies in quality evidence; has relevance and applicability to emergency nursing practice.
   **C. Level C (Weak) Recommendation:** There is limited or low-quality patient-oriented evidence; has relevance and applicability to emergency nursing practice.
   **D. Not Recommended:** Based upon current evidence.
   **E. Not Enough Evidence:** Insufficient evidence upon which to make a recommendation.
   **F. No Evidence:** No evidence upon which to make a recommendation.

   H. Include ENA Disclaimer and Authors for TIP recommendations.

**Disclaimer**
This document, including the information and recommendations set forth herein (i) reflects ENA’s current position with respect to the subject matter discussed herein based on current knowledge at the time of publication; (ii) is only current as of the publication date; (iii) is subject to change without notice as new information and advances emerge; and (iv) does not necessarily represent each individual member’s personal opinion. The information and recommendations discussed herein are not codified into law or regulations. Variations in practice and practitioner’s best nursing judgment may warrant an approach that differs from the recommendations herein. ENA does not approve or endorse any specific sources of information referenced. ENA assumes no liability for any injury and/or damage to persons or property arising from the use of the information in this document.

**Authors**
Authored by XXXX
ENA Board of Directors Liaison:
ENA Staff Liaisons:

3. The final version of the TIP recommendations will be peer reviewed by and the and the Institute for Quality and Safety Prevention (IQSIP) and the IENR Advisory Council.
<table>
<thead>
<tr>
<th>Component</th>
<th>Decision Rule</th>
<th>Quality of the Evidence: (Use the scale of 1-4)</th>
<th>Relevance &amp; Applicability</th>
</tr>
</thead>
</table>
| 1         | Grade the Quality of the Evidence | 1. Acceptable  
2. Limitations in Quality: Minor flaws or inconsistencies in the evidence  
3. Major Limitations in Quality: Many flaws and inconsistencies in the evidence  
4. Not Acceptable: Major flaws in the evidence  
*Specify any study design concerns:* | □ YES  
□ NO |
| 2         | Grade the Levels of the Evidence (Melnyk & Fineout-Overholt, 2014) | 1. Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials or evidence-based clinical practice guidelines based on systematic reviews of RCTs  
2. Evidence obtained from at least one properly designed randomized controlled trial  
3. Evidence obtained from well-designed quasi-experimental studies without randomization  
4. Evidence obtained from well-designed case control and cohort studies  
5. Evidence from systematic reviews of descriptive and qualitative studies  
6. Evidence from a single descriptive or qualitative study  
7. Evidence from opinion of authorities and/or reports of expert committees  
*Strength of the Evidence (Use the scale of I-VII)* (Determine the overall level of evidence strength based on the aggregate of data available from all sources) | |
| 3         | Grade the Relevance and Applicability of the Evidence to Emergency Nursing Practice | Is there consensus in the Subcommittee that the evidence has relevance and applicability to emergency nursing practice? | □ YES  
□ NO |
## Table 2. Levels of Recommendation for Practice

<table>
<thead>
<tr>
<th>Description</th>
<th>Level</th>
</tr>
</thead>
</table>
| **High** Recommendation:  
- Reflects a high degree of clinical certainty.  
- Based on availability of high quality level I, II and/or III evidence available using Melnyk & Fineout-Overholt grading system (Melnyk & Fineout-Overholt, 2014).  
- Based on consistent and good quality evidence; has relevance and applicability to emergency nursing practice.  
- Is beneficial. | □ A – High |
| **Moderate** Recommendation:  
- Reflects moderate clinical certainty.  
- Based on availability of Level III and/or Level IV and V evidence using Melnyk & Fineout-Overholt grading system (Melnyk & Fineout-Overholt, 2005).  
- There are some minor or inconsistencies in quality evidence; has relevance and applicability to emergency nursing practice.  
- Is likely to be beneficial. | □ B – Moderate |
| **Weak** Recommendation:  
- Level V, VI and/or VII evidence available using Melnyk & Fineout-Overholt grading system (Melnyk & Fineout-Overholt, 2014) -Based on consensus, usual practice, evidence, case series for studies of treatment or screening, anecdotal evidence and/or opinion.  
- There is limited or low-quality patient-oriented evidence; has relevance and applicability to emergency nursing practice.  
- Has limited or unknown effectiveness. | □ C – Weak |
| **Not Recommended for Practice**  
- No objective evidence or only anecdotal evidence available; or the supportive evidence is from poorly controlled or uncontrolled studies.  
- Other indications for not recommending evidence for practice may include:  
  1. Conflicting evidence.  
  2. Harmfulness has been demonstrated.  
  3. Cost or burden necessary for intervention exceeds anticipated benefit  
  4. Does not have relevance or applicability to emergency nursing practice  
- There are certain circumstances in which the recommendations stemming from a body of evidence should not be rated as highly as the individual studies on which they are based. For example:  
  1. Heterogeneity of results.  
  2. Uncertainty about effect of magnitude and consequences.  
  3. Strength of prior beliefs.  
  4. Publication bias. | □ Not Recommended |
<table>
<thead>
<tr>
<th>Process</th>
<th>Format of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A preliminary review of the literature on selected topics</td>
<td>Committee chair, Board liaison staff liaison and one to two</td>
</tr>
<tr>
<td></td>
<td>senior members</td>
</tr>
<tr>
<td>Receive project orientation and topic assignments</td>
<td>Committee Conference call</td>
</tr>
<tr>
<td>Transform and narrow topic into a clinical question;</td>
<td>Subcommittee</td>
</tr>
<tr>
<td>Review articles, complete critique worksheets, and refine the clinical</td>
<td>Subcommittee</td>
</tr>
<tr>
<td>question</td>
<td></td>
</tr>
<tr>
<td>Develop preliminary definition of the clinical question and the</td>
<td>Subcommittee</td>
</tr>
<tr>
<td>background information including significance</td>
<td></td>
</tr>
<tr>
<td>Create preliminary evidence table using the evidence-appraisal table</td>
<td>Subcommittee</td>
</tr>
<tr>
<td>template</td>
<td></td>
</tr>
<tr>
<td>Review, discuss, and refine the evidence-appraisal table as a group</td>
<td>Committee Meeting</td>
</tr>
<tr>
<td>Determine the level of recommendation</td>
<td>Committee Meeting</td>
</tr>
<tr>
<td>Refine the draft CPG including definition, background, evidence-</td>
<td>Subcommittee</td>
</tr>
<tr>
<td>appraisal table and level of recommendation</td>
<td></td>
</tr>
<tr>
<td>IENR Advisory Council reviews the CPG</td>
<td>IENR</td>
</tr>
<tr>
<td>Refine the final version</td>
<td>Committee Conference Call</td>
</tr>
<tr>
<td>Create final product(s)</td>
<td>ENA Staff</td>
</tr>
<tr>
<td>Submit final products for distribution</td>
<td>ENA Staff</td>
</tr>
<tr>
<td>Activities</td>
<td>Y1 Q3</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>July of Y1:</td>
<td></td>
</tr>
<tr>
<td>Potential new CPGs identified by C Committee</td>
<td>X</td>
</tr>
<tr>
<td>Fall Y1:</td>
<td></td>
</tr>
<tr>
<td>ENA Board of Directors approves final list of CPGs to be developed in following Year</td>
<td></td>
</tr>
<tr>
<td>• Assign Subcommittees for CPG development</td>
<td></td>
</tr>
<tr>
<td>• Recruit Content Experts (optional)</td>
<td></td>
</tr>
<tr>
<td>• Finalize PICOT for CPG</td>
<td></td>
</tr>
<tr>
<td>• Critique of Literature</td>
<td></td>
</tr>
<tr>
<td>• Development of Reference Table of the literature</td>
<td></td>
</tr>
<tr>
<td>• Finalize the Reference Table Draft of CPG for Committee meeting mid-year</td>
<td></td>
</tr>
<tr>
<td>• Critique and input on Draft of CPG by Committee &amp; IENR representative(s)</td>
<td></td>
</tr>
<tr>
<td>• Draft of CPG completed</td>
<td></td>
</tr>
<tr>
<td>• Literature search conducted to include any additional current references since beginning of the year and/or since last literature search</td>
<td></td>
</tr>
<tr>
<td>• Final review by Committee and IENR Advisory Council</td>
<td></td>
</tr>
<tr>
<td>• Final CPG uploaded to ENA website</td>
<td></td>
</tr>
<tr>
<td>• CPG submitted to the National Guidelines Clearinghouse</td>
<td></td>
</tr>
<tr>
<td>• CPG submitted to <em>Journal of Emergency Nursing</em></td>
<td></td>
</tr>
</tbody>
</table>
## PICOT DEVELOPMENT

Clearly formulating the clinical question is the key to getting usable information. Clear questions allow for a better utilization of time, resources, and facilitating search strategies. The framework utilized to define the question is PICOT:

- **Patient Population** - What patient population/problem are you trying to address?
- **Intervention (area of interest)** - What will you do for the patient or problem?
- **Comparison Intervention or Groups** – What is an alternate group or intervention?
- **Outcome** – What is the desired effect or improvement for the patient/population?
- **Time** – Timeframe

Using the PICOT framework allows for clear parameters when searching the literature and evaluating the application in the ED. The final clinical question that appears in the CPG does not need to follow format but should take all elements into consideration when possible.

### Example 1

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient population</td>
<td>Intervention</td>
<td>Comparison</td>
<td>Outcome</td>
<td>Time</td>
</tr>
<tr>
<td>Low speed MVC patients in spinal precautions in the emergency department</td>
<td>Clearance by RN (assessed and removed from precautions per protocol by an RN)</td>
<td>Removed from precautions by a physician</td>
<td>Have more positive radiological findings</td>
<td>During their emergency department stay</td>
</tr>
</tbody>
</table>

**Example 1 PICOT Question:** Do low speed MVC patients in spinal precautions in the emergency department who are assessed and are cleared (have spinal precautions removed per protocol) by an RN have more positive radiological findings during their ED stay than patients whose precautions are removed by physicians?

### Example 2

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient population</td>
<td>Intervention</td>
<td>Comparison</td>
<td>Outcome</td>
<td>Time</td>
</tr>
<tr>
<td>Do patients with chest pain in the emergency department</td>
<td>Cardiac enzyme profiles every 6 hours x 3</td>
<td>Cardiac enzyme profiles 12 hours x 2</td>
<td>Have fewer complications</td>
<td>In the first 24 hours of admission</td>
</tr>
</tbody>
</table>

**Example 2 PICOT Question:** Do chest pain patients in the emergency department who have cardiac injury (enzyme) profiles every 6 hours times 3 vs. every 12 hours times 2, have fewer complications during their first 24 hours of admission?
## Appendix B. Resources for the Creation of CPGs

### Research Methods

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
</table>

### Research Terms

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cochrane Tutorial</td>
<td><a href="http://www.cochrane.org/glossary">http://www.cochrane.org/glossary</a></td>
</tr>
</tbody>
</table>

### APA Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Psychological Association</td>
<td><a href="http://www.apastyle.org">www.apastyle.org</a></td>
</tr>
<tr>
<td>Purdue APA</td>
<td><a href="http://owl.english.purdue.edu/owl/resource/560/01/">http://owl.english.purdue.edu/owl/resource/560/01/</a></td>
</tr>
</tbody>
</table>

### Statistics Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics Glossary</td>
<td><a href="http://www.stats.gla.ac.uk.steps/glossary/index.html">http://www.stats.gla.ac.uk.steps/glossary/index.html</a></td>
</tr>
</tbody>
</table>

### National Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cochrane evidence-based reports</td>
<td><a href="http://www.cochrane.org">www.cochrane.org</a></td>
</tr>
</tbody>
</table>
### Appendix C. Reference Table Template

| Article File Name (1st Author _Publication _Year) | Year | Full APA Citation | Key words | CPG Committee Reviewer | Type of Pub (Research, review article, letter to editor, etc) | **Note if endorsed by Prof Org | Research Purpose/Questions/Hypothesis | Design/Method (prospective, descriptive, controlled, variables, etc) | **Note if IRB approval? | Sample (N, randomized, convenience, population, etc) | Setting (ED, critical care, urban, rural, community hospital, academic medical center, etc) | Measures/Instruments/Appropriate Statistical Analysis | Findings/Implications/Conclusions re: PICOT question (e.g. Relative Risk Ratios, p value, confidence intervals) | Generalizable/Relevance to Practice/Feasibility | Limitations for both study design and results | Overall Quality of Research including comments (4-point scale) | Level of Evidence including comments (7-point scale) | Final Disposition 1-Evidence Table, 2-Other Resources Table 3-Do Not Include | Include notes for each article to explain why assigned 1, 2, or 3 |
|------------------------------------------------|------|------------------|-----------|------------------------|-------------------------------------------------------------|---------------------------------|-------------------------------|---------------------------------------------|---------------------------------|---------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------|---------------------------------------------|-------------------------------------------------|---------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Make sure this is identical to how article file is named. | Include DOI when available. | Pertaining to article. | Initials | Use direct quote. Include page #. | IRB: yes, no, or not stated. | Both should be included. | Indicate specific brand/model of any devices used. | If conclusion does not fully apply to PICOT, include explanation of how it does. | | | |

APA format must be used for references.

If you have questions on vernacular or research terms see resources page.


Utilize Table 1 for leveling information.
Appendix D. ENA Critical Appraisal of Evidence Guide

Source: Is the study report from a peer-reviewed publication?

Purpose

Purpose of Study
Is the purpose of the study clearly stated?

Significance
1. Does the investigator provide a good argument for significance?
2. Does the investigator provide a rationale for why the study is being conducted?
3. Does the study have the potential to help solve or provide further data for evaluating a problem that is currently faced in clinical practice, education or research?
4. Is the study relevant to emergency nursing practice, education and research?

Problem statement
Is the problem statement clear and concise?

Background/Literature Review
1. Does the review of literature follow a logical sequence?
2. Does the author review a sufficient amount of literature? Does the literature review include research done within past five years? Does the literature review include historical and/or classical research?
3. Does the investigator use primary sources?
4. Does the investigator identify gaps in the research literature and support the need and design of the present study?
5. Does the literature review reflect the current state of science?

Theoretical Framework
1. Is there a theoretical/conceptual framework identified?
2. If no framework is provided, is it difficult to understand the relationships among variables in the study?
3. Is the identified conceptual framework relevant to the research area and are appropriate relationships among major variables identified?
4. Did the framework guide the methods and conclusions?

Research Questions/Hypotheses
1. Is the research question(s) clearly stated?
2. Are hypotheses specified, if applicable?
3. Are the hypotheses appropriate and precisely stated in a format that allows for testing?
4. Is there a logical consistency between purpose and research questions/hypotheses?

Methodology

Does the research approach fit the purpose of the study?

Design - Quantitative
1. Is the design appropriate for the research questions?
2. Was the study longitudinal or cross-sectional? Was the amount of data gathered appropriate for the research question and design?
3. If the study involves interventions was it quasi- or pre-experimental? Was this appropriate?
4. If the study involves no interventions was non-experimental (no manipulation of independent variable) appropriate?

Design – Qualitative
1. Is the design/methodology identified and appropriate?
2. Are the language and concepts consistent with the approach?
3. Does the investigator report any preconception or bias?
4. Is observational or interview experience described?

Variables
1. Are the type of variables (independent and dependent) clearly stated?
2. Are the concepts clearly and operationally defined?

Validity
1. Is the data collection technique specified, including inter-rater reliability/inter-observer agreement if applicable to the study? Does the study design effectively control sources for error/bias? If not, is it justified?
2. When present, are the potential threats to internal and external validity identified and discussed?
3. For qualitative studies, was the relationship between investigators and subjects as well as any bias addressed adequately?

Sample
1. Is sampling frame (population) identified and sampling method described?
2. Is the sample size adequate? Is a power analysis performed to show that the sample for the study is adequate, given the number of variables, to affect size and design?
3. Are the inclusion and/or exclusion criteria clear and appropriate?
4. Does the sample composition and size reflect study needs?

Data Collection
1. Are methods for data collection described/appropriate?
2. Are data collector(s) qualified?
3. Were the methods of data collection used reliable and independently verifiable?
4. Is there evidence of reflexivity, credibility and/or transferability for qualitative research?

IRB
1. Was IRB approval obtained for the study?
2. Is there adequate assurance that the rights of human subjects were protected?
2. Were the subjects pressured to participate or their responses influenced in any way?

**Setting and Location**

Are the setting and location for the study specified and clear? Was the setting appropriate for the study?

**Measures/Instruments**

**Quantitative**

1. Were the instruments appropriate to gather the information relevant to the research question(s)?
2. Was reliability testing described and adequate for the instruments/measures used in the study?
3. Was the validity testing described and adequate for the instruments/measures used in the study?

**Qualitative**

1. Did the investigator try to enhance trustworthiness of the study?
2. Did the investigator try to enhance and appraise the credibility of the data?
3. Were the findings dependable, confirmable and transferable?

**Analysis**

**Quantitative**

1. Are methods for data analysis consistent with research design and question/hypothesis?
2. Are the statistical methods for analysis described and appropriate?
3. Are appropriate statistical analysis methods being used according to level of measurement, sample size, sampling method?
4. Are the statistical findings adequately reported?

**Qualitative**

1. Was the data analysis rigorous?
2. Was the data transcribed/analyzed appropriately?
3. Were themes/concepts derived from the data?

**Major Findings, Conclusions and Limitations**

**Findings and Conclusions**

1. Are the results for each hypothesis clearly presented and supported?
2. Do the figures and tables help to explain the results?
3. Are results described within the theoretical framework and supporting literature?
4. Are conclusions based on the results and related to the hypotheses’?
5. Are generalizations made within the scope of the results and findings?
6. Does the data support the findings?

**Limitations**

1. Are study limitations identified?
2. Are suggestions for future research identified?

**Implications**

**Generalizability**

Are the findings generalizable?

**Relevance to Practice**

1. Are implications of findings discussed appropriately (i.e., for practice, education and research)?
2. Are the findings clinically significant?
3. Are the findings relevant to emergency nursing practice?

**Applicability to Practice**

1. Are the study findings feasible for nurses to apply to practice?
2. Do the study findings offer solutions that provide benefits that outweigh the risks?
3. Is the population, intervention or phenomenon described applicable to the emergency environment?
4. Will the benefits affect a large number of clients or outcomes?
5. Does the study contradict other innovations or research?
6. Are the results and implementation under the authority of nursing?
7. What is the cost/benefit ratio?
8. Does the study help clarify a concept, theory or relationship with a population?

**Overall Quality of the Research**

1. Does the quality of the study meet the criterion of scientific merit and can it be used as evidence for practice?
2. Identify if there are major or minor flaws in study design for the following:
   a. Selection of patients
   b. Allocation of patients to treatment groups
   c. Therapeutic regimen
   d. Study administration
   e. Withdrawals from the study
   f. Patient blinding (in randomized clinical trials only)
   g. Outcome measurement
   h. Statistical analysis
3. Major flaw=A potential bias of the study which could invalidate the study’s findings.
4. Minor flaw=A small divergence from usual or best practices, but does not create a partiality which would suggest invalid study findings.
5. Three minor flaws should be considered an equivalent of a major flaw.
## Appendix E. Evidence Table Template

<table>
<thead>
<tr>
<th>CPG Title</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference (Author, Year, Title)</th>
<th>Research/Purpose Questions/Hypothesis</th>
<th>Design/Sample Setting</th>
<th>Variables/Measures Analysis</th>
<th>Findings/Implications</th>
<th>Overall Quality of Evidence (4-point scale)*</th>
<th>Level of Evidence (7-point scale)**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Grading the Quality of the Evidence

I. Acceptable Quality: No Concerns
II. Limitations in Quality: Minor flaws or inconsistencies in the evidence
III. Major Limitations in Quality: Many flaws and inconsistencies in the evidence
IV. Not Acceptable: Major flaws in the evidence

**Grading the Levels of the Evidence (Melnyk & Fineout-Overholt, 2005)

I. Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials or evidence-based clinical practice guidelines based on systematic reviews of RCTs
II. Evidence obtained from at least one properly designed randomized controlled trial
III. Evidence obtained from well-designed quasi-experimental studies without randomization
IV. Evidence obtained from well-designed case control and cohort studies
V. Evidence from systematic reviews of descriptive and qualitative studies
VI. Evidence from a single descriptive or qualitative study
VII. Evidence from opinion of authorities and/or reports of expert committees
Appendix F. AGREE Worksheet

Reference Evaluated: __

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Dis-agree</th>
<th>Strongly disagree</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The overall objective(s) of the guideline is (are) specifically described.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2. The health question(s) covered by the guideline is (are) specifically described.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. The population (patients, public, etc.) to whom the guideline is meant to apply are specifically described.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. The guideline development group includes individuals from all the relevant professional groups.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. The views and preferences have been sought.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. The target users of the guideline are clearly defined.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Systematic methods were used to search for evidence.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Dis-agree</td>
<td>Strongly disagree</td>
<td>Comments</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-------</td>
<td>-----------</td>
<td>-------------------</td>
<td>----------</td>
</tr>
<tr>
<td>8. The criteria for selecting the evidence are clearly described.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9. The strengths and limitations of the body of evidence are clearly described.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10. The methods used for formulating the recommendations are clearly described.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11. The health benefits, side effects and risks have been considered in formulating the recommendations.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12. There is an explicit link between the recommendations and the supporting evidence.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13. The guideline has been externally reviewed by experts prior to its publication.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>14. A procedure for updating the guideline is provided.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>15. The recommendations are specific and unambiguous.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>16. The different options for management of the condition or health issue are clearly presented.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>17. Key recommendations are easily identifiable.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>19. The guideline provides advice and/or tools on how the recommendations can be put into practice.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Dis-agree</td>
<td>Strongly disagree</td>
<td>Comments</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>18. The guideline describes facilitators and barriers to its application.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>20. The potential resource implications of applying the recommendations have been considered.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>21. The guideline presents monitoring and/or auditing criteria.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>22. The views of the funding body have not influenced the content of the guideline.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>23. Competing interests of guideline group members have been recorded and addressed.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Rate the overall quality of this guideline.  
1: Lowest possible quality  2 3 4 5 6 7: Highest possible quality

I would recommend this guideline for use.  
Yes  Yes, with modifications  No

NOTES:
## Appendix G. Clinical Practice Guidelines Evaluation Worksheet

<table>
<thead>
<tr>
<th>CPG Title:</th>
<th>Evaluated by:</th>
<th>Date:</th>
</tr>
</thead>
</table>

### Clear and well developed

<table>
<thead>
<tr>
<th>CPG</th>
<th>Needs some clarification or further development</th>
<th>Needs substantial clarification or substantial development</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Problem statement/ PICOT Question</td>
<td>☐ The problem statement is specific and well delineated</td>
<td>☐ The problem statement is somewhat non-specific regarding significant aspects of the problem.</td>
<td>☐ The problem statement does not state the problem clearly.</td>
</tr>
<tr>
<td>2. Background/ Significance</td>
<td>☐ The Background/ significance provide a clear overview of the problem statement.</td>
<td>☐ The Background/ significance need some further clarification/ development to better address problem statement being addressed by CPG.</td>
<td>☐ The Background/ significance are inadequate to address the problem statement being addressed in the CPG.</td>
</tr>
<tr>
<td>3. Summary of Literature Review</td>
<td>☐ The literature review summary is a clear synthesis of relevant literature reflecting the scope of the CPG based on the PICOT question for the CPG.</td>
<td>☐ The summary of the literature review needs further clarification/ development in a few areas to more adequately synthesize the literature pertaining to the PICOT question for CPG.</td>
<td>☐ The literature review summary is inadequate to support the problem statement/ PICOT</td>
</tr>
<tr>
<td>4. Evidence Appraisal Table</td>
<td>☐ The evidence table succinctly summarizes each evidence reference. The content of the evidence reference summarized provides sufficient information to evaluate reference for the CPG (e.g., to derive level and quality of evidence, to grade the relevance, to determine recommendations for practice).</td>
<td>☐ The evidence table needs further synthesis /clarification or development for some of evidence reference(s).The content of the evidence references summarized provides inadequately synthesized or insufficient information to evaluate reference for the CPG (e.g., to derive level and quality of evidence, to grade the relevance, to determine</td>
<td>☐ The evidence table needs substantial revision of the synthesis for many or all evidence reference (s).The content of the evidence references summarized is an unacceptable synthesis to evaluate reference for the CPG (e.g., to derive level and quality of evidence, to grade the relevance, to determine recommendations for practice).</td>
</tr>
</tbody>
</table>
5. **Overall Quality of the Evidence**
   - **I. Acceptable**
   - **II. Limitations in quality of the evidence**
   - **III. Major limitations in the quality of evidence**
   - **IV. Not acceptable**

<table>
<thead>
<tr>
<th>Recommendations for practice</th>
<th>The ratings of the Levels of Evidence are supported by design.</th>
<th>Information of the research/comments/narrative is somewhat incongruent with the overall conclusion regarding the quality of the evidence.</th>
<th>Information/comments/narratives do not reflect the conclusion regarding the quality of the evidence.</th>
</tr>
</thead>
</table>

6. **Grade the Levels of the Evidence***

<table>
<thead>
<tr>
<th>Recommendations for practice</th>
<th>Agree with the grading of the levels of the evidence for each of the evidence references.</th>
<th>There are some grading of the levels of evidence that are inconsistent with one or more of the evidence references.</th>
<th>There are several evidence references that have been inconsistently graded based on the levels of evidence.</th>
</tr>
</thead>
</table>

7. **Description Options/Interventions and the Level of Recommendations**

<table>
<thead>
<tr>
<th>Recommendations for practice</th>
<th>The final recommendations are clearly defined and are relevant to the CPG PICOT question. There is comprehensive inclusion of all evidence findings reflected in the final recommendations.</th>
<th>The final recommendations are somewhat unclear, and may not adequately reflect the scope of the CPG PICOT question. And/or there is not a comprehensive inclusion of all evidence findings reflected in the final recommendations.</th>
<th>The final recommendations are not clear; and/or do not adequately reflect the scope of the CPG PICOT question. Furthermore, there is not a comprehensive inclusion of all evidence findings reflected in the final recommendations.</th>
</tr>
</thead>
</table>

---

*Level I: Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials or evidence-based clinical practice guidelines based on systematic reviews of RCTs

**Level II:** Evidence obtained from at least one properly designed randomized controlled trial

**Level III:** Evidence obtained from well-designed, quasi-experimental studies without randomization

**Level IV:** Evidence obtained from well-designed case control and cohort studies

**Level V:** Evidence from systematic reviews of descriptive and qualitative studies

**Level VI:** Evidence from a single descriptive or qualitative study

**Level VII:** Evidence from opinion of authorities and/or reports of expert committees
## Appendix H. ENA Other Resources Table Template

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
<th>Conclusions about (topic of CPG)</th>
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