Clinical Practice Guidelines: AAO-HNSF Process for CPG Development and Topic Selection

Sukgi Choi, MD, MBA1 and Lorraine Nnacheta, MPH2

Sponsorships or competing interests that may be relevant to content are disclosed at the end of this article.

Abstract
The American Academy of Otolaryngology—Head and Neck Surgery has been developing clinical practice guidelines (CPGs) for use by its members and the public. The process of CPG development and the selection of topics for CPGs can be confusing. This commentary attempts to clarify this process and delineate the issues that are considered in topic selection.

Keywords
clinical practice guidelines, evidence-based medicine, topic selection, development, priority

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In 1990, the Institute of Medicine published its first recommendation on how clinical practice guidelines (CPGs) should be developed, in response to a request made by the Agency for Health Care Policy and Research (current known as the Agency for Healthcare Research and Quality).1 In that first report, CPGs were defined as “systematically developed statements that assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.” In 2011, the Institute of Medicine revised this definition to state that CPGs “are statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options.”2 This document outlines 8 standards for developing trustworthy CPGs, 1 of which is the recommendation to use systematic reviews.

The American Academy of Otolaryngology—Head and Neck Surgery Foundation (AAO-HNSF) published a CPG development manual outlining a transparent process that considers level of evidence, harm-benefit balance, and gaps in evidence.3 In this manual, Rosenfeld et al recommend selecting topics that are of high priority and are feasible. High-priority topics are defined as topics that have the potential for evidence-based practice to improve health outcomes, minimize undesirable variations in care, and reduce the burden of disease and health disparities. This definition of high priority was based on the priority-setting criteria identified by the Institute of Medicine, which include disease burden, controversy, cost, new evidence, potential impact, public or provider interest, and variation in care.4 A feasible topic is defined as a topic that has a sufficient base of high-quality published evidence, consistent with the 2011 Institute of Medicine recommendation.

So how does the AAO-HNSF choose topics, and what is the process for developing CPGs? When the CPG on cerumen impaction was published, many of us asked why this particular topic was chosen over many other topics that may have been suitable. Yet perhaps the AAO-HNSF knows something unknown to us, as the CPG on cerumen impaction is the most frequently downloaded CPG from the AAO-HNSF website.5 This commentary reviews the process by which the AAO-HNSF selects and develops CPGs.

The AAO-HNSF solicits submission of CPG topics from individuals and groups using a form available on its website.6 The submitters are strongly encouraged to procure sponsorship from the appropriate AAO-HNSF committee for the topic, before presentation to the Guideline Task Force (GTF), as doing so can make for a stronger submission if there is adequate committee support for the topic. The GTF then reviews the submissions. The GTF is made up of an appointed chair and 22 participants who are AAO-HNSF representatives (6) and representatives of various specialty societies (16). Additional participants include consultants, methodologists in training, and AAO-HNSF staff. To date, the AAO-HNSF has developed 15 CPGs, 5 of which were updated. There are 2 other CPGs in development (hoarseness update, tonsillectomy in children update) and 3 others in the development queue (the surgical management of rhinosinusitis, Ménière’s disease, and epistaxis).7

On a more granular level, once a topic is submitted, a member of the GTF is assigned the task of reviewing the

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The GTF considers 3 domains when considering whether a submitted topic will be accepted for CPG development. Scores are given for 3 domains: importance, feasibility, and priority. As otolaryngology literature lacks high-quality evidence on many conditions, the feasibility domain alone eliminates many topics from consideration. The importance domain may not be aligned with guideline methodology but rather address the needs of its members, or a controversial topic may arise that requires a rapid response. Each stakeholder on the task force gets 1 vote, and the votes are blinded. The scores range from 1 to 7, with 1 being the highest score. An average of the 3 domain scores that is $< 2.5$ enters the topic queue.

Table 1. Criteria Considered in Topic Selection.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>SIGN</th>
<th>NICE</th>
<th>AAO-HNSF</th>
</tr>
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<tbody>
<tr>
<td>Large burden of disease and potential to improve care and/or cost</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Evidence of variation in practice</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Availability of evidence</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Recommendations acceptable to potential users</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>No existing relevant and valid guideline</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Clinical priority for developing organization</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Perceived need as indicated by network of relevant stakeholders</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 2. Steps in CPG Development Process.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN</td>
<td>Individual or group submission of proposal</td>
<td>SIGN senior management evaluation of proposal</td>
<td>Request for detailed submission of accepted proposal</td>
<td>Formation of the GD committee (15-25 members)</td>
<td>Committee members write CPG</td>
</tr>
<tr>
<td>NICE</td>
<td>Topic selection by NICE in consultation with NHS</td>
<td>“Developer” defines the scope of the guideline</td>
<td>Formation of GD committee (12-18 members)</td>
<td>“Developer” writes the CPG in accordance with committee discussion</td>
<td></td>
</tr>
<tr>
<td>AAO-HNSF</td>
<td>Individual or group submission of proposal</td>
<td>Guideline Task Force evaluation of the topic</td>
<td>Formation of the GD group (15-20 members)</td>
<td>Group members write CPG</td>
<td></td>
</tr>
</tbody>
</table>

Abbreviations: AAO-HNSF, American Academy of Otolaryngology–Head and Neck Surgery Foundation; NICE, National Institute for Health and Care Excellence; SIGN, Scottish Intercollegiate Guidelines Network.

It is evident that the AAO-HNSF follows sound principles in its CPG development, which are used by other reputable organizations, such as the Scottish Intercollegiate Guidelines Network and the National Institute for Health and Care Excellence, whose sole function is to develop CPGs (Table 2). The topic selection and development process involves the proposal of new topics, the evaluation of these topics, and the development of CPGs. The AAO-HNSF develops a tentative timeline for the development of the CPG. The timeline for new CPGs includes 2 in-person meetings and 4 teleconference calls. For CPG updates, there is 1 in-person meeting and 4 teleconference calls. The initial call for each CPG involves a planning teleconference call with the CPG leadership and the staff liaison. During this call, a list of pertinent stakeholder organizations to include in the development of each guideline is discussed, and at the conclusion of the call, the staff liaison contacts each organization to invite it to nominate a representative to serve on the guideline panel. Once all invited stakeholder representatives have agreed to participate, the process of developing the CPG begins.

AAO-HNSF senior staff, in coordination with GTF leadership, then selects the panel leadership for guideline development from the topic queue, which initiates the CPG-writing process. The AAO-HNSF CPG staff liaison develops a tentative timeline for the development of the CPG. The timeline for new CPGs includes 2 in-person meetings and 4 teleconference calls. For CPG updates, there is 1 in-person meeting and 4 teleconference calls. The initial call for each CPG involves a planning teleconference call with the CPG leadership and the staff liaison. During this call, a list of pertinent stakeholder organizations to include in the development of each guideline is discussed, and at the conclusion of the call, the staff liaison contacts each organization to invite it to nominate a representative to serve on the guideline panel. Once all invited stakeholder representatives have agreed to participate, the process of developing the CPG begins.
process do not follow an exact blueprint, but they do have significant components that are based on expert opinion and consensus. This process is likely to become more complicated as the AAO-HNSF works to merge parts of CPGs and quality measures developments for the Merit-based Incentive Payment System.

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Disclosures
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References