

## Guidance for Development of NASPGHAN Practice Guidelines

### What is a Practice Guideline?

The Institute of Medicine (IOM, now called Academy of Medicine) defines practice guidelines as 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<sup>1</sup>. Practice guidelines are based on systematically reviews and evaluate the quality of relevant scientific literature, assess the benefits and risks of care options, and support healthcare providers in making informed decisions tailored to individual patient needs.

### Approach to Development of NASPGHAN Practice Guidelines

The methodology to develop guidelines has evolved, with guidance available from organizations including the [Institute of Medicine](#)<sup>1</sup>, [Guideline International Network \(GIN\)](#)<sup>2</sup>, and [World Health Organization](#)<sup>3</sup>. This document provides guidance primarily based on the report from the IOM while highlighting other resources for high-quality guideline development. It is not a comprehensive guide on developing practice guidelines, and authors are encouraged to consult referenced documents.

### What are the Standards of Trustworthy Guidelines?

According to IOM report, to be trustworthy, the:

- Guidelines should be based on systematic review of the existent evidence or the best of available evidence.
- Guidelines should be developed by a knowledgeable, multidisciplinary group of experts and representatives from key affected groups that are diverse.
- Guidelines should consider important patient subgroups and patient values and preferences as appropriate.
- The guideline should be produced based on an explicit and transparent process that minimizes distortion, biases, and conflicts of Interest.
- Guidelines should provide a clear explanation of the logical relationships between alternative care options and health outcomes and provide ratings of the quality of evidence and strength of recommendation.
- Guidelines should be reconsidered and revised as appropriate when important new evidence warrants modification of recommendations.

The IOM outlines eight standards for developing trustworthy guidelines, ensuring scientific validity, transparency, and reproducibility, as follows:

### 1. Establishing transparency

- The development and funding process of a practice guideline should be fully documented and publicly accessible.
  - Users should understand how recommendations were derived and who developed them.
  - Reporting should balance the necessary detail for transparency and credibility with available time and resources.
- The practice guideline should describe judgments on benefits, harms, risks, and costs, as well as consensus-building methods.
- Financial and intellectual conflicts of interest (COI) must be disclosed, along with how they were managed (see section below).

### 2. Managing conflict of interest (COI)

- Proposed practice guidelines development group (GDG) members must disclose potential conflicts of interest (COI) as part of the NASPGHAN guideline application process and explain how their COI could influence guideline development.
- Disclosures should cover current and planned commercial, non-commercial, intellectual, institutional, and patient-public activities relevant to the practice guidelines.
- GDG members must disclose any new potential COIs as they arise during the guideline development process.
- Please review the NASPGHAN COI policy for further guidance.

### 3. Guideline Development Group (CDG) Composition

- The GDG should be multidisciplinary and balanced, including guideline methodologists, clinical/topic experts, and representatives from populations likely to be affected by the practice guideline.
- The [Guideline International Network](#) provides guidance on involving patients and the public in the guideline development process.
- Multidisciplinary experts, tailored to the topic and target audience, should be considered to ensure a balance of perspectives (e.g., child psychologists, dietitians, pediatric surgeons, radiologists, general pediatricians)

### 4. Practice Guideline–Systematic Review Intersection

Practice guidelines should be based on systematic reviews with rigorous, transparent methodologies that:

- Focus on a clearly defined question
- Follow pre-specified, transparent scientific methods to identify, select, assess, and summarize findings from relevant studies (may or may not include a meta-analysis)
  - Refer to [IOM Standards for Systematic Reviews](#)<sup>4</sup> and the [Cochrane Handbook for Systematic Reviews of Interventions](#)<sup>5</sup> for guidance on conducting systematic reviews.
- Assess risk of bias and the quality of included studies

#### 5. Establishing Evidence Foundations and Rating Strength of Recommendations.

- Each recommendation should be:
  - Based on a clear underlying reasoning, including a summary of relevant available evidence and evidentiary gaps.
  - Accompanied by a rating system that grades:
    - Quality or certainty of evidence underpinning the recommendation
    - Strength of recommendation.
  - Supported by an explanation of the role of values, opinion, theory, and clinical experience in its development.

Different methods are available to accomplish the aforementioned standards, including GRADE ([Grading of Recommendations Assessment, Development and Evaluation](#))<sup>6</sup>, which evaluates evidence certainty (high, moderate, low, or very low) and guides the development of recommendations, including their strength (strong or conditional). NASPGHAN highly encourages the use of GRADE methodology, with support from a trained methodologist.

#### 6. Articulation of Recommendations

- Recommendations should be articulated in a standardized form to ensure they are:
  - Clear, specific, and actionable
  - Worded to reflect the strength (e.g., [GRADE](#) methodology: "recommend" vs. "suggest")<sup>6</sup>.
- Contextualized with considerations of benefits, harms, and patient preferences.

#### 7. External review

- Practice guidelines must undergo an external review process as outlined in the NASPGHAN manual of operations, fulfilling the IOM standards for review.
- Reviewer comments should be considered, with a written record of the rationale for any modifications or lack thereof.

#### 8. Updating Practice Guidelines

- The publication date, date of the last literature search, and proposed update timeline should be included in the practice guideline document.
- After publication, the GDG chair/co-chair should regularly monitor new literature (every 6-12 months) to identify relevant evidence.
- Practice guidelines should be updated according to the specified timeline or sooner if new evidence indicates a need for modification (e.g., new harm, superior interventions, or broader applicability).

### Helpful resources

1. Institute of Medicine Committee on Standards for Developing Trustworthy Clinical Practice G. In: Graham R, Mancher M, Miller Wolman D, Greenfield S, Steinberg E, eds. *Clinical Practice Guidelines We Can Trust*. National Academies Press (US) Copyright 2011 by the National Academy of Sciences. All rights reserved.; 2011.
2. GIN. Guideline International Network <https://g-i-n.net>.
3. WHO. Handbook Guideline Development. Available at <https://www.who.int/publications/i/item/9789241548960>. last accessed March 15th, 2025.
4. Institute of Medicine (US) Committee on Standards for Systematic Reviews of Comparative Effectiveness Research. *Finding What Works in Health Care: Standards for Systematic Reviews*. Eden J, Levit L, Berg A, Morton S, editors. Washington (DC): National Academies Press (US); 2011. PMID: 24983062. 2011.
5. Cochrane Handbook for Systematic Reviews of Interventions. Available at <https://training.cochrane.org/handbook/current>. Last accessed March 15th 2025.
6. GRADE Handbook. Available at <https://gdt.gradepro.org/app/handbook/handbook.html>. Last accessed March 15th, 2025.

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