

Toward Optimized Practice Clinical Practice Guideline Development Methodology

A. Introduction

Many organizations and associations develop clinical practice guidelines (CPGs) at the local, provincial, national and international level, and make them available to health-care providers. Toward Optimized Practice (TOP) CPGs primarily differ from other CPGs by addressing practice gaps or behaviours that exist in Alberta in regards to various health topics. One key feature of TOP CPGs is the user-friendly format.

The TOP CPG program develops CPGs for use by physicians and their teams. The goal is to provide recommendations and supporting evidence necessary to influence decision-making behaviour for the clinical gap or behaviour identified.

TOP CPGs are typically developed by adapting content from other well established and high quality evidence-based guidelines.

See below for our CPG development process. See also Figure 1: CPG development cycle.

Topic selection

Any CPG topic can be considered but selection is primarily based on province-wide need, importance of the topic and its relevance to the Alberta health context.

B. Scope and purpose

Identifying the CPG scope is the first step in the CPG development process. The scope is informed by known clinical practice gaps in Alberta. The overall objectives, the health question(s), and the target population of each CPG are explicit.

C. Stakeholder involvement

The CPG development committee includes individuals from all relevant professional groups involved in patient care, including the target user of the CPG. The number of committee members can vary. The committee includes at least two family physicians, relevant specialty physicians, and other appropriate health-care providers. The views of the target population are sought where appropriate via surveys or committee membership.

Typically, the targeted user of TOP CPGs are family physicians but specialists and/or other health providers may also be interested and benefit from the information. The targeted user of the CPG is stated in the CPG objectives.

D. Rigour of development

Introduction

TOP strives to present the highest quality evidence available in keeping with the requirements of the *Institute of Medicine's Standards for developing trustworthy clinical practice guidelines* (<http://iom.nationalacademies.org/Activities/Quality/ClinicPracGuide.aspx>) and the *Appraisal of Guidelines for Research & Evaluation (AGREE) Instrument* (<http://www.agreetrust.org/>).

TOP conducts a systematic search of existing guidelines and other high-quality literature to inform the CPG development. Although TOP does not conduct independent systematic reviews or meta-analyses of the research evidence, CPG content is based on existing, high-quality, respected guidelines and/or systematic reviews whenever possible.

CPG recommendations are developed by adapting and building upon content from other well-established and accepted evidence-based guidelines where available. Rarely are CPGs developed de novo. The TOP CPG adaptation process is informed by the [ADAPTE Manual and Resource Toolkit](#), and its Canadian update and modification by [CAN-IMPLEMENT](#). The ADAPTE process informs TOP's use of evidence and literature search process.

Literature search process

The literature search occurs once the CPG committee agrees on the health question(s) or scope. The TOP Librarian systematically searches for existing guidelines, systematic reviews, meta-analyses, and recent clinical trials not yet analyzed by a systematic review. For more detail, including search terms, contact cpg@topalbertadoctors.org.

The following reference sources are consulted: PubMed, guideline clearinghouses, other grey literature sources relevant to the CPG topic. Evidence is also obtained via committee member contributions and searching the references provided in relevant guidelines or other publications.

Results are reviewed and assessed for relevance by comparing the titles and abstracts with the TOP CPG scope. Relevant results are saved in Zotero, a reference management software program.

Next, a summary of the relevant guidelines and other literature is provided to the committee using a recommendations matrix. Full text is also provided. A summary of the quality of existing guidelines is also included, and is based on the AGREE II instrument (<http://www.agreetrust.org/>).

Formulating the recommendations

The committee reviews the quality and applicability of the evidence. Then based on the strength of this evidence, decides what recommendations to adopt. Recommendations are based on committee consensus after reviewing the quality of evidence. If consensus is not reached, and there is a lack of strong evidence, all views will be respected and made explicit in the final CPG.

The health benefits, side effects, and risks are considered when formulating the recommendations. The strength of evidence informs the strength of the CPG recommendations. Each CPG recommendation corresponds with supporting evidence (in the background text of the CPG) describing and evaluating strengths and limitations of the recommendation.

External review

Once the TOP CPG is completed it is externally reviewed by targeted user representatives. A standardized validation form is provided and reviewer feedback is used to improve the CPG prior to release.

CPG updating procedure

TOP CPGs are reviewed and updated using an internal standardized process. When a CPG evidence base is emerging or likely to change, the CPG is reviewed no later than every two years. For CPGs where the evidence base is not likely to change, the review is no later than every five years.

E. Clarity of presentation

Templates have been created to facilitate usability for clinicians. CPG recommendations precede background information for emphasis and ease of use. Two CPG documents are produced: the complete CPG and a summary of the CPG. Ideally, the CPG summary is less than two pages. Recommendations are presented in bullet format typically as direct instructions/actions. This is to facilitate use in practice during patient care and other clinic activities.

F. Applicability

CPGs also include a section with suggestions for implementing recommendations in practice. Relevant stakeholders are consulted to identify any resource implications resulting from CPG recommendations implemented.

G. Editorial independence

TOP funding for CPG development is from Alberta Health and the Alberta Medical Association. Industry funding is not solicited or accepted.

TOP CPG content is developed and agreed-to solely by the CPG committee.

Each committee member is required to declare competing interests both verbally to the CPG development committee and in writing. Although this information is not published, it is kept on file by TOP.

Figure 1: CPG Development Cycle

