



# A practical approach to evidence-based dentistry: VII

## How to use patient management recommendations from clinical practice guidelines

Alonso Carrasco-Labra, DDS, MSc, PhD(c); Romina Brignardello-Petersen, DDS, MSc; Michael Glick, DMD; Gordon H. Guyatt, MD, MSc; Ignacio Neumann, MD, MSc, PhD; Amir Azarpazhooh, DDS, MSc, PhD, FRCD(c)

### SEVENTH IN A SERIES

In previous articles published as part of this series on evidence-based dentistry, we provided an overview of evidence-based clinical practice,<sup>1</sup> explained how to search for<sup>2</sup> and critically appraise articles about therapy,<sup>3</sup> harm,<sup>4</sup> diagnosis,<sup>5</sup> and described how to use systematic reviews.<sup>6</sup> In this article, we define clinical

practice guidelines, describe the process of developing guidelines and the basic components

of a recommendation, and provide a structure for determining the trustworthiness of recommendations about patient management included in clinical practice guidelines.



Supplemental material is available online.

### ABSTRACT

**Background and Overview.** Clinical practice guidelines represent highly processed evidence with associated recommendations to inform clinical practice and optimize patient care. Appropriately developed, evidence-based recommendations will integrate the best evidence regarding benefits and harms, the certainty of the evidence, patients' values and preferences, and resource utilization.

**Practical Implications.** The authors provide a structure for clinicians to critically appraise clinical practice guidelines to determine whether the guidelines offer trustworthy recommendations.

**Key Words.** Clinical practice guidelines; GRADE approach; recommendation; quality of evidence; strength of recommendations; patients' values and preferences; evidence-based dentistry.

JADA 2015;146(5):327-336

<http://dx.doi.org/10.1016/j.adaj.2015.03.015>

**Dr. Carrasco-Labra** is an instructor, Evidence-Based Dentistry Unit, Faculty of Dentistry, University of Chile, Santiago, and a doctoral student, Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario, Canada.

**Dr. Brignardello-Petersen** is a lecturer, Evidence-Based Dentistry Unit, Faculty of Dentistry, University of Chile, Santiago, and a doctoral student, Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada.

**Dr. Glick** is a professor and dean, School of Dental Medicine, University at Buffalo, The State University of New York. He also is the editor of The Journal of the American Dental Association.

**Dr. Guyatt** is a distinguished professor, Department of Clinical Epidemiology and Biostatistics, and a joint member, Department of Medicine, McMaster University, Hamilton, Ontario, Canada.

**Dr. Neumann** is an assistant professor, Department of Internal Medicine, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile.

**Dr. Azarpazhooh** is an assistant professor, Dental Public Health, Faculty of Dentistry; an assistant professor, Endodontics, Faculty of Dentistry; and an assistant professor, Clinical Epidemiology and Health Care Research, Institute of Health Policy, Management and Evaluation, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada. He also is the head, Endodontics, Mount Sinai Hospital, Toronto, Ontario, Canada. Address correspondence to Dr. Azarpazhooh at Biological and Diagnostic Sciences, 124 Edward St., Room 515C, Toronto, Ontario, Canada M5G 1G6, e-mail [amir.azarpazhooh@dentistry.utoronto.ca](mailto:amir.azarpazhooh@dentistry.utoronto.ca).

Copyright © 2015 American Dental Association. All rights reserved.

## BOX 1

**Clinical scenario.**

You meet with a 63-year-old edentulous patient who was referred to your practice for full-mouth rehabilitation with dental implants. During the physical examination, the patient mentions that he has a prosthetic hip joint implant, which was placed 5 years ago. Although you are aware that for many years the standard of care was to provide antibiotic prophylaxis to patients with joint implants before performing invasive dental procedures, you also know that this practice has been questioned in recent years. The patient, who has received antibiotic prophylaxis routinely for dental procedures since having his joint replacement, is skeptical about proceeding without a prophylactic regimen. When planning the patient's dental implant surgery, you decide to consult the available recommendations about the use of antibiotic prophylaxis in patients with prosthetic joints and share with your patient the available evidence on this matter.

**EVIDENCE-BASED CLINICAL PRACTICE GUIDELINES**

According to the Institute of Medicine<sup>7</sup> of the National Academies, clinical practice guidelines 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." Although the authors of evidence-based guidelines follow a systematic process to identify, select, assess, and summarize evidence, they rely on the consensus of a group of decision makers, also known as a guideline panel. After reviewing the evidence, the panel typically recommends a specific course of action on the basis of the implications for those who may be affected by the recommendation. The panel's mission is to interpret the available evidence and to consider the clinical context in which the recommendations will be applied.

Because of differences in clinical contexts and in clinicians' attitudes toward benefits and harms, members of various guideline panels might evaluate the same body of evidence but not necessarily make the same recommendations. For example, there are major discrepancies between the recommendations formulated by guideline panels from the American Heart Association (AHA)<sup>8</sup> and the National Institute for Health and Care Excellence (NICE)<sup>9</sup> regarding the use of antibiotic prophylaxis for preventing infective endocarditis in patients who are at risk for developing this condition and who are undergoing invasive dental procedures. In 2008, both of these guideline panels<sup>8,9</sup> conducted rigorous systematic reviews that showed similar results. Although the AHA recommended the use of prophylaxis for patients with particular cardiac conditions, NICE recommended against its use in all patients, regardless of the perceived susceptibility of the patient to develop infective endocarditis. In this case, AHA guideline panelists placed a higher value on the potential benefit of the intervention than the adverse events and cost, whereas NICE panelists considered that the risk and cost of antibiotic prophylaxis

outweighed the minimal benefits of administering the intervention.

**STRUCTURED PROCESS OF DEVELOPING MANAGEMENT RECOMMENDATIONS**

Decision making is ubiquitous in clinical practice. Consciously or unconsciously, clinicians weigh the potential short- and long-term benefits and harms, burden of the treatment, and costs associated with alternative courses of action to arrive at a decision consistent with the patient's best interest.<sup>10</sup> By consulting guidelines whose authors have documented in a systematic manner both the evidence and the rationale for specific recommendations, clinicians can make sound decisions about clinical options for typical patients.

The process of developing recommendations begins when an institution or an organization defines a health care problem as a priority and initiates a call to develop guidelines to address the health care problem. After defining the scope of the guideline (for example, focusing on primary, secondary, or tertiary care) and the target audience (for example, dentists, other health care professionals who contribute to the management of oral conditions), the institution or organization selects a panel of experts and charges the panel with the task of defining the questions the guideline will answer. These questions include details about patients, clinical options (that is, one or more courses of action), and target outcomes. Using the questions, the panel (which may be expanded to include other collaborators such as information specialists and clinical epidemiologists) undertakes systematic searches of the literature to identify the highest quality available evidence, arrive at the best estimates of benefits and harms, and assess their certainty or confidence in those estimates. On the basis of evidence summaries generated from this process, the panel formulates and grades the strength of the recommendations. After producing and publishing the guideline, the panel can monitor its implementation and update the guideline when new evidence emerges (Figure 1).<sup>10,11</sup>

**WHERE TO FIND CLINICAL PRACTICE GUIDELINES**

Specific databases presenting full versions or brief summaries of evidence-based clinical practice guidelines are available. For example, by using the Trip database ([www.tripdatabase.com](http://www.tripdatabase.com)), clinicians can find references to guidelines, which are organized according to the region

**ABBREVIATION KEY.** AAOMS: American Association of Oral and Maxillofacial Surgeons. AAOS: American Academy of Orthopedic Surgeons. ADA: American Dental Association. AHA: American Heart Association. GRADE: Grading of Recommendations Assessment, Development and Evaluation. NICE: National Institute for Health and Care Excellence. USPSTF: US Preventive Service Task Force.

Download English Version:

<https://daneshyari.com/en/article/3136674>

Download Persian Version:

<https://daneshyari.com/article/3136674>

[Daneshyari.com](https://daneshyari.com)