

# Identifying and Using Good Practice Guidelines

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Performance measurement and payment are increasingly linked to goals established by practice guidelines. The best guidelines are based on systematic reviews and patient-oriented evidence, use an evidence-rating system such as the Strength of Recommendation Taxonomy, and are prospectively validated. The guidelines also should have a transparent development process, identify potential conflicts of interest, and offer flexibility in various clinical situations. (*Am Fam Physician*. 2009;80(1):67-69. Copyright © 2009 American Academy of Family Physicians.)

This is the sixth article in a six-part series on finding evidence and putting it into practice.

Physicians consult practice guidelines to help them make decisions about the management of individual patients. Examples include deciding whether to order a test, to prescribe or change the dose of a drug, or to refer a patient to a specialist. These days, everyone seems to be producing practice guidelines; sources include professional organizations, disease advocacy groups, government agencies, and public and private insurance plans. A search for diabetes guidelines on the National Guideline Clearinghouse Web site (<http://www.guidelines.gov>) yields more than 500 documents. Many of these guidelines, unfortunately, were written with more than your patient's interests in mind. How should you determine which guidelines to trust, and which will be most likely to help in your practice? *Table 1* lists important attributes of good practice guidelines.

First, a good practice guideline should be based on a systematic review of the relevant literature that lists the publication date of the most recent evidence considered.<sup>1</sup> Any review that is less rigorous than a systematic review, even if it contains hundreds of meticulously documented references, is subject to bias.<sup>2</sup> In general, family physicians should avoid "opinion" or "consensus-based" guidelines, which typically mean that a group of experts met to recommend clinical practices that they agreed with, with little regard to whether

these practices were actually supported by evidence. For example, after the publication of a systematic review that found no benefit to treating subclinical hypothyroidism,<sup>3</sup> the American Association of Clinical Endocrinologists continued to recommend that asymptomatic patients with thyroid-stimulating hormone levels greater than 5.0 mIU per L be treated if thyroid antibodies were present, based on expert consensus.<sup>4</sup> Also, a recent study found that from 1998 to 2008, clinical practice guidelines of the American College of Cardiology and the American Heart Association have contained an increasing proportion of recommendations that lack conclusive evidence.<sup>5</sup>

Evidence considered by guideline developers may include studies with observational and randomized clinical trial designs. As a rule, good practice guidelines make strong recommendations only when there is strong evidence to support them. Strong recommendations should be based on studies reporting improvement in patient-oriented outcomes (e.g., morbidity, mortality, quality of life, cost) rather than intermediate or disease-oriented outcomes (e.g., blood pressure, blood glucose levels, peak flow). If an evidence rating system other than Strength of Recommendation Taxonomy (SORT) is used, disease-oriented studies should not be assigned the highest evidence ratings. Such guidelines may be evidence-based, but because they rely on

**Table 1. Attributes of Good Practice Guidelines**

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Comprehensive, systematic evidence search with end date noted
Evidence linked directly to recommendations via strength of recommendation grading system*
Recommendations based on patient-oriented rather than disease-oriented outcomes
Transparent guideline development process
Potential conflicts of interest identified and addressed
Prospectively validated (i.e., guideline use has been shown to improve patient-oriented outcomes)
Recommendations offer flexibility in various clinical situations

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\*—The search engine at the National Guideline Clearinghouse allows users to limit their search to guidelines that use an evidence rating system. On its “detailed” search page (<http://www.guideline.gov/search/detailedsearch.aspx>) under “Methods Used to Assess the Quality and Strength of the Evidence,” select “Weighting According to a Rating Scheme.”

evidence that is irrelevant to your patients, you should view them skeptically.

Good guidelines should have a transparent development process. It should not be difficult to tell exactly what evidence was reviewed, how it was obtained, how strong it was, and where it came from. Ideally, the deliberations of guideline developers should be open to outside groups and the public. The group’s methods should be clearly described so that it is known what studies were considered most critical and how decisions were made on the basis of those studies (“evidence-linked” guidelines). The U.S. Preventive Services Task Force, whose recommendations inform the American Academy of Family Physicians’ policies on clinical preventive services, periodically publishes formal statements describing how it reaches its recommendations.<sup>6,7</sup>

It stands to reason that anyone who writes a guideline or votes on its recommendations should not have conflicts of interest that could bias the recommendations. For example, it would be inappropriate for a group

that makes guidelines about optimal cholesterol levels to have financial relationships with companies that manufacture drugs to reduce cholesterol levels. Unfortunately, this situation occurred during the development of the most recent National Cholesterol Education Program guideline.<sup>8</sup> At a minimum, conflicts of interest should be declared within the guideline, allowing readers to determine whether to trust the guideline.

The ultimate test of a good guideline is whether or not it has been prospectively validated; that is, has its adoption been shown to improve patient-oriented outcomes in real-world settings? Prospective validation is particularly important when recommendations are based on studies with disease-oriented outcomes. In a classic study, researchers evaluated the performance of the American Thoracic Society’s 1993 guideline on outpatient management of community-acquired pneumonia.<sup>9</sup> They found that patients younger than 60 years who were prescribed antibiotics recommended by the guideline had lower medical costs and similar health outcomes as patients who were prescribed other antibiotics, but patients older than 60 years who were treated according to the guideline’s recommendations had higher costs, and health outcomes were no better, and possibly worse, than those of other patients. The guideline was subsequently revised.

Good guidelines acknowledge situations where clinical decisions are not clear-cut, and offer flexibility in these situations. Even in areas where strong evidence exists, incorporating patient preferences may be critical to making an appropriate decision. For example, you may offer a 60-year-old man with hypertension the option of taking daily aspirin to lower his risk of myocardial infarction, but advise him that this medication will increase his risk of having a gastrointestinal bleed or hemorrhagic stroke.<sup>10</sup> A guideline can help to estimate relative risks and benefits, but deciding what to do will depend on the value the patient places on each of the possible outcomes. Good guidelines are not cookbooks; they augment but do not replace clinical judgment.

After applying all of the above criteria, you may still find multiple recent practice guidelines that seem to be equally reliable and useful, but that provide conflicting recommendations. In this case, consider how well each of the guidelines fits your patient.<sup>11,12</sup> Is he or she clearly the intended target of the guideline? What particular benefits and harms does the guideline consider? Does the guideline ignore any outcomes that would be important to your patient?

Finally, after going to the trouble of identifying a good practice guideline to help you treat this patient (and others you will see in the future), be sure to share that guideline with colleagues so that their patients may benefit as well. Good guidelines improve quality of care only if they are followed consistently. In the past, flow sheets and chart audits were the only implementation tools available to practices. Today, personal digital assistants and electronic health records can provide evidence-based decision support at the point of care. Because performance measurement and payment are increasingly linked to goals established by practice guidelines, it is essential to have a reliable system for incorporating guidelines into your practice.

The opinions expressed in this article are those of the authors and do not represent the official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

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