EDITORIALS

Practice Guidelines for Practicing Doctors

Practice guidelines have become one of the major themes in clinical medicine during the past decade. Physicians practicing general internal medicine have been inundated with guideline information from many sources, such as federal agencies, voluntary health care organizations, primary care and specialty societies, health insurance industries, pharmaceutical industries, and, of course, their own health care organizations. However, the widespread promise that practice guidelines would lead to global improvements in clinical care and patient outcomes has, as yet, remained largely unfulfilled.

In time, we will develop a better understanding of the reasons for acceptance or rejection of guidelines in the practice setting. The success or failure of guideline adoption at the level of the individual practitioner is probably related to a broad range of important factors. Perhaps foremost among these factors is the face validity and content validity of the guideline itself. Perceived clinical need and perceived societal need are also likely to influence the acceptance of guidelines. Formal endorsement, both at the professional level and from a marketing perspective, is another important factor. For without broad-based organizational support, it is unlikely that guidelines will be effectively disseminated. Currently there is a paucity of literature to help us understand how these and other factors affect the acceptance of practice guidelines.

In this issue, Picken et al. have brought us a little closer to understanding these issues by effectively examining what changes in a set of national clinical practice guidelines might make them acceptable to a group of general medicine physicians.¹ This very practical study explores how a group of general medicine physicians in Boston perceived the face validity and content validity of the Guidelines for the Diagnosis and Management of Asthma, released in 1991 by the National Asthma Education and Prevention Program (NAEPP) of the National Heart, Lung and Blood Institute (NHLBI).² These asthma guidelines were developed in response to public health concern over rising asthma prevalence and hospitalization rates.^{3,4} They were developed with an expert panel through a "consensus" process that was not fully characterized by the NHLBI. Therefore, these guidelines would not meet many of the current criteria for evidenced-based guideline development.⁵ In 1991, the guidelines were issued as an 136-page report and a 44-page executive summary. The NHLBI, professional societies, and the pharmaceutical industry have heavily marketed these guidelines to U.S. physicians. It is estimated that several hundred thousand copies of the asthma guidelines were circulated in the

early 1990s (personal communication with Robinson Fulwood, Coordinator, National Asthma Education and Prevention Program of the National Heart, Lung and Blood Institute, National Institutes of Health). Many of us have received more than one copy of these guidelines over the past few years.

Therefore, data suggesting a general, overall awareness of these asthma guidelines within the professional community are not surprising.^{6,7} Yet, there have been few formal studies of how physicians view these guidelines. The study by Picken et al. suggests that although the study physicians did endorse some of the basic components of the asthma guidelines, many aspects could be endorsed only after some local modification. Of the six areas selected for evaluation, only two were endorsed without significant modifications—indications for administering inhaled corticosteroids and recommendations surrounding patient education. Coincidentally, these are also the topic areas with the most support from the clinical trial literature, including data on clinical effectiveness and health economic evaluations. The authors of the study conclude that the disagreement between practicing primary care physicians and the expert panel recommendations may be a potential cause of poor compliance with the guidelines.

This study has some limitations, not the least of which are concerns related to the small size of the sample of primary care physicians, which limits the generalizability of the results, and concerns related to the fact that the investigators themselves led the discussion groups, which could have allowed the introduction of investigator bias. The conclusions seem reasonable, however, and they raise questions about the asthma guidelines and about the development of practice guidelines in general.

The Picken study suggests several ways for revising the 1991 asthma guidelines. Interestingly, in 1997, the NAEPP updated the original asthma guidelines, and the revisions addressed many of the strengths and weaknesses identified by the physicians in the Picken study.⁸ For example, areas with strong, evidence-based support from the literature—such as the pharmacotherapeutic section, which emphasized the use of anti-inflammatory medications—continue to be a central component of the guidelines. Alternatively, in areas for which evidence is less robust such as routine use of peak flow monitoring, the recommendations have been modified to reflect a more limited and focused use in clinical practice. The recommendations for specialty referral also are more clearly defined in the updated version. A majority of the recommen-

dations in the revised guidelines are annotated to reflect whether they are primarily evidence-based or based on expert opinion. These changes to the asthma guidelines may have been, in part, due to the wisdom of the NAEPP in embracing a more systematic, evidence-based approach to guideline development. These changes may also reflect the inclusion of primary care physicians on the expert panel. In addition, the expert panel for the revised guidelines conducted an extensive process of review and feedback, which included the primary care community, prior to publication.

The study by Picken et al. provides some insights into the broader issues surrounding guideline development as well. Perhaps most striking is the central tension between optimal clinical practice (as expressed by a set of guidelines) and current behavior in the practice setting. Most guidelines have been developed under the premise that current clinical practices are substandard and need to be improved. Yet, guideline development and promotion, no matter how much it may be grounded in evidence-based research, still remains a conceptual exercise. What is missing is a reality check, a process by which guidelines are tested in the clinical environment by individual practitioners, and modified accordingly, to be meaningful at the level of care.

The tension between optimal practice patterns and normative practice patterns is often viewed as a gap in the quality of care within our society, and more discussion is needed on how we should bridge this gap. The study by Picken et al. emphasizes the willingness of the primary care community to participate in practice guideline development and its ability to reshape national guideline recommendations once provided with a forum to do so. Once the goals for optimal care are set, the focus needs to shift toward testing these goals in the clinical environment, so that ultimately, the guidance provided to practitioners is

grounded not only in science, but in practice as well.—

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