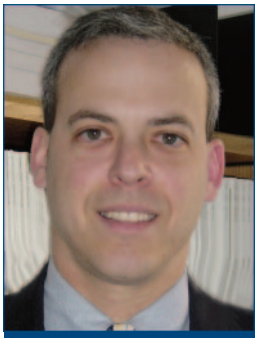
Clinical Practice Guidelines in Oncology: Translating Evidence Into Practice (and back)



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In this issue of the *Journal of Oncology Practice* are the executive summaries of two new practice guidelines, the full text of which are being published simultaneously in the *Journal of Clinical Oncology*. Whether it discusses the management of nodal micrometastases in a woman with breast cancer, or decision making regarding the use of computed tomography scan surveillance for colorectal cancer, it is possible that these recommendations may not match with your own practice.

If the systematic review convinces you that practice change is in order, how would you do this? Can you change your practice habits on a dime, or would you like some help remembering when tests are due and for whom the guidelines apply? The focus of this article is to provide some background on clinical practice guidelines, but particularly to explain a new ASCO program called Best Practice Tools. Clinicians have told us that they know the right things to do for patient care, but lack the systems to ensure that they deliver the right tests, the most effective treatment, optimal supportive care, and appropriate follow up at the right time and for the right patient. A clinical practice guideline is meaningless if it fails to help you give your patient the best possible care. We hope you will find this new ASCO initiative useful for you and your patients.

Rigorous training, clinical experience, exchange of information among practitioners, and familiarity with the medical literature are not enough to ensure that physicians will do the right thing for their patients. A corollary was that widespread adoption of a specific practice intervention meant that the intervention was not only a standard of care but also an appropriate use of health care resources. Physicians respond to similar clinical problems with significant variation in practice patterns.[1] As summarized by Eddy, ". . .the complexity of medical decisions, errors in reasoning, and wide ranges of uncertainty (makes it impossible) for anyone, even physicians, to accurately process in their heads all of the information needed for a complex medical decision."[2] A growing interest in scientific evidence to counteract such widespread clinical empiricism and to support claims of efficacy fostered the development of evidence-based medicine (EBM) as an established discipline.[3]

EBM is commonly defined as "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients," and its practice requires the integration of "clinical expertise with the best available external clinical evidence from systematic research."[4] This level of evidence would preferably, though not exclusively, be found in randomized clinical trials. An EBM exercise can also identify areas in which evidence is lacking and further studies are needed. A review of the available evidence is at the core of the process of generating a clinical practice guideline (CPG). CPGs are a useful mechanism to break down complex data sets into more manageable pieces, and ideally allow busy clinicians to effectively use them for individual patient care.

Interest in EBM grew exponentially in recent years, with more than 3,000 references added to PubMed in 2004 compared with just two in 1992. EBM was initially used as a teaching tool for clinical reasoning, and now a whole new generation of clinicians is familiar with its principles and able to employ it in daily practice. Several policy bodies and professional organizations such as ASCO have become heavily involved in the development of CPGs, and their potential impact can be estimated by understanding who is creating them, who is using them, and how. It is then worth noting the growing interest expressed by policy makers, health care administrators, regulatory entities, and third-party payers.

CPGs are being used increasingly to set practice standards. However, a CPG is not cookbook medicine; it cannot replace individual clinical expertise, nor can it function in the absence of patient-specific information regarding comorbid disease, individual preferences, and available resources. If the underlying motivation to use a CPG is to limit care and control costs, therein a word of caution. Clinicians practicing EBM seek out the best available evidence to inform decisions in order to provide the highest quality and most effective care for an individual patient, and have an ultimate goal of improving outcome. Even though the cost of tests or interventions should be reasonable when compared to the potential benefits, it is entirely possible that the actual cost of care for certain individuals may go up and not down.

The Centers for Medicare & Medicaid Services is evaluating financial performance (pay-for-performance) measures that would link physician payment to the demonstration of health care quality and efficiency as incentives to improve patient care. CPGs are viewed as credible sources of data for what might be considered effective care. However, CPGs are primarily designed as tools to broadly inform patient care, rather than a roadmap for the treatment of a specific patient. Most evaluate efficacy but few evaluate value (cost

effectiveness).[5] CPGs have a stated goal to improve quality of care, but there is significant variability in how quality is defined and they commonly lack validated quality indicators. In our highly fragmented health care delivery system that is geared towards the provision of acute care and technical procedures, [6] the use of CPGs to guide reimbursement policies in the absence of robust quality indicators could in some cases create perverse incentives.[7] In fact, greater health care spending does not necessarily equal more effective care or better outcome.[8]

It is in this context that ASCO and its Health Services Committee have played a major role in efforts to develop evidence-based CPGs and Technology Assessments as tools to effectively change clinical behavior and close the quality chasm between "the health care we have and the care we could have."[9] More than 30 current documents are available on its Web site (see "ASCO Guideline Recommendations for Sentinel Lymph Node Biopsy in Early-Stage Breast Cancer: Guideline Summary" on p. 134 and "2005 Update of ASCO Practice Guideline Recommendations for Colorectal Cancer Surveillance: Guideline Summary" on p. 137). This process involves ASCO's full-time staff and volunteers (members and non-members) to produce and update high-quality, evidence-based CPGs, and is very time consuming and resource intensive. However, this new knowledge must be disseminated and implemented by a wide number of practitioners in order to effect change in clinical practice and improve patient care. The resulting improvements in quality of care and outcome should be measured using reliable instruments, and the information then used to refine and refocus the guideline process. In other words, the release of a well written, extensively referenced CPG should not signal the end of the effort. ASCO is now involved in quality initiatives to examine the prevalence and reasons for practice variation and to test and validate measures of quality. Two distinct efforts were recently reported in the *JCO*,[10,11] and the long-term goal is to develop a real-time system for quality self-assessment and improvement that is informative to both individual practices and to the CPG process.

Barriers involving the dissemination and implementation of new knowledge in health care are well documented. The simple publication of a lengthy CPG document is no guarantee that the recommendations will be implemented, even among the small minority who will actually have time to read the whole document. Several factors influence the likelihood of change including the perception of benefit to the practice itself (e.g., cost, risk, doing the right thing, etc.), the compatibility with existing processes within a practice, and to what degree individuals are allowed to adapt centrally designed recommendations to their individual settings.[12] Therefore, simplicity is key. Recommendations should be clear, precise, and concise, and should encourage local solutions.[13]

ASCO has now embarked on several initiatives aimed at facilitating the translation of guideline recommendations into practice. An important one with the end user in mind is called Best Practice Tools. This toolbox concept consists of various tools that will be created alongside a specific CPG and made available in print and at the ASCO (http://www.asco.org) and People Living With Cancer (http://www.plwc.org), as appropriate. Examples might include one- to two-page summaries of the guideline covering the "what, why, who, and how?" for health care professionals and for patients, PowerPoint slide sets summarizing key elements, and print- and Web-based flow sheets that can be used for individual patient care. This issue of *JOP* includes a few examples including a clinician summary of the guidelines on colorectal cancer (CRC) surveillance and on sentinel node biopsy in breast cancer, and a tear-out flow sheet for rectal and colon cancer for individual patient care (on p. 179-180 of this issue; also available in an interactive, Web-based format). We hope oncologists will use these tools and give us feedback. Our ultimate goal is to improve the quality of care and the outcome for individual patients already burdened with a cancer diagnosis. Therefore, we must strive to translate research into practice and understand what the real impact is. Our patients and society deserve nothing less.

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