

# Hard Choices: The Role of Evidence in Clinical Decision-Making

*By Martin Saggese*

All health care professionals would agree in principle that clinical decisions should be made based on consideration of the best available evidence. But deciding how best to implement that principle has become an often contentious battleground,, involving practicing clinicians, medical educators, government policy makers, patient advocates and insurance company cost control specialists.

The pressure to improve the quality of patient care while controlling costs affects both wealthy countries, such as the United States and Western European nations, and countries going through economic restructuring such as those in the NIS and CEE. Clinicians are being driven to search for and identify sources of cost that do not produce commensurate benefit to patients. Newly-developed treatment approaches are subjected to rigorous trials to demonstrate their efficacy and safety. And many approaches in common usage are being re-examined for evidence to substantiate their actual efficacy.

This emphasis on basing medical practices on a rigorous review of evidence goes by many different names: evidence-based medicine, outcomes-based medicine, best practices, clinical practice guidelines, practice policies. Proponents of each school approach the task somewhat differently, but common to all of them is the review of a large number of studies and a careful analysis of the outcomes in order to develop better guidance for clinicians to use in dealing with both the everyday and unusual medical problems faced by their patients.

Also common to these approaches is the heated debate they generate among physicians and policy makers. The rise of evidence-based approaches to making clinical decisions raises the most fundamental questions and trade-offs about physician autonomy, control over clinical decisions, the cost of medical care and the interests of society versus the interests of the individual patient--questions that are often obscured behind arguments over sample bias and study methodology.

Partners will be introduced to techniques associated with evidence-based approaches and to the debate these approaches generate among medical professionals during both the CEE conference in Zagreb in May and at the NIS conference, to be held in October in Atlanta.

## Evidence-Based Medicine

Evidence-based medicine is the name given to a movement that seeks to use the current "best evidence" to make effective decisions about patient care. The term began to be widely used in medical journals the early 1990's. Evidence-based medicine places a very high premium on results from randomized controlled trials (RCTs), and to some extent allows for consideration of evidence from other sources.

Many of the leading proponents of evidence-based medicine are in Britain and Canada, and are associated with the Cochrane Collaboration. The Cochrane Collaboration is an international organization of medical professionals associated with a network of Cochrane Centers in ten countries. Its goal is to develop, maintain and disseminate comprehensive reviews of randomized clinical trials conducted around the world in order to aid practitioners in making evidence based health care decisions. (See box)

The evidence-based medicine approach has drawn criticism on three main counts:

- Systematic reviews weigh RCTs too heavily, discounting potentially valid and important evidence because they do not meet specific inclusion criteria.
- Reliance on evidence-based practice guidelines amounts to "cookbook medicine" and does not sufficiently take into account clinical judgement of the treating physician regarding the unique circumstances of individual cases.
- Evidence-based medicine will be misused as a cost-cutting tool, potentially discouraging necessary treatments that do not meet rigid cost-benefit criteria, thereby sacrificing the interests of patients. One of the leading advocates of evidence-based medicine is David Sackett, professor of medicine at Oxford and editor of the journal, Evidence-Based Medicine. In an article in the British Medical Journal, Sackett rebutted these criticisms. Evidence-based medicine, he argues, is more than RCTs and meta-analyses; it involves tracking down the "best" external evidence wherever that is found; according to Sackett, RCTs are a good starting place, but not the only place to look. Sackett argues that neither quantitative evidence nor individual clinical expertise alone are enough to ensure the best outcome for the patient; both are necessary. And, he says, evidence-based medicine's focus on documenting practices that produce the best patient outcomes irrespective of costs means that it could raise rather than lower the cost of care in some cases. (See box, for an example of an evidence-based approach to a case.)

## Practice Policies

Practice policies have probably been used in medicine since the time of Hippocrates. Historically, they have been used to identify and certify as standard those medical practices that were in common use, not to define desirable new practices. The process was informal and decentralized. Traditional practice guidelines evolved; they were not created or designed. The underlying premise was that in the "marketplace of ideas," those medical practices that stood the test of time did so because of their efficacy.

This approach, which still underlies much of current medical practice, has begun to give way under pressure from three main forces. First, there is an inherent weakness in the traditional approach in that it relies on what clinicians are doing rather than on what they should be doing as the source of accepted practice. Second, as medical practice becomes ever more complex, the number of decisions and alternatives that each individual clinician faces have become so numerous that clinicians need guidance on how to deal with the diverse cases with which they are confronted. And third, as the practice (and financing) of medicine changes, the nature of practice policies is changing. They are no longer mere "suggestions" to be used or disregarded by physicians as they choose; rather, practice policies are now sometimes used as active management tools for quality assurance, insurance reimbursement and cost containment purposes. (See box)

Practice policies may be classified in three broad categories based on their flexibility. Standards are those that should always be followed. Guidelines are those that should be followed in most cases, but where the physician may deviate as necessary based on the circumstances of an individual case. Options offer a clinician information about treatment approaches that may be in common usage, but provide no guidance as to whether they should be used in a particular case.

The development of practice policies in the United States is increasingly becoming a more formalized process, usually involving committees and panels. Increasingly, such panels are focusing on evidence and outcomes in developing practice policies. For example, the US Preventive Services Task Force (USPSTF), created in 1984 by the US Department of Health and Human Services, has explicitly adopted an evidence-based methodology in the development of its recommended practices. In the US, as more committees consider more evidence and develop more policies to guide (and constrain) medical practices in more effective (and cost-effective) directions, the development of practice policies is increasingly becoming the crucible in which battles over evidence, cost and physician autonomy play out.

## Improving Information Access

Studies in the US and Britain suggest that on average practicing doctors spend only a few hours a week reading medical journals, not nearly enough to stay abreast of the latest developments in general medicine, let alone in complex specialties. In the NIS and CEE countries, where access to foreign and even national language medical journals has been limited, it seems clear that the current "best evidence" may not always be readily available to practitioners.

AIHA partners have taken a number of steps to improve access to information for NIS and CEE professionals. US partner institutions have donated significant quantities of journals and textbooks, and many partnerships have collaborated on changes in medical and nursing education, at the undergraduate and graduate levels as well as for continuing medical education. In the past few months, AIHA has begun providing electronic access for NIS and CEE partner hospitals to Medline and full-text articles in over a dozen major medical journals through Ovid, an Internet-based service. These steps have begun to improve information access for both practicing physicians and medical students in partner institutions.

## Next Steps

Evidence-based medicine and practice policies will be discussed at AIHA's CEE and NIS partnership conferences this year. For the CEE conference, sessions are being planned to introduce evidence-based approaches, to illustrate them using case studies, and to provide opportunities for feedback and discussion from CEE hospital, university and ministry officials about the applicability of evidence-based approaches. Similar sessions are anticipated at the NIS conference.

In between, there will be workshops for information coordinators at NIS and CEE partner institutions to introduce them to the Cochrane Collaboration databases and other computer-based resources. Training for the information coordinators, some of whom are clinicians and some of whom are medical librarians or information professionals, will include background on how to interpret and use medical databases, as well as discussions of the limitations of these databases. The goal is to help position information coordinators to provide useful information to clinicians for their use in treating their patients. This is one of the key goals of AIHA's Learning Resource Center (LRC) Project: to help provide an electronic extension to the hospital's medical library to help clinical professionals obtain the information they need to make better treatment decisions. LRC's will be provided with copies of the Cochrane Collaboration databases on CD-ROM, which are updated quarterly, as well as a collection of other important CD-ROM databases, resources and training materials.

Given the controversy surrounding evidence-based approaches among medical professionals in North America and Western Europe, introducing the subject to NIS and CEE partners is bound to generate lively discussions and debate. AIHA's approach is designed to provide information to CEE and NIS partners about various evidence-based approaches and the techniques and technologies that support them. A great deal of attention will be given to the context of these approaches, including their implications at the individual practitioner, hospital and health care system levels. Discussion will be encouraged about the advantages, limitations and critiques of evidence-based approaches, and their degree of applicability to the world in which NIS and CEE clinicians and hospitals are working today.

As efforts to stabilize and strengthen health care delivery in the NIS and CEE proceed, health care professionals will continue to experiment with new treatment approaches and funding mechanisms to help them save lives and money. As they introduce tools such as quality assurance techniques, continuing education requirements and reimbursement mechanisms based on adherence to standards and guidelines, they will be looking for new ways to evaluate

and incorporate evidence-based approaches to help them decide on the best treatment for their patients.

*Martin Saggese is AIHA's associate director for administration and chief financial officer.*