

Keynote Address Examines Prospects for Evidence-Based Medicine

With the global scientific knowledge base growing at an unprecedented rate, patient expectations on the rise, and new information technology connecting more physicians worldwide, the time may be right for evidence-based medicine to assume a central role in clinical practice, said conference keynote speaker Clifton Gaus, ScD, former administrator for the US Agency for Health Care Policy and Research (AHCPR).

Evidence-based medicine, or practice, relies on tying scientific knowledge to behavioral change--"closing the gap between what we know and what we do," Gaus said. He defined the concept as: "The process of providing health care by a team of professionals whose clinical behavior is based on scientific knowledge of known outcomes and risks--not past practices, instinct or the advice of others."

In the US and Europe, the idea has spawned innovations such as clinical practice guideline panels, consensus conferences and evidence-based practice centers that analyze and disseminate scientific knowledge to medical professionals and the public. AHCPR, the government agency that has pioneered evidence-based medicine in the US, currently is awarding grants to establish eight new practice centers, which will enlist multidisciplinary teams to produce evidence reports defining a clinical topic or practice and summarizing related costs and research. Practices chosen for study must generate high costs, yield uncertain effectiveness and be related to condition or disease with high incidence or prevalence. AHCPR also manages a National Guideline Clearinghouse, soon to be available on the Internet.

Gaus emphasized that clinical outcomes and effectiveness research makes the scientific knowledge base more accessible, supplying more complete information on which to base treatment decisions. Research by AHCPR, for example, has found that depression is undertreated, cancer pain is undermanaged and lower back pain is overtreated by surgery.

Though some health care professionals have criticized evidence-based medicine as having a "dehumanizing" aspect, Gaus said it provides unique opportunities to improve quality, reduce costs and satisfy patients, with the potential to weed out unproven interventions and correct overuse, underuse and misuse of health care services.

"I believe the prospects for evidence-based practice are very good. It is about the only solution to the many different pressures we are feeling in our health care systems today," he concluded.

As a case study in how evidence-based medicine is carried out in practice, conference participants also heard about two Hungarian demonstration projects that are examining the efficacy of particular clinical practice guidelines. Eva Belicza, PhD, head of the Consultative Center of Quality Improvement, Hungarian Ministry of Welfare, summarized the "BORCSI" project, which is studying the application of four different AHCPR guidelines--on urinary incontinence, cancer pain, lower back pain and left ventricular systolic dysfunction-- in eight Hungarian hospitals. She said the initiative measures changes in staff workload, costs, patient quality of life, and the daily activities of physicians and managers, comparing those who follow the guidelines and those who don't.

At the same time, Hungarian health officials are looking at several outpatient cardiac rehabilitation guidelines--from AHCPR, the World Health Organization and Hungary's College of Medical Rehabilitation--to see how they might better meet the population's needs. About 28,000 Hungarians suffer heart attacks annually, but fewer than 20 percent of these patients take part in a rehabilitation program. Slated to begin in October, the one-year project aims to

determine the clinical, psychological and economic outcomes of cardiac rehabilitation, and inform the medical profession about the benefits of rehabilitation and secondary prevention.

"There are special difficulties with guidelines in CEE," noted Lajos Kullman, MD, PhD, director general of the National Institute for Medical Rehabilitation in Budapest. "It is difficult for doctors to understand it is not a 'must'--it is simply a guideline."