In April 2000, nine organizations with a commitment to the continued professional development of physicians sponsored “A Continuing Medical Education Summit on the Practices, Opportunities and Priorities for the New Millennium.” Congress 2000 was the fourth international meeting of continuing medical education (CME) leaders during the past two decades. Chaired by Jocelyn Lockyer, University of Calgary, and hosted by Phil Manning, MD, University of Southern California, the Congress was intended to bring CME leadership together to review and discuss five major themes:

- Physician Education in the Workplace
- Continuing Education for Continuous Improvement: Linking CME to the Health of the Public
- Shifting the Culture of CME: What Needs to Happen? Why Is It So Difficult?
- Preventing “Information Overdose”: Creating Information Literate-Practitioners
- Using Theory and Research to Shape the Practice of Continuing Professional Development

The content of those themes is presented in this issue of the Journal of Continuing Education in
the Health Professions so the value can be shared with all those who did not have the opportunity to participate in the Congress. The present article summarizes major points and key issues identified by conferees during the meeting and challenges each reader to reflect and act upon implications of the Congress.

Summaries of Post Plenary Session Perspectives

Prior to the Congress, participants were asked to rank the importance of the themes, identify the key issues for each theme, and submit comments to be summarized and presented to the keynote speakers. The intention was to provide speakers with attendee expectations so that perceived needs could be addressed.

During the Congress, each attendee was asked to identify key issues after each plenary address. The results of the post plenary perspectives are summarized below, by theme.

- **Physician Education in the Workplace**
  CME providers reported a need to focus their interventions around physician problems, using effective databases to measure the results of interventions. Technology was seen as important for reaching physicians at the point of care, with just-in-time learning.

- **Continuing Education for Continuous Improvement: Linking CME to the Public’s Health**
  Attendees reported how physicians must change their focus to recognize and address public health issues in their practices and community, change how they practice to cultivate better group work habits and learning, and change the culture of health care from defensive medicine to continuous improvement. There was a broad understanding that CME must emphasize performance in practice and health care outcomes.

- **Shifting the Culture of CME: What Needs to Happen? Why Is It So Difficult?**
  Participants focused on the value of change and a need to think systemically. Shifting the culture did not directly address the learning styles of physicians but rather how CME is organized to do business. Involvement of the patient in the learning process was mentioned. Could this mean that CME providers should focus on the patient health outcome as a result rather than involvement of the patient in the educational process?

- **Preventing “Information Overdose”: Creating Information-Literate Practitioners**
  Access to timely and appropriate information for the learner is central to effective CME. How might the CME provider build partnerships with the physician, information technology, and the medical librarian to ensure that evidence-based medicine is available to support the continued learning of the physician?

- **Using Theory and Research to Shape the Practice of Continuing Professional Development**
  Time and knowledge to conduct research seem to be the biggest barriers to implementing research and putting results into practice. The profession has a journal, but it does not maintain a system to encourage or facilitate the application of new research in the practice of continuing education of the health professions. The Society for Academic Continuing Medical Education is promoting research among its members in an exemplary manner, but the profession may need to expand that effort in the future.

The expectations raised prior to the Congress and the major points and issues identified after the plenary sessions reflected the need of attendees to (a) clarify issues and (b) learn how to implement the changes necessary to accomplish the themes.
The Congress helped with both and then went a little further. The final plenary session summarized the issues for each theme and identified implications for a developing profession of CME, for individual CME providers, and for the individual CME professional. The following section summarizes those implications, with a focus on research in CME.

Implications for the Profession, Individual CME Providers, Individual CME Professionals, and CME Research

What do the Congress themes imply for our profession, the places we work, and ourselves? What are we going to do with what was learned from the distinguished presenters?

The implications for the profession include

• **Closing the research gap.** Develop a global strategy to close the gap between what we have learned through research about how physicians learn and change and how we practice the design, development, and implementation of CME activities.

• **Developing new CME leaders.** A new generation of physician and educational CME leaders is needed to keep the profession moving forward. Multiple plans need to be developed for identifying potential leaders, training CME professionals in leadership, and providing advanced degree programs in the leadership of education of the health professions.

• **Sharing “best practices.”** Many CME offices in hospitals, medical schools, specialty societies, communication companies, state medical societies, and voluntary health care organizations have developed “best practices.” Whether these practices focus on administration, educational process, finance, commercial support, technology, or governance, the practices need to be shared with colleagues. Strategies need to be developed to facilitate such an exchange.

• **Creating information literacy.** A great deal is known about physician learning and what does and does not work in facilitating the process. The results of years of educational research are available; however, many who work in CME are unaware of the literature or do not fully understand its implications. More chances are needed to share research relating to new technologies, educational processes, and evaluation methodologies.

• **Responding to the Institute of Medicine report.** Medical errors can be deadly and, in many cases, preventable. The CME community needs to develop an integrated approach to assisting physicians and other health professionals to understand and deal with this reality in specific health care settings. Looking at common errors, helping with “root-cause analysis,” and implementing live or online learning activities will all contribute to a lasting solution to this problem.

• **Emphasizing outcomes over process.** Both the CME planning process and the accreditation process that supports it have led to an emphasis on process over outcomes. The CME community needs to support the creation of CME activities and an accreditation system based upon outcome measures.

The implications for different types of CME providers include

• **Developing a culture of continuous learning.** Regardless of the type of CME provider, each must develop a culture that allows and facilitates growth and development of its staff, its leadership, and its ability to meet the needs of its physician constituents. Sharing best practices will
assist in developing unique approaches to continuous learning.

- **Creating new partnerships.** CME providers need to create partnerships with other types of providers and others with whom they work in order to successfully meet the future needs of physicians. It is very likely that some of the partnerships needed to succeed will not have been established in the past. Partnerships inside and outside health care institutions should be evaluated solely on their potential to enhance the CME provider’s ability to meet its mission.

- **Providing visible value.** CME providers need to increase both their visibility and value to parent bodies. Many health care organizations are currently struggling financially. Therefore, CME offices must learn to be financially independent (or even a profit center) while they simultaneously increase their ability to design and test learning activities that positively impact both quality and cost of care.

- **Engaging in CME research.** Studying the processes we undergo and the outcomes we achieve is integral to their improvement. Given the magnitude of workload, however, CME offices are often prevented from engaging in this critically important venture. Hiring new staff and/or partnering with other institutional staff with appropriate skills and/or teaching CME workers necessary skills are both needed in all types of CME provider organizations.

- **Linking to data.** Using real physician performance data as a basis of understanding learner needs and studying changes in behavior is a critical ingredient in quality CME. Offices of CME need to focus their CME activities on issues for which they have data and for which they can potentially influence behavior. Different types of CME providers are positioned more naturally to deal with difficult types of physician performance problems or opportunities.

The implications for the individual CME professional include

- **Identifying new CME skills.** The skills needed to succeed as a CME professional in the future may look very different from those needed in the past. CME professionals need to assess their own skills in research, technology, organizational learning and change, process and performance consultation, coaching, facilitating learning, quality improvement, and data analysis.

- **Obtaining needed skills.** CME professionals need to develop a new skill set, help teach colleagues some of the skills they possess, and continuously improve themselves and their CME staff.

- **Advocating the new CME vision.** Everyone involved in CME has a vested interest in becoming a proponent of and practicing a new vision of CME. The future of the profession, of specific types of CME providers, and of each CME practitioner depends on bringing about a new future.

The implications for CME research that reflect on the profession, different types of providers, and the individual CME professional include

- **Outcomes research.** The profession needs to provide leadership on how to conduct outcomes research, including identification and use of appropriate data to measure results, describing effective processes to measure appropriate outcomes, identifying variations of research by venue, facilitating the sharing of results, and promoting application of research findings.

- **Learning effectiveness.** Not only does the profession need to conduct research on
outcomes, it needs to continue research on learning effectiveness. The profession and the individual CME professional must apply in practice what is already known about physician learning, practice, and change.

- **Patient role in CME.** Is there a role for the patient in CME? If so, what is that role? These questions require further study.

- **Technology and problem-based learning.** Technology will play an increasingly important role in CME in the future and will influence the current practice of CME and physician learning. Further study must be undertaken on the value, role, strengths, and weaknesses that technology brings to continuing development of the learner, especially the busy physician. The implications of technology on the current role and responsibilities of the CME profession and professional must be studied as well.

- **Venue-specific effectiveness.** Does the venue make a difference in the effectiveness of CME? Are some venues more effective in producing different types of outcomes than other venues? What are the implications for the profession and the professionals that work in those venues?

- **Research skill development.** The profession must cultivate a research mentality, improve skills, and support the research of the CME professional. These efforts must complement and go beyond the significant start promulgated by projects, education, and training sessions of the Society for Academic Continuing Medical Education and initiatives of the Journal of Continuing Education in the Health Professions. Without such development, the CME profession will be unable to address basic or applied questions and will not advance as a profession.

**Conclusion and Charge**

Congress 2000 was a major event in the advancement of CME.

The obvious conclusion from the Congress was that there are significant opportunities to make CME a more valuable partner/contributor to quality health care. The vision suggests that CME should be linked more closely to physician learning at the point of care, perhaps using technology more effectively to address physician learner (problem-based) needs. This would help the physician manage the volume of relevant evidence-based information to treat the patient more effectively. In addition, health care outcome data to analyze the need for and measure the effectiveness of educational interventions should become a standard of practice for CME providers. Continuous improvement based on research about effective learning processes and outcomes should become a characteristic of our CME culture.

The vision must be led and a plan of action must be developed by the profession to implement such a large and complex change. The Society for Academic Continuing Medical Education, the Alliance for Continuing Medical Education, and the Association for Hospital Medical Education must facilitate it through their professional meetings and publications, through appropriate partnerships such as the Tri-Group, and by cultivating new partnerships with organizations that complement CME and support those who practice the vision. The individuals who practice and study CME must assume leadership to see that the vision is implemented in their places of work. Support must be fostered for more studies of what works in CME, what does not, and why. The organizations most committed to CME must ensure not only the carrying out of a rich research agenda but also a biennial Congress dedicated to closing the gap between what we know and how we practice CME.