CARE IV Series:
State of Knowledge, Practice, and Translation in Interdisciplinary Arthritis Research and Care

In the Bone and Joint Decade, health care professionals, professional organizations, and advocacy groups across the globe are working together to enhance health-related quality of life for people with musculoskeletal disorders. As part of that effort, PTJ is publishing articles from the CARE IV Conference held in Leeds, England, in September 2006.

Established in 2002 by pioneers in arthritis care and research as a vehicle to stimulate and support interdisciplinary initiatives, the CARE Conferences foster international collaboration and support for novice and seasoned clinicians, researchers, and stakeholders in arthritis and engage consumers of arthritis care in the development, dissemination, and implementation of clinical research. Each conference has focused on different themes:

- **CARE I** (the Netherlands) defined and discussed the state of knowledge on rehabilitation interventions for rheumatoid arthritis (RA) and created a research agenda in arthritis rehabilitation. Specifically, the aim was to describe the state of evidence for rehabilitation research in RA, define “team care,” and discuss the use of frameworks, such as the *International Classification of Functioning, Disability and Health* (ICF), for selecting outcome measures.

- **CARE II** (Sweden) identified research strategies relevant for evaluating arthritis team care, including the elements and processes of team care and the best strategies for implementation. Participants discussed the evidence for exercise and patient education in managing patients with various forms of arthritis. Recommendations included the implementation of the ICF framework in research initiatives and the need to emphasize the use of multiple research designs to target all levels of research in nonpharmacologic care.

- **CARE III** (Canada) focused on research design and selection of outcome measures to evaluate rehabilitation in arthritis, expanding to all forms of nonpharmacologic care. It also explored emerging models of care delivery, such as the physical therapist/occupational therapist practitioner model and the clinical nurse specialist and nurse practitioner models that have been developed in the United States and Canada to meet increasing demands for arthritis health care at a time when there is a shortage of practitioners. Models of care delivery were evaluated in the context of cultural, social, and economic structures worldwide and with respect to the characteristics of patients who might benefit from these models. Participants identified current strategies to incorporate patient perspectives into care delivery and research initiatives to enhance the quality of life and well-being of patients with arthritis. This conference began a formal dialog on engaging patients in the design, implementation, and dissemination of research.
© CARE IV explored how to promote patient engagement in the development of research initiatives and information dissemination. The conference focused on implementation of effective research and outcomes measurement, use of a patient-centered approach, and knowledge translation and exchange. The group considered the complexities and special issues inherent in conducting nonpharmacologic care research and in communicating the results of these trials. Specifically, the group discussed checklists and frameworks for reporting complex clinical trials, such as the CLEAR NPT, and evaluating the external validity of findings and promoting the adoption and sustainability of interventions using the RE-AIM model. Participants also discussed the emerging roles of patients on scientific review panels to ensure the practicality of new research protocols, pragmatic implementation and recruitment strategies, and the feasibility of scientific protocols used in Scandinavia and Canada. Participants discussed the need to identify and develop measures that target various components of the ICF and to explore the facilitators, barriers, and contextual factors based on patient contributions. Presentations emphasized the need to represent personal factors in outcomes measures to better understand and assess patient-related outcomes. (One strategy currently used in England to understand the contextual framework of patient outcomes is “journey mapping,” a detailed account of personal experiences during care delivery.) Discussion on knowledge translation began with the evidence for nonpharmacologic care and covered strategies to incorporate the evolving roles of patients in research design, development, and dissemination.

Two of the CARE IV papers included in this issue of PTJ provide an overview and synthesis of systematic reviews. They summarize the literature on all aspects of nonpharmacologic care—ranging from active interventions, such as exercise, to modalities—and the impact of these interventions on patient outcomes. The articles provide a snapshot of the information available to formulate evidence-based clinical decisions on appropriate, effective plans of care and focus on the most prevalent forms of arthritis: rheumatoid arthritis and osteoarthritis.

Once data are summarized and aggregated, the next step is to formulate this information into a clear and user-friendly format for the consumer. The process is called knowledge translation. Knowledge translation is not specific to patients. Instead, it includes all consumers of the literature: patients, clinicians, policymakers, and stakeholders. In a third CARE IV paper in this issue, Tugwell et al describe the process of knowledge translation for effective consumers. For many clinicians and researchers, this is a new paradigm, but it is quickly emerging as an important process. The authors describe the “Knowledge to Action” (KTA) framework and the application of KTA in creating consumer-friendly materials for patients of an Ottawa arthritis clinic. One key component in KTA is the process of synthesizing the evidence and tailoring information so that it can be conveyed in a manner that patients understand. Another key component is to ensure that the knowledge is used. To ensure understanding and usefulness of information for patients, the Ottawa team surveyed patients and incorporated their feedback into the development of patient education materials. This paper provides a template for assessing patient understanding of terms and contextual factors and for increasing the likelihood that patients will actually use information from the literature.
This is an exciting time for clinicians, researchers, and consumers of rheumatology care and research. PTJ's CARE IV series highlights fertile areas of growth, development, education, and implementation. Further information about CARE IV, including handouts of the slide presentations with sound recordings and a list of attendees with contact addresses, can be found at www.leeds.ac.uk/CAREIV. CARE V will take place in April 2008 in Oslo, Norway.

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References
