# Clinician's Commentary

The Canadian acute-care health system has changed little in structure since the beginning of the twentieth century. The model has remained physician centred, with the rest of the care team as adjuncts; patients have still tended to rely on expert advice provided by physicians. After resolution of an acute event, follow-up care with the treating physician has been likely to continue indefinitely. This traditional model of care is now undergoing a major transformation for three major reasons. First, demand for health services has outgrown supply, thanks to population growth and ageing and the availability of many more effective treatments. This demand/supply mismatch has resulted in a significant deterioration in access to many acute-care services, including cardiac, cancer, and orthopaedic surgery, and is not sustainable because the demand for services is forecasted to consistently exceed physician supply. Second, the traditional medical model has become forbiddingly expensive, with health care now responsible for 40% of all provincial and territorial government expenditures[1] and growing at a rate in excess of GDP growth. Third, and equally important, patient expectations have changed, and the traditional medical model is no longer meeting their needs, particularly with respect to provision of information and emotional support.[2] As a result of the increasing availability of disease-specific information on the Internet or through social networks, patients are no longer passive recipients of medical advice and care; instead, they are both better equipped for and more comfortable with active participation in decisions about their care. Thus, their requirements from the care team, including the physician, have changed considerably.

Leaders in chronic disease management, such as Wagner, were quick to react to this changing landscape. Wagner developed a model of chronic disease that places the patient at the centre of the care team, with nurses, physicians, physiotherapists, and others assuming roles of varying importance depending on the status of the patient and his or her requirements at that point in the disease trajectory.[3] Chronic disease models focus on prevention and wellness, maximize use of extended scope roles for health professionals in inter-professional teams, and use evidence-based care plans and patient-empowerment tools. In Canada, the chronic disease model has been implemented within primary care and for some chronic conditions such as diabetes and congestive heart failure. The acute-care sector, however, has been relatively slow to incorporate relevant principles from the chronic disease model. For example, despite good evidence of the usefulness of advanced practice nursing roles in follow-up care and patient education in the management of chronic conditions, until recently these roles were uncommon in the acute-care setting.[4] They were novelties, generally seen as physician extenders, and often were not well integrated into, or well accepted by, the care team.

The developing crisis in access to surgical services in Canada has led to an interesting and informative set of changes in the model of care delivery. Most of these changes were designed to maximize the use of operating-room time and to free up surgeons' non-operating-room duties to maximize their surgical productivity. One approach to achieving the latter goal is to incorporate "surgeon extender" roles in aspects of care where it is believed that this can be done without sacrificing quality of care or patient satisfaction. The advanced practice physiotherapist (APP) role at the Sunnybrook Holland Orthopaedic and Arthritic Centre is an excellent example.[5] APPs have been incorporated into two settings: initial assessment of patients referred for hip or knee arthroplasty and follow-up care of those patients postoperatively. In evaluating this advanced practice role, Kennedy et al. found high levels of patient satisfaction with APP follow-up, no different from follow-up by orthopaedic surgeons. Their results are consistent with those reported by others outside Canada. Studies from the United States and United Kingdom found that the quality of care, as measured by diagnostic acumen, appropriate test ordering, and management strategies, was equivalent to and, in some cases, superior to physician care.[6,7] Patient satisfaction appeared to be at least as high as that achieved with physician care. In spite of pockets of lingering scepticism about the value and patient acceptance of advanced practice roles in the Canadian context, Kennedy et al.'s results should put to rest concerns about the usefulness of the APP role in an orthopaedic setting.

These results are important not just for orthopaedic care but because they should inform the development of advanced practice roles and inter-professional models of care in other acute-care contexts. In my own professional domain of oncology, while general practitioners in oncology have been incorporated into specialty practice for many years, until recently there were few advanced practice health professional roles functioning in stable team-based models of care. As occurred with surgical services, deteriorating access to specialty oncology services led to the development of more imaginative extended scope roles. Nurse practitioners now are incorporated, albeit in an ad hoc fashion, across the spectrum of the

cancer journey: navigation through diagnosis, supervision of chemotherapy, assessment of post-treatment complications, and follow-up care. Even more recently, extended scope roles for medical radiation therapists have been developed and implemented in cancer care. However, we have much to learn from the orthopaedic setting, since there is now widespread acknowledgement that the traditional model of oncology care needs transformational change. At Cancer Care Ontario, we are actively working with all partners in care to develop more innovative models that incorporate extended scope roles for health professionals, utilize oncologists where their specific expertise is required, maximize the involvement of primary-care physicians and palliative-care specialists, and incorporate principles of therapeutic patient education to achieve a greater degree of self-management. Further, this initiative acknowledges that reimbursement models for hospitals and physicians must be realigned to achieve the desired team-based model.

The benefits of a team-based approach to care seem obvious: such an approach maximizes the use of scarce human resources, has the potential to improve job satisfaction and career longevity, and is almost certainly less costly than the traditional physician-based model. But what about the patient experience? In transforming care as discussed, are we seeking to simply replace physician roles to create a more sustainable model, or are we also striving to better meet twenty-first-century patient needs? I strongly believe that the new inter-professional model has the potential to achieve this goal: it is inherently patient focused and has great potential to standardize care according to best practice and to provide information that better meets individual patient needs, thus increasing patients' ability to self-manage.

Why do I assert this with conviction? I must end with a personal disclosure: I am not only a medical oncologist and cancer system executive, I am also a patient. Through my journey as a patient undergoing total hip replacement at the centre under discussion, I had a unique opportunity to assess my experience and to determine whether it met my needs as well as my expectations of quality of care. My experience has been positive on both criteria. The quality of care has been excellent. Furthermore, follow-up visits with an APP have allowed me to explore my personal goals for rehabilitation in a manner that suits my needs extremely well. The atmosphere in the inter-professional clinic is one of mutual respect for complementary roles and skills. I have spent most of my time with the APP but know that the surgeon is available for matters that require his specific expertise. I am thus able to use his time efficiently and only when necessary. My access to providers with a wider array of skills and competencies than might be available through specialist follow-up alone has reinforced my belief that an inter-professional model of care is superior to the traditional physician-based model from the patient's perspective, at least in the follow-up phase of care. Studies such as the one by Kennedy et al.[5] are important to neutralize persistent arguments against inter-professional or team-based models.

My experience as a patient has taught me that the acute care / specialty services domain has just begun to scratch the surface of true inter-professional care. We now need to explore it systematically across the spectrum of disease management. Furthermore, we now have an excellent opportunity to work collaboratively across disease entities to rigorously evaluate the incorporation of advance practice roles to ensure the delivery of high-quality care at high levels of patient satisfaction.

*Carol Sawka, MD, FRCPC*
*VP, Clinical Programs & Quality Initiatives*
*Cancer Care Ontario*
*Professor of Medicine, University of Toronto*
*16th Floor, 620 University Avenue*
*Toronto, ON M5G 2L7 Canada*
*carol.sawka@cancercare.on.ca*

## REFERENCES

1. Canadian Institute for Health Information. Health care in Canada 2009: a decade in review [Internet]. Ottawa: The Institute; 2009 [cited 2010 May 27]. Available from: http://secure.cihi.ca/cihiweb/products/HCIC_2009_Web_e.pdf
2. Cancer Care Ontario. Figure 3: Patient experience with outpatient cancer care—average cancer patient satisfaction scores for selected concerns related to emotional support, 2006–2009. In: Patient experience: key findings [Internet]. Toronto: Cancer Care Ontario; 2010 [updated 2010 May 11; cited 2010 May 28]. Available from http://csqi.cancercare.on.ca/cms/one.aspx?portalId=63405&pageId=68019
3. Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. Health Aff. 2010;20(6):64–78. doi:10.1377/hlthaff.20.6.64
4. Gambino KK, Planavsky L, Gaudette H. Transition toward a nurse practitioner–managed clinic. J Cardiovasc Nurs. 2009;24:132–9.
5. Kennedy DM, Robarts S, Woodhouse, L. Patients are satisfied with advanced practice physiotherapists in a role traditionally performed by orthopaedic surgeons. Physiother Can. 2010;62:298–305. doi:10.3138/ptc.2009-19
6. Moore JH, Goss DL, Baxter RE, DeBerardino TM, Mansfield LT, Fellows DW, et al. Clinical diagnostic accuracy and magnetic resonance imaging of patients referred by physical therapists, orthopaedic surgeons, and nonorthopaedic providers. J Orthop Sport Phys Ther. 2005;35(2):67–71. doi:10.2519/jospt.2005.1344
7. Daker-White G, Carr AJ, Harvey I, Woolhead G, Bannister G, Nelson I, et al. A randomized controlled trial: shifting boundaries of doctors and physiotherapists in orthopaedic outpatient departments. J Epidemiol Community Health. 1999;53:643–50.

DOI:10.3138/physio.62.4.306