Notes from the Editor-in-Chief

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In this issue, Andreas Laupacis, from Ontario's Institute for Clinical Evaluative Studies, and William Evans, from Hamilton's Juravinski Cancer Centre and Cancer Care Ontario, succinctly discuss the issues around the rapid and extensive growth in the use of annual diagnostic imaging in Canada. In conjunction with this growth there has also been an increase in the length of waiting times for such procedures. The authors speculate on the reasons for the increasing demand. For example, is it because Canada has not kept up with the acquiring of the equipment? Is it because physicians are relying more on technology and less on their clinical skills in reaching diagnoses? Laupacis and Evans debate the appropriateness of the increased use of the technology as well as the ambiguities and complexities surrounding accurate diagnosis of health problems. They conclude with a number of suggestions about the different approaches to ensure that Canadians have timely access to diagnostic imaging. One aspect they stress is the need for more dialogue between radiologists and the physicians who are offering the diagnostic tests.

In commenting on this paper, Lawrence Stein from the Canadian Association of Radiologists suggests it is the baby boomers who are partially responsible for some of this increase. He adds to the debate by discussing the issue of when and how much imaging is appropriate – do we actually know the answer to that? Labarge also suggests a variety of strategies that can be used to improve the efficiency of radiological services including implementing clinical guidelines for imaging use, implementing better information systems and using physician extenders for less complex procedures.

Tom Noseworthy of the Centre for Health and Policy Studies, University of Calgary, suggests looking at the demand side of access to imaging as opposed to the supply side. He recommends that the focus be on physicians and examining their practice patterns. He also recommends that patients should be informed and educated about risks and costs of inappropriate use of technology.

Deon Louw and Ken Gaston, also from the University of Calgary, reinforce the need for better information systems such as the use of the electronic health record; they also suggest that clinical guidelines should and can be used more extensively and their implementation should be a priority. They advocate for regular review of private MRI facilities and for greater standardization of procedures. Louw and Gaston rightly

point out that there will always be new technologies and these innovations must be embraced, but that technology assessment and monitoring is critical and these tasks might best be shouldered by a national blue-ribbon panel.

Pascale Lehoux, of the Department of Health Administration at the University of Montreal, argues that the problems of diagnostic imaging are deeply rooted in the cultural and political realities of the Canadian society. She is concerned that rationality alone will not solve the problems at hand. She suggests that cultural and political perspectives must come together with scientific rationality and decision-making about use of technology should be transparent and informed by social science research.

In responding to these commentaries, Laupacis and Evans focus on the response by Lehoux. They note: "She has appropriately chastised us for underemphasizing the importance of cultural and political issues in healthcare. To quote her: 'one questionable aspect of Laupacis and Evans' paper is that it seems to assume that clinicians, radiologists and patients are currently behaving irrationally and that science is the most desirable incarnation of rationality. As mentioned earlier, radiologists, clinicians, policymakers and the public may all have *reasons* to adhere to various views about the value of diagnostic imaging. That their views do not fit neatly with what researchers see as appropriate does not simply reflect ignorance or intellectual laziness on their part.' She further states, 'Scientific rationality is not to be abandoned; but it should be rooted in and articulated with social, cultural and political rationalities.'"

Laupacis and Evans use their recent experience with positron emission tomography (PET) scanning in Ontario to explore Dr. Lehoux's points in more detail, as they relate to diagnostic imaging. The history of PET scanning in Ontario, and the viewpoints and incentives of some of the important stakeholders, illustrate Dr. Lehoux's point about the importance of culture and politics in health policy and the difficulty of making meaningful changes without considering these issues. The authors conclude with speculation on how Ontario's strategy for PET scanning and new diagnostic imaging technologies unfold in the next few years. The evidence about the clinical usefulness of PET for certain procedures will almost certainly improve in the near future, and pressure from patients and physicians will force the government to make PET more widely available for cancer patients. The use of PET and other diagnostic imaging technologies will be guided by clinical practice guidelines designed by experts, and compliance with those guidelines will be monitored by health services researchers. It will be of great interest to policymakers, providers and consumers to observe how this story unfolds.