

practice on household incomes is considerable because, as of July 1, 2001, the National Child Benefit Supplement was \$104.58 a month for a family with 1 child and \$192.50 a month for a family with 2 children.⁴

One might argue that community supports such as food banks, children's meal programs and other community-based food programs lessen the deleterious effect of very low incomes on household food security. Indeed, 20%–30% of households that report problems of hunger or food insecurity indicate that they have sought charitable food assistance.^{1,5} Eighty percent of women in the study by McIntyre and colleagues reported receiving assistance from food banks, relatives and other sources over the last year. However, the existing evidence suggests that assistance from charitable food programs and informal support networks is insufficient to compensate for the extent of deprivation experienced by many food-insecure households.^{6–8}

The study by McIntyre and colleagues paints a disturbing portrait of the conditions of single-parent families living on low incomes, principally supported by social assistance. It is time for the federal, provincial and territorial governments to embark on a new phase of welfare reform — one in which policies and programs are redesigned to ensure that welfare incomes are not so low as to jeopardize the nutritional health and well-being of those Canadians who must rely on these programs.

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Technology-enabled knowledge translation: building a framework for collaboration

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It's a busy day in your office, and you are running behind. Your patient with arthritis of the knee greets you with a small stack of printouts from the Internet on glucosamine. She wants to know whether taking this medicine would be beneficial.

You're in the emergency department, managing a patient with unstable angina. You wonder whether the current evidence would support combining a glycoprotein IIb/IIIa inhibitor with low-molecular-weight heparin in this case.

Physicians need to find reliable evidence swiftly to help in “real-time” patient diagnosis and management. At the same time, faced with the rapid and voluminous accumulation of new research data, physicians are finding it increasingly difficult to keep up with current knowledge and to integrate it into practice. More and more, the ability to locate and access

evidence to support decision-making — just-in-time information retrieval — is becoming an essential skill for physicians.¹

How does research evidence become part of routine medical practice? The process of “knowledge translation” is of intense interest to researchers, clinicians and policy-makers and has been identified by the Canadian Institutes of Health Research as a major challenge.² Knowledge translation involves applying evidence to at least 3 areas of action: the practices of health professionals,³ policy-making by health authorities and governments,⁴ and the implementation of strategies to enable health professionals and policy-makers to work together to put policies into practice.⁵

It commonly takes more than 20 years for advances in medical knowledge to become widely incorporated into clinical practice.⁶ Barriers that contribute to this delay in-

clude ineffective continuing education for health professionals, the increasing complexity of medical regimens and management strategies, reductions in health care resources, an inadequate process of integration of evidence into case management, a lack of communication between researchers on the one hand and practitioners and policy-makers on the other, and the influence of practitioners' and policy-makers' beliefs and experience on the clinical application of new information and on quality assurance initiatives.⁴⁻⁶

To accelerate the process of knowledge translation, we need continuous learning on the part of health professionals and health organizations. We also need health organizations to promote the systematic review of evidence for program decision-making, to support health care professionals in the acquisition of new knowledge and critical appraisal skills, and to provide clinicians with ready access to relevant evidence and clinical practice guidelines.^{1,7}

In the final report of his Commission on the Future of Health Care in Canada, Roy Romanow highlighted the twin needs for an expanded public health knowledge base to support key strategic reforms and for multilayered information systems that take into account not only how information is packaged but how it is accessed, interpreted and used.⁸ Modern information and communication technologies — e.g., computers, the Internet, personal digital assistants (PDAs) and videoconferencing — can play a key role in attaining a multilayered system for the “just-in-time” delivery of information. For example, the Internet can be used for information retrieval and online continuing education,⁹ to inform evidence-based patient management,^{6,10} and in the development of health information systems that provide just-in-time support for clinical and policy decision-making.^{1,11} Such technologies can also play a pivotal role in synthesizing knowledge, building shared capacity for knowledge exchange, and minimizing duplication of decision support systems.¹² As a result, there is an increasing interest in discussing and researching a technology-enabled approach to knowledge translation.^{13,14}

A group of Canadian health professionals, researchers, policy-makers, health administrators, information technology experts and representatives from the private sector and other interested groups will convene in Vancouver on March 27–28 to scrutinize the niche of technology-enabled knowledge translation research in health care delivery (www.cme.med.ubc.ca). This gathering will explore individual-level and system-level factors that govern knowledge translation, as well as research strategies that might help to shape those factors. Our objectives are to build a network of like-minded individuals from various constituencies to exchange ideas, promote dialogue between researchers and end-users, and build a framework for continuing collaboration. Through focused presentations, panel discussions and breakout sessions, the meeting will provide an opportunity for participants to share their experiences and innovations with others and to highlight key ingredients that have contributed to success.

We hope that this workshop will be a start in building a community of health professionals and policy-makers who will collaborate in the future development and implementation of technology-enabled knowledge translation. We invite individuals across Canada with an interest in knowledge translation research or the use of electronic technologies in health care practice or policy decision-making to join us in this community-building endeavour. We would also like to hear about pearls and perils in the use of electronic technologies, and about how these innovations have affected your ability to incorporate medical evidence into practice. We welcome your thoughts and comments.

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