# Notes from the Editor-in-Chief

There has not been an era in history when the importance of public health has been more critical than it is today. This issue of *HealthcarePapers* presents a lead article by Hugh Tilson and Bobbie Berkowitz, previously published in *Health Affairs* (2006), that describes the state of the art and the science of the public health enterprise in the United States. As you will read in the commentaries, our writers agree that there are many similarities between Canada and the United States in the way in which public health has evolved. These similarities exist in spite of the major differences between the two countries in the way that healthcare in general is financed and organized.

Tilson and Berkowitz examine public health in its broadest interpretation and the policy changes it is facing. They take the perspective of a wide range of stakeholders, including the examination of the public health infrastructure, the definition of essential public health services, consideration of community health preparedness and the importance of measuring the public's health.

Through a series of policy analyses, starting with the landmark report in 1988 by the Institute of Medicine (IOM), Tilson and Berkowitz trace the development of the public health system. Building on the IOM report, the mission of public health is seen as "fulfilling society's interest in assuring conditions in which people can be healthy." The authors outline *six* policy challenges that they feel have inhibited the evolution of a comprehensive, effective public health system.

**Challenge 1** is the public health infrastructure, which basically rests with governments at the national, state (provincial) and local levels. Why is it not surprising that coordination among these levels is almost non-existent and certainly insufficient for a collaborative plan to emerge easily in the event of an incident of "national significance"? In neither country has the national government been able to take the lead in driving solutions to public health initiatives.

**Challenge 2** involves getting agreement on the essential services. The IOM report recommended 10 essential services for the United States. In Canada, the federal government has recommended five core functions for public health (2005).

**Challenge 3** is described as a "heightened level of preparedness." Recent disasters, such as Hurricane Katrina and the outbreak of severe acute respiratory syndrome (SARS), highlighted the need for special planning for unpredictable events.

**Challenge 4** focuses on accountability and measurement of the entire health system performance. I believe that both Canada and the United States have made considerable progress in setting standards through accreditation processes. Canada has been particularly successful through a variety of provincial and national quality councils in defining indicators of quality and outcomes. The Hospital Report efforts in Ontario have a long track record now of monitoring hospitals' performance and disseminating the information to decision-makers and policy makers.

**Challenge 5** involves the public health workforce. The myriad of public health workers, such as physicians, nurses, health educators, food and safety workers, and environmental specialists, all come to public health with a variety of training and experi-

ences. Recent work through the Association of Schools of Public Health has defined competencies for the MPH in five core areas: biostatistics, environmental health sciences, epidemiology, health management and policy, and social and behavioural sciences. In addition, interdisciplinary/cross-cutting competencies were also defined for communications and informatics, diversity and culture, leadership, public health biology, professionalism, program planning and systems thinking. The core competencies are now a requirement for the professional master's degrees offered by a school or program in public health wishing to be accredited by the Council on Education for Public Health. The National Board of Public Health Examiners is currently working on the development of a voluntary examination, which could be the first step toward credentialing.

**Challenge 6** is the public health research agenda, which has clearly been underdeveloped. There has been little funding available for public health research, and the creation of specialized public health research centres has not occurred. In Canada, however, the Canadian Institutes of Health Research has a "directorate" for population and public health, which is a step in the right direction.

Tilson and Berkowitz conclude that *now is the time* for public health – it has never been more important. They recommend that public health align with the rest of the healthcare delivery system so that effective partnerships can be developed.

Our Canadian respondents to the Tilson and Berkowitz paper provide us with thoughtful commentaries on the applicability of the six challenges to the Canadian context, as well as recent developments in public health in Canada. Larry Chambers and Shannon Sullivan, of the University of Ottawa, indicate that the uneven public health enterprise in the United States is mirrored in the structure of public health in Canada. They also point out that there is considerable variability in the infrastructure from province to province. Several public health catastrophes have occurred in recent years – such as the contamination of drinking water in Walkerton, Ontario, and North Battleford, Saskatchewan, and the SARS outbreak in Toronto. The federal government responded by creating a position of minister of state (public health); but with a change in government in 2005, that position was dropped and a new chief public health officer was appointed. Public health programs and policies for Canada now report to the chief public health officer, not the minister of health. The Public Health Agency of Canada was created (headed by the chief public health officer) to provide leadership, coordination, research knowledge translation, guideline development, specialized public health services and technical advice.

Since 2000 there have been further structural changes – most provinces have reorganized to create regional health authorities, which have authority over public health. While, in theory, this seems like an excellent idea for population health and to integrate coordination, unfortunately, most resources in the regions are not allocated to public health but to traditional healthcare services. The Family Health Networks in Ontario provide an excellent opportunity to integrate public health practices with primary healthcare, and Chambers and Sullivan outline potential strategies.

David Mowat, deputy chief public health officer, and David Butler-Jones, chief public health officer – the newly appointed Canadian leaders for public health – provide many insights into the challenges outlined in the lead paper. They begin by pointing out that our measurements for the public's health fail to reveal the full extent of health disparities in Canada. In their view, the role of public

health is not only to prepare for and respond to emergencies but also to improve the health status of the population, reduce disparities and enhance the sustenance of an effective health services system. They recognize the array of governmental and non-governmental agencies that are essential to carry out the public health mission. They describe how the "Naylor Report" (commissioned by the federal government to learn from the SARS outbreak) emphasized the need for information and knowledge systems, which have been sadly lacking in Canada and the United States.

Mowat and Butler-Jones clearly understand the issues around the public health workforce in Canada. The workforce is aging, and many positions are difficult to fill, especially in northern areas. Working conditions and compensation are typically not on par with healthcare workers in other sectors. There are a number of groups studying these issues.

Stephen Corber, of the Faculty of Health Sciences at Simon Fraser University, does a fine job of reviewing the concepts, definitions and evolution of public health in Canada, the United States and Britain, recognizing similarities and differences. He goes on to present his ideas about a possible orientation for Canada. For example, he indicates that

> a focus by the United States on preparedness is understandable given its experience with September 11, 2001, and the instances of anthrax being deliberately spread through the postal service. However, in Canada the relative importance of the various risks to health are different, and, although we share many social, cultural and economic characteristics, there are some important differences in the size and distribution of our populations, our political systems, our place in international relations and our view of the role of government in the provision of services and in striving for equity.
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> I believe that Canadians expect their government and its public health services to have a broad scope in their consideration of how to improve health and to take a more active role in addressing health issues. It is important not only to do assessment, policy development and assurance but also to carry out advocacy, service delivery and community development, to develop a wide range of partnerships in other sectors and countries and so on … In Canada, the concept of "population health" has been gaining greater traction. "Its aim is to maintain and improve the health of the entire population and to reduce inequities in health status among population groups. It considers the entire range of factors and conditions (determinants) and their interactions that have been shown to influence health" (Public Health Agency of Canada 2002) … Public health must be active and competent in protection, prevention and promotion if it is to be successful in improving the health of populations. First, public health must be able to protect (e.g., regarding water, sanitation, pollution, food, workplace, daycare, etc.), to immunize and to respond to disasters. No other actor in society does this work, and the public expects this from its public health services. Communicable disease prevention (e.g., surveillance, outbreak detection, and response and disease control) is similarly fundamental. Strength in these areas gives public health the credibility and self-confidence to attempt other programs.

Colin McMillan and Seema Nagpal, of the Canadian Medical Association (CMA), remind us of the discussion paper, *A New Perspective on the Health of Canadians* (the "Lalonde Report"), released in 1974. Marc

Lalonde, the minister of national health and welfare, created a framework for understanding the influences on health, called the health field concept. The theory was that Canada was preoccupied with the delivery of healthcare but paid less attention to the other three elements of the concept: human biology, environment and lifestyle. This report was internationally acclaimed and, a decade later, led to attention being placed on health promotion and environmental considerations for health. McMillan and Nagpal then trace the evolution of health promotion and disease prevention in Canada, pointing out that progress has been very slow.

McMillan and Nagpal emphasize that it is essential that the public health system in Canada rise to meet the current challenges with "vigour and stamina. The threat of bioterrorism, new emerging communicable diseases and the increasing burden of chronic illness demand a strong and robust public health system with sufficient human and financial resources. Yet the current political climate does not appear ready to deliver and support a coordinated public health system." The authors suggest, as other commentators have, that the linkages between the public health and clinical/acute health systems, including primary care health professionals, are insufficient. They also indicate that additional resources are needed, especially at the front lines of public health. The financial gaps, coupled with a lack of public health professionals, have left many public health departments unable to fulfill essential functions, let alone respond to health crises if they occur. After the SARS outbreak, there were some changes at the national level but very few changes on the ground in local communities. The CMA has a long history of support for public health, including the establishment of the Office for Public Health in 2002. But despite many advocacy efforts by the CMA and other stakeholders, the public health system in Canada is inadequate.

Gregory Marchildon, professor and Canada research chair in public policy and economic history, and Kathleen McNutt, assistant professor, both at the University of Regina, focus their discussion on the use of Web-based approaches to inform citizens and deliver services about public health. Based on an e-government performance-ranking system, Canada ranks in the top six countries in the use of Web-based approaches. A Web-based environment requires that information be reliable, timely and accessible. To the users of the information, it should also be seamless. Using Web-analysis software, the authors assessed the informational reputation of public health providers serving Canadians. Conclusions indicate the Canadian governmental agencies are the main suppliers of the information (as you would expect). The federal government has made a considerable investment in new infostructure, including a Web-based public health infostructure since the mid-1990s. It would seem more attention should be given to reaching the general public, who would benefit from the information.

Jeff Lozon and Miin Alikhan, of St. Michael's Hospital in Toronto, question whether the pace of progress in reforming public health is sufficient. After the SARS outbreak and the subsequent excellent recommendations of the Naylor Report, there could be a tendency for public health to become less of a critical issue, and certainly not a crisis. While many of the recommendations of the Naylor Report have been implemented, as noted above, it is important that the public health system be strongly aligned with the other components of healthcare delivery. Lozon and Alikhan assert that the sharing of public health responsibilities across non-conventional, intersectoral partnerships is critical for future planning and interventions.

They stress the importance of creating a surge capacity by advanced planning so that human, capital and financial resources can be deployed at a time of emergency. Emergencies need immediate attention and extend beyond jurisdictional boundaries and authorities; greater attention to preparedness is required than was demanded in the past. Public health preparedness needs the health sector; in and of itself, it is insufficient to do the job.

Raisa Deber, Christopher McDougall and Kumanan Wilson, of the University of Toronto, provide their insights into the many developments that have occurred in Canada since the SARS outbreak. Their comments are based, in part, on a review they conducted for the Public Health Agency of Canada on approaches, issues and options for financing and delivering public health in Canada. They agree with other commentators that there are many similarities between the situations in the United States and Canada. They conclude:

> Co-operation in public health is largely based on voluntary agreements, and the federal government remains reluctant to compel co-operation. With respect to health promotion, this is often wasteful and has long-term negative consequences in terms of foregone benefits. With respect to potential pandemics, however, it could be disastrous; infectious agents are unlikely to respect provincial/territorial boundaries.
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> Our analysis suggests that decentralization to regional authorities may be making things worse, making it harder to get critical mass and forcing public health advocates to make the same case repeatedly. Somehow, Canada will have to devise mechanisms to transfer enough authority to higher levels to ensure that local public health failure cannot affect wider populations. In return, these central or supra-national governments will have to assist the development of necessary public health capacity at the local level. It will not be easy.

I recommend a thorough reading of a recent article by Raisa Deber and colleagues titled "A Cautionary Tale of Downloading Public Health in Ontario: What Does It Say about the Need for National Standards for More Than Doctors and Hospitals?" which was published in *Healthcare Policy*, Volume 2, Number 2, 2006. Deber et al. provide an insightful analysis of the legislation and traditional organization of public health in Canada and the importance of clearly articulated national standards for public health.

In conclusion, neither the United States nor Canada (or other developed countries, for that matter) have the public health solution, but we are beginning to have some roadmaps for how we should proceed. It is still a long road to haul.

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