

# Sharing the Caring: Telehealth Offers Fairer Distribution of Health Expertise Across Canada

Andrew J. Siman



Andrew J. Siman is the Director General,  
Office of Health and the Information  
Highway, Health Canada.

**F**or the troubled teenager in the tiny northern hamlet, opening up to a counsellor is easier when the counsellor is thousands of kilometres away. The video conferencing equipment linking the two is familiar and comforting to the youth, a lifelong computer user. And in a community where everyone knows everyone else's business, there's a welcome anonymity of interacting with a health professional not located in the community.

This is just one example of telehealth, the use of advanced technologies to connect patients and health practitioners separated by geographic distance. Telehealth, in one form or another, has been with us since the invention of the telephone, and its uses are bound to expand as information technologies and telecommunications improve.

But is it for everyone?

The answer is a qualified "yes." Yes, because it is an effective way to bring care to individuals whenever they need it, wherever they are. But qualified, too, by a recognition that telehealth comes with challenges as well as opportunities.

It is, therefore, essential that Canadians become informed participants in the debate over telehealth, working together toward a shared national vision that would allow us to maximize the benefits while minimizing the risks.

## **Common understanding**

To build a shared vision, we need a common understanding of the meaning and scope of telehealth. At Health Canada's Office of Health and the Information Highway, we like to think of telehealth as the use of advanced information and communications technologies to bring health services and health information to the patient. To us it means that Canadians, no matter where they live, would have realtime online access to clinical expertise, reliable health information, diagnostic tests and results, and other health services.

Whether across town or across Canada, telehealth puts the individual first. For some, it is a convenient alternative to the expense and personal disruption of travel. For

others, where travel is not an option, telehealth could spell the difference between life and death.

Telehealth can improve patient care through direct applications in fields such as radiology, pathology and psychology. But it also has other benefits, by enhancing the effectiveness and efficiency of the health care system itself. Electronic health records, which could follow the individual between health services and across the country, are a case in point. With digitized and integrated medical, pharmaceutical and even dental records, health practitioners could have instant access to the complete health profile, regardless of the individual's location, and independent of the individual's ability to communicate.

The electronic record saves time and effort for the practitioner. For the patient, meanwhile, it can protect against hazardous drug interactions, or serve as the basis for better clinical management.

Similarly, health databases give practitioners instant access to a wealth of information that can help them make the best possible clinical decisions for their patients. At a time when Canada's health care system is moving toward decision making on the basis of proven best practices, the growing use of information technology benefits both the individual and the system.

## **Considering costs**

Many believe that telehealth can save money, too, but the proof is not yet in. We don't yet know, for instance, how much the infrastructure would cost, although our coast-to-coast telephone and cable services give us an invaluable head-start. We also cannot predict the impact of telehealth on the utilization of health services, although there's a good chance demand will rise as new services become available in currently under-served regions.

We do know, however, that the costs for patients will go down if they and their families are not obliged to travel and stay in distant cities.

Still, "cost" is a complex concept, which goes far beyond capital investment and physician remuneration to include

the social impact on patients, their families and their communities. We must consider, for example, the patient's personal comfort with the technology and satisfaction with the outcome.

Cost/benefit analyses aside, we cannot ignore other, less tangible, dimensions of telehealth.

First, it speaks to one of our core values: an abiding belief in equity. In a nation as vast as Canada, it is only fair that people in remote and rural areas should be entitled to the same calibre of care as those in urban centres. If advanced technologies are one way to make that possible, they surely we have an obligation to explore their potential.

And second, telehealth gives Canada an opportunity to serve as a model for the world. We are known globally for our high-quality health care system and for the sophistication of our telecommunications systems. This unique combination gives us a chance to shine on the world stage, even as we create new export markets for our know-how.

### **Growing reality**

So with all these advantages, why isn't telehealth a reality already?

Depending on where you live, it is. Pilot projects are being funded from the Yukon to Newfoundland to demonstrate the feasibility of one or another aspect of telehealth.

In northern Alberta, for instance, the Keeweenok Lakes Regional Health Authority (with the funding support of Health Canada's Health Infrastructure Support Program (HISP)) is using satellite-based systems to connect patients and health workers in remote parts of their region with doctors in Slave Lake, Wabasca, High Prairie and, eventually, Edmonton. In Toronto, the Sunnybrook and Women's College Health Sciences Centre is working to improve access to high-quality mammography for women living in sparsely populated areas by transmitting digital breast imaging data. And the Quebec Neonatal Tele-Echocardiology Project sends digital images of sick babies' hearts from 11 distant sites in the province to medical centres in Rimouski and Laval University.

Remarkable as they are, however, these projects benefit only isolated pockets of patients. To make telehealth a coast-to-coast reality for all Canadians, we need to unify our efforts within a shared vision, so that we can learn from each other and leverage the benefits.

Armed with a clear vision for the future, we can confront with confidence some of the practical challenges that stand in the way of progress.

One unresolved issue is that health practitioners can



only practise in the province where they are licensed, yet a telehealth patient could well be in a different province. What are the implications for professional responsibility and liability? Who sets and enforces practice standards? Who pays for the service?

There are also training, retraining and certification issues. Whether they are technicians or health professionals, competent people are needed to operate both ends of the telehealth connection.

Clearly, such matters must be addressed by medical, nursing and other health-practitioner colleges, in concert with provincial health ministries, medical schools and professional institutions. And, in fact, some promising discussions are taking place, especially since all the provinces and territories endorse the telehealth concept.

### **Outstanding issues**

But there are other important issues that go well beyond the mechanics of building a national system for telehealth.

Chief among those is the protection of privacy of personal health information. Not only must personal records be protected, they must be seen and believed by the public to be totally safe from abuse or misuse. Because the electronic transmission of personal health information is the very underpinning of telehealth, it must be safeguarded through effective and enforceable privacy legislation and meticulous monitoring.

In formulating our vision for the future, we must also reflect on certain qualitative issues that distinguish the use of technology in health care from any other field, be it banking, insurance or postal services.

It is, for example, imperative that we not become so dazzled by the potential of technology that we sacrifice the human touch. Developments in telehealth must be guided by their capacity to heal and improve health and quality of

life, not pursued to justify the irresistible tug of technological advances.

It is an inescapable fact that technology creates a layer between individual and practitioner, for if both were in the same room, there would be no need for telehealth equipment. Still, we must ensure that its effect is to bridge and bind, not further isolate people already separated by distance.

### **Focus on patients**

A top priority, therefore, is to place the individual firmly at the centre of the telehealth discussion. In building our strategy, we must be sure to involve Canadians, because they are both the clients and the paymasters of the system.

Indeed, experience elsewhere reveals that if rural residents are excluded from the debate, they tend to perceive telehealth as an urban solution, forced on a powerless populace by yet another central authority looking to save costs.

Thus, when telehealth applications are introduced into a community, it is critical that they respect the particular sensitivities of the community - be these regional, cultural or just plain fear of the unknown. We must, for instance, accommodate the fact that some people will be slower to embrace telehealth. Among those might be older Canadians and those who, for reasons of literacy, language or computer inexperience, lack confidence in the world of high-tech.

Patient choice is therefore key to gaining public support for telehealth. As far as possible, telehealth should be an improvement, available to improve health services and information for those unable to travel, rather than a substitute for face-to-face care.

Maintaining the human touch is also an issue for practitioners. Training programs must sensitize them to the intimidating effect that technology can have on some patients. At the same time, we must recognize that health technologies can have a dramatic impact on the health workers themselves.

Even now, many doctors don't have basic computers in their offices, and would become unlikely telehealth practitioners. Similarly, the role and working conditions of rural practitioners could change dramatically as telehealth becomes more established.

### **Limitless opportunities**

With the blazing speed of advances in high technology, its applications in health are limited principally by our own fears and reservations. Even so, a growing number of forward-thinking projects are demonstrating that telehealth is not only feasible, but desirable as a means of improving the health status of Canadians especially in remote regions.



These efforts, however, are fragmented – the benefits accruing only to a few, the lessons learned mostly by those involved. A national vision for telehealth, however, would invite synergy. It would encourage us to learn from each other, to gain more than the sum of our individual efforts.

Clearly, governments can help facilitate the process. They can promote dialogue, educate consumers, and encourage buy-in by businesses such as the telecommunications industry. They can also work with professional organizations, institutions and other stakeholders to develop the legal and regulatory framework, the standards and the infrastructure needed to make telehealth a reality.

What's more, governments can play a role in devising an evaluative framework that allows us to assess whether telehealth would make sense for a particular application or community. The framework would allow us to measure the whole range of social and financial costs and benefits - for the health care system, the individual and the community as a whole.

In short, there's plenty of work to be done. And, in fact, the federal, provincial and territorial deputy ministers of health have already established an Advisory Committee on Health Infostructure with four working groups that are actively examining the issues. Working groups on strategic planning, privacy of personal health information, and health surveillance have been formed, and a telehealth working group, to develop a national telehealth strategy, is now being created.

Though we would be unwise to dismiss the challenges, we can take heart from the many success stories. Technology is advancing, as is medical knowledge. It only makes sense to take advantage of both to improve the health and the health services enjoyed by all Canadians, no matter where they happen to live. 🇨🇦