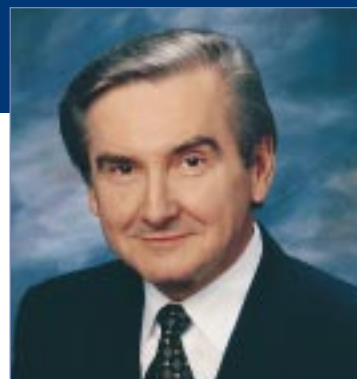


The Canadian Health Infostructure (CHI): A Promising Prescription For The Health Care System

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Suzanne (not her real name) is 46 years old. She has been diagnosed with breast cancer. Her doctor is recommending saying surgery, but she wants to better understand her condition. So she turns to the CHI, where she accesses reliable sources of information and finds on-line support groups from across Canada. With the CHI, she is able to make an informed decision.

Does this scenario sound impossible? Well, thanks to a new federal government initiative, the Canadian Health Infostructure (CHI), on-line health help is just around the corner – as are many more exciting new opportunities for Canada's health care system.

CHI: the link to the future Canada's health care system has changed, is changing and will continue to change. Many factors, including a rapidly aging population and the increasing cost of medical technology, are behind this change.

As witnessed in the 1999 budget, health care is at the top of the federal agenda, with \$11.5 billion in additional transfer payments to the provinces. Canadians are very concerned about health care. The budget will help build a stronger health care system, one that reflects the changing health care needs of Canadians and that is based on timely access to high quality health care. In this same budget, the emphasis on developing the CHI was another link to the future of the health care system.

It is widely agreed that the revolutionary potential of the new information and communications technologies is key to enhancing the traditional excellence of our national health



care system. The goal is to harness these technologies to develop a national health information highway, or the CHI.

A boost for health care

According to the recent report of the Minister's Advisory Council on Health Infostructure, setting up a nationwide health information highway could significantly improve the quality, portability and efficiency of health services 'across the entire spectrum of care.' When fully developed, the CHI will give all users – patients, citizens, caregivers, health care professionals and policymakers alike – improved access to the latest and most comprehensive health information available.

The concept is not a distant dream, but quickly becoming a reality. Key elements of the CHI are already falling into place or are developing rapidly. For example:

- In November 1998, the Ontario Hospital Association launched "Your Hospital at Home," a free on-line medical information service packed with the latest information on topics ranging from AIDS to stress management.
- In British Columbia, a province-wide network links pharmacists to the PharmaNet database, a registry of patient prescriptions. The system has prevented almost a half-million potential drug interactions and eliminated thousands of duplicate prescriptions.
- In New Brunswick, a system called Healthnet allows institutions to share patient records. Nova Scotia and Alberta are planning similar networks.
- In Quebec's sparsely populated North Shore region, a private network links nine health care organizations,

including two hospitals, five health centres, a rehabilitation clinic and a local community service centre. They use the network to coordinate patient treatment, exchange information and share ideas. It's the first in a series of such projects that will ultimately link more than 2,200 sites across the province of Quebec in a seamless electronic health care network.



Facilitating change – Health Canada's role

Health Canada envisions the CHI being put together with building blocks like these. It will continue to be built around a growing number of initiatives already being developed through a variety of key stakeholder partnerships across the country.

To a degree, it was a recognition of the CHI's essentially patchwork evolution that made information and communications technologies in health care a high priority in the 1997 federal budget. It also led to the creation of the Advisory Council on Health Infostructure by Health Minister Allan Rock. The Minister charged the Council with the task of defining ways in which new technologies could be used to improve the national health care system.

In its final report, issued earlier this year, the Council urged all levels of government – federal, provincial and territorial – to collaborate with all stakeholders in the health care arena to realize the vision of a national CHI.

The federal government plays an important role in health and health care policy. It provides funding for health care through transfer payments to the provinces and works with them to facilitate policy development, enforce health regulations and promote a wide range of health-related initiatives.

It is in this capacity as facilitator that Health Canada will work to achieve the CHI. The significance of this role is underlined by the various initiatives proposed in this year's budget.

A significant portion of the \$1.4 billion earmarked for the health care system in the budget will go directly to the harnessing of information technologies within the health care system. In total, \$328 million will be spent over the next three years to establish the CHI.

Two Health Canada information initiatives have been allocated \$75 million. The Canadian Health Network will provide Canadians with direct "one-stop shopping for the latest and most relevant information on disease prevention, self-care and the performance of the health system." And the National Health Surveillance Network will link more than 400 laboratories and public health offices to improve health intelligence gathering.

The budget provides \$115 million over the next three years to test pilot projects and develop large-scale applications of technologies such as "telehealth" and "telehomecare," in consultation with the provinces.

The budget also allocates \$43 million over the next three years to improve health information systems in Health Canada, to better inform Canadians on the performance of federal health programs, consistent with the Social Union Framework.

Renewed support will also be given to a wide range of organizations already involved in the electronic delivery of health care services. As well, additional emphasis will be put on addressing such potential roadblocks on the CHI as security, personal privacy, system compatibility and standards.

The Canadian Institute for Health Information (CIHI), for example, will receive \$95 million to develop a health database and gather demographic information on the health of Canadians. This will enable CIHI to provide more accurate, current information on health matters to all health care users.

Patient records and privacy

If the CHI is to live up to its potential, most health care providers and governments believe that medical records must be able to follow the individual patient. Many administrators and policymakers now envision a system that would lead to the creation of an electronic medical record.

The benefits of electronic medical records include greater portability for patients. An electronic record can travel easily, from coast to coast to coast. Paper records have limits in terms of filing space, whereas electronic records do not.

Electronic records mean the right people get the right access to health information at the right time. For example, when analyzing a medical case, a specialist needs comprehensive background information to make a proper

diagnosis. Electronic health records will supply that history – subject to informed consent by the patient. In fact, with new technologies, electronic records have the potential to increase the security of a file.

Many health care professionals point out that the current paper-based system needs improvement. If a medical specialist is unable to access key information, the result can be duplication of effort or, worse, misdiagnosis. With electronic records, on the other hand, access to information would be on a “need to know” basis – with the individual patient controlling the use and disclosure of medical information.



Better, more secure system for all Canadians

The continuing focus on security, confidentiality and patient privacy presents an opportunity to deal with the question of privacy legislation in its broader context. Currently, different jurisdictions take different approaches to privacy. As a result, there are wide variations in the level of privacy protection afforded to individuals across the country.

In its role as facilitator, Health Canada is working with all levels of government to harmonize privacy protection. The Advisory Council on Health Infostructure, for example, consulted with privacy commissioners across Canada before setting out its recommendations for the CHI. Feedback has been reassuring. Some privacy commissioners have said that the Council's vision reflects a balanced approach that puts a high priority on privacy protection.

Looking ahead – working together

Through the Office of Health and the Information Highway, Health Canada is committed to a collaborative approach to resolving key issues and concerns around the development of the CHI.

In pursuing the development of the CHI, Health Canada has four main goals:

- build cooperation among federal, provincial and territorial governments;
- consult with the general public as citizens, patients and caregivers;
- seek the active collaboration of all those directly involved in health care – physicians, professionals, associations, health managers, policymakers and researchers; and
- ensure that non-government organizations are involved in the process.

It's a tall order, but the vision is more than worth the effort it will take. The CHI has the potential to enable the Canadian health care system to flourish. Its successful application will result in better information, improved access to it and, in the final analysis, new generations of healthier Canadians. 🇨🇦



For further information visit the Office of Health and the Information Highway at their Web Site:
www.hc-sc.gc.ca/ohih-bsi