Innovation for Better Health Care

E-Health
Technologies and
Canada:
The Future Is Here

A new era for health care

Canada's world-leading e-health technologies provide the tools and techniques needed to deliver the highest quality of health care.

Innovations in e-health improve patient care and keep costs down. In turn, Canada is keeping its commitment to universal health care for all its citizens.

The best solutions for your organization

Canada is an early adopter of innovative health technology solutions and has an established track record in health care provider systems, integration of physician offices, long-term and acute care using telemedicine, and effective home and community care.

Find out how Canadian e-health technology can help your organization.

> **CANADIAN EXCELLENCE IN E-HEALTH**
> - Physician office systems
> - Electronic health records
> - Imaging equipment and picture archiving and communications systems
> - Drug information systems
> - Alternative health care delivery support systems
> - Administration and financial solutions

Canadian e-health technology solutions

Physician office systems

Canadian cutting-edge physician office systems are making a vital difference both in Canada and around the world. These automated systems help improve the quality of clinical decisions and provide total solutions that adapt to individual workflow requirements.

CLINICARE is Canada's leading provider of applications for electronic medical records (EMR) and practice management. It is the number one provider of such software to physicians in group practices in both Canada and the United States. CLINICARE has repeatedly won the annual "Best in KLAS" award from the prestigious KLAS health care informatics rating services.

Canadian companies offering a wide range of physician office systems include **ABELSoft**, **Healthscreen Solutions Inc.**, **Jonoke Software**, **Nightingale Informatix**, **Optimed Software**, **Osler Systems**, **Practice Solutions**, **Wolf Medical Systems** and **York-Med Systems Inc.**

Electronic health records

Secure Internet-based portals allow the sharing of a patient's clinical information across the entire continuum of care. This can reduce duplicative testing and medication errors. With a $1.6 billion investment in a national electronic health records system, Canada is at the forefront of this field. Canadian electronic health record solutions have been successfully installed in both large hospital networks and in rural and community hospitals across Canada, as well as in locations worldwide.

Numerous Canadian companies such as **Asystar Medical Records Solutions**, **Britech Information Systems**, **CHCA Computer Systems**, **DataGlider**, **Loki Management Systems**, **MediSolution** and **Momentum Healthware** are implementing better ways to manage electronic health records systems.

Imaging equipment and picture archiving and communications systems

Canadian companies — well known for the excellence of their digital imaging expertise — are leaders in developing and deploying picture archiving and communications systems (PACS). PACS increase the efficiency of imaging departments by simplifying workflow, enhancing productivity and making information accessible to multiple users simultaneously. It has also led to many improvements for patient care, including shorter hospital stays, decreased waiting times and faster diagnoses.

Canadian firms that provide the very best in PACS technology include **ART Advanced Research Technologies Inc.**, **DALSA Corporation**, **Eyelogic Systems Inc.**, **Imaging Dynamics Company**, **Resonant Medical** and **Softmedical**.

Drug information systems

Canadian technology is in use in Canada and the U.S. to manage drug administration. These drug information systems foster the creation of physician–pharmacist networks that improve best practices, services and care — preventing medication errors. A recent report from the Institute of Medicine of the National Academies estimated that each year at least 1.5 million people in the U.S. were injured as a result of medication errors. Extra medical costs for treating drug-related injuries occurring in hospitals alone conservatively amounted to US$3.5 billion a year.

Canadian companies leading in this field include **BDM** (subsidiary of **GE Healthcare**), **Emergis**, **MOXXI Medical** and **SXC Health Solutions**.

Alternative health care delivery support systems

Around the world, traditional health care delivery systems are under pressure. The search is on for more economical and effective delivery models — focusing on areas such as in-home and remote monitoring, assessment support systems for alternative care facilities and medical research support.

Canadian home care, community health care and long-term care facilities and delivery models — coupled with innovative Canadian information and communications technology (ICT) support for medical research — have developed to meet these challenges.

One excellent example of Canadian research innovation can be found at the British Columbia Cancer Agency, which has the world's most extensive database on cervical cancer. This database is used by researchers from around the globe for product development and clinical trials. Another is **New IT Healthcare**'s Intelligent Distance Patient Monitoring solution that uses a central telemonitoring facility to enable health care professionals to monitor patients who wish to remain in their homes.

Canadian e-health technologies are proven enablers of alternative delivery solutions offered through firms such as **Assessment & Intelligence Systems**, **Campana Systems**, **Logibec Groupe Informatique Ltd.**, **March Healthcare**, **Medical Intelligence**, **Procura** and **Timeless Medical Systems**.

Administration and financial solutions

Both at home and abroad, Canadian ICT administration and financial solutions are helping improve service levels and operational efficiencies. Integrated health care delivery systems enable organizations to manage their resources more effectively.

Canadian companies helping health care organizations to better manage their resources include **Deltaware Systems**, **Heron Technologies**, **Ormed Information Systems** and **QHR Technologies**.

E-health technology service providers

Highly skilled Canadian consulting firms help provide the smooth and effective adoption of virtually any e-health technology system — whether in a hospital setting or in alternative care facilities.

Experienced Canadian companies such as the **AnyWare Group**, **CGI**, **Courtyard Group**, **Healthtech Inc.**, **Sierra Systems Consultants** and **xwave** are helping to accelerate this health care transformation.

More Canadian e-health technology innovations

Canada is home to numerous leading-edge ICT companies, whose products have direct health care applications:

- **Bycast** sets the standard for high performance software storage, based on the next generation of grid computing technology. *Bycast Endeavour Live*™ enables the live transmission of full-motion video from ultrasound, fluoroscopy and endoscopy scans between geographically separated health care facilities.

- **GenoLogics Life Sciences Software Inc.** is an outstanding developer and provider of lab and management software solutions for proteomics biomarker discovery and research. GenoLogics' *Genius*™ system is specifically designed for genomics and systems biology researchers. Based on an open, configurable and integrating platform, *Genius* allows researchers to focus on their scientific challenges rather than the mundane details of workflow and data management.

- Hospitals now can go wireless, thanks to **Nortel Networks** IP network technology, which supports wireless portable and hand-held devices, as well as VoIP telephony and sensor networks for patient-monitoring bracelets.

Research In Motion's BlackBerry® device is used worldwide as a secure wireless information management tool by physicians.

The Canadian health care system has created a demanding marketplace for world-leading innovative solutions — and our ICT sector has responded with leading-edge solutions. Canadian e-health technology companies have a solid reputation for excellence, and the on-time and on-budget delivery of their products.

For further information, visit these websites:

Industry Canada: www.strategis.gc.ca/ICT

Association of Health Technologies Industry (AITS): www.aits.ca

Canada Health Infoway: www.infoway-inforoute.ca

Canadian Healthcare Information Technology Trade Association (CHITTA): www.chitta.ca

Canadian Organization for the Advancement of Computers in Health (COACH): www.coachorg.com

Canadian Society of Telehealth: www.cst-sct.org