

Centre for Health Information

Annual Business Report 2007-08

Improved health through improved health information

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Message from the Chair



On behalf of the Board of Directors, I am pleased to submit the 2007-08 Annual Business Report for the Newfoundland and Labrador Centre for Health Information, to the Minister of Health and Community Services.

The Centre for Health Information's progress in 2007-08 not only generated great momentum towards achieving our vision of *Improved health through improved health information,* but marked a period of significant organizational growth. During the past year, the organization welcomed eleven new employees and became its own crown agency, with the proclamation of the *Centre for Health Information Act* on April 27, 2007.

The proclamation of the Act demonstrates the level of confidence in the Centre for Health Information, and the shared vision we have for ensuring quality information is available to support improved health for the people of Newfoundland and Labrador.

On behalf of the Board and the Centre for Health Information staff, I thank Eastern Health for its commitment to ensuring that the Centre for Health Information thrived in its first ten years. We recognize the significant impact this relationship has had, and will continue to have, on the organization's work.

In addition to becoming a crown agency, the Centre for Health Information continued towards its vision and support for the Department of Health and Community Services' strategic directions, with a particular emphasis on improving accountability and stability in the delivery of health and community services, within available resources.

This past year saw significant progress in the areas of Electronic Health Record development, applied health research, improved data and technical standards.

This report was prepared under my direction in accordance with the *Transparency and Accountability Act.* The Centre for Health Information's Board of Directors is accountable for the preparation of this report, the results contained herein, and any variances from stated goals and objectives. As Chair of the Board of Directors, this is my annual update to the Minister on the status of our work.

I would like to take this opportunity to thank my past and present colleagues on the Board for their support and contribution to these achievements.

The next few years will be exciting for the Centre for Health Information, but not without its challenges and risks. The Board will continue to provide sound governance, oversight and leadership and ensure the Centre realizes its full potential.

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Bill Fanning Chair, Board of Directors

Message from the CEO



As we momentarily look up from our task of developing a sophisticated and comprehensive health information system for Newfoundland and Labrador's health professionals, we observe that we are engaged in a genuinely remarkable and innovative project.

Electronic health records will help transform and modernize health care in Newfoundland and Labrador and across Canada. Thanks to committed staff, steadfast partnerships and sound leadership, the Centre for Health Information is making great strides and breaking new ground in the area of electronic health record development, setting the stage for other provinces.

In the past year, we became the second province in Canada to implement a provincewide diagnostic imaging system and laid the groundwork for launch of the Pharmacy Network, our provincial drug information system. We also significantly expanded provincial telehealth services, allowing patients in more than 24 rural communities to receive care, services and support closer to home.

During the past year, we continued to build capacity to undertake and support health research, while striving to foster a more collaborative provincial approach. Realizing the full potential of this province's capacity for health research is an exciting challenge, and is one in which the Centre is well poised to lead.

As an employer, we are facing increasing growth throughout the organization. While this growth is a reflection of our achievements, it presents challenges with regards to attracting and retaining experienced and qualified staff, adequate office obtaining space and successfully integrating new staff into the organization. Meeting this challenge will require us to broaden our thinking to embrace new ways of attracting the right people with the right skills and providing the support they require.

We look forward to rolling out additional Newfoundland components of the and Labrador Electronic Health Record and fosterina an even more collaborative environment with health-system stakeholders, with great expectations of the many benefits this will bring to the people of Newfoundland and Labrador.

I would like to thank the Board of Directors and all Centre employees for their commitment and belief that through quality health information, we can improve the health of the people of Newfoundland and Labrador.

Mike Barron Chief Executive Officer

About the Centre for Health Information

The Newfoundland and Labrador Centre for Health Information provides quality information to health professionals, the public, researchers and health system decision-makers. Through collaboration with the health system, the Centre supports the development of data and technical standards, maintains key health databases, prepares and distributes health reports, and supports and carries out applied health research and benefits evaluations. The Centre's mandate also includes the development of a confidential and secure provincial Electronic Health Record. A complete copy of the Centre's full mandate and mission is located in Appendix A.

Vision

Improved health through improved health information

Mission

By March 31, 2011, the Newfoundland and Labrador Centre for Health Information will have implemented all funded components of the Electronic Health Record, and these will be in use by all authorized users.

It should be noted that the Centre's mission was revised in the 2008-2011 Business Plan, which can be viewed on the Centre's website at <u>www.nlchi.nl.ca</u>.

Lines of Business

The Centre for Health Information is an integral part of the Newfoundland and Labrador health system, supporting improvements in the collection of data and use of information for individual care, administration, planning and research. Through three lines of business, the Centre provides services to the provincial and federal governments and their agencies, community organizations, health professionals, the public and researchers.

1. **Provincial Health Information System -** The Centre was established to provide a comprehensive province-wide information system for the health sector. Activities for the development of this information system are led either by the Centre or by other organizations within the health system, with whom the Centre collaborates. The Centre is responsible for:

- planning, design, implementation, and maintenance of the Health Information Network, which the Centre does in collaboration with its clients to ensure the desired outcomes of the Health Information Network are achieved;
- managing the privacy and security of personal information transmitted through the Health Information Network;
- coordinating provincial participation in national standard setting activities for the Electronic Health Record (EHR);
- managing the planning, design, and implementation of specific provincial health information systems; and
- evaluating the benefits of health information systems.

2. Quality Information - Recognition of the connection between quality health information and healthier people and communities led to the establishment of the Centre for Health Information in 1996. Since its inception, the Centre has collaborated with Newfoundland and Labrador's health system to ensure quality health information is available for health care, system-wide planning, research, and policy development. Quality health information is information that is accurate, timely, useable, relevant, and comparable. The Centre is responsible for:

- preparing reports and analyzing data using health databases available to the Centre;
- conducting applied health research independently and in collaboration with clients;
- performing data linkages for researchers and other public bodies;
- managing the provincial database of demographic information associated with the Unique Personal Identifier/Client Registry;
- managing databases on behalf other custodians, including the Department of Health and Community Services, (use of these databases is authorized by the legislated custodian);
- assisting clients and stakeholders with requests for information, re-abstracting of health records to confirm data quality, and training and site visits for the users of the Unique Personal Identifier/Client Registry;
- maintaining a web site of health information resources, community health organizations and support groups in the province, and links to national organizations where there is no local division. There is also information about health professionals, hospitals, nursing homes, personal care homes and other resources.

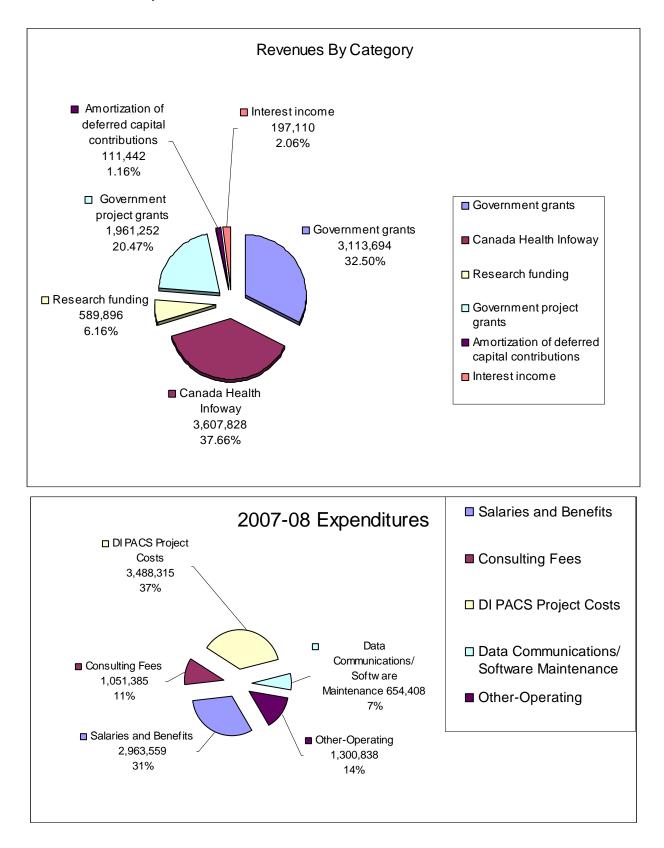
3. Standards - The Centre is responsible for the development and use of data and technical standards for financial, statistical, social, demographic, and clinical data collection in the health sector, and ensuring that this data is uniform in definition, measurement, collection, and interpretation. The Centre achieves this by:

- adding value to the national standards set by the Canadian Institute for Health Information by interpreting them in the context of the Newfoundland and Labrador health environment;
- working closely with provincial committees on the development, education, and adoption of standards;
- promoting principles and guidelines for protecting personal information on the Health Information Network; and
- participating in national standard setting committees and initiatives.

Number of Employees and Physical Location

The Centre is structured into five departments: Health Information Network; Research and Evaluation; Data Quality and Standards; Privacy and Corporate Services; and Finance and Project Management Office. It currently employs 65 full and part-time staff; 28 males and 37 females. The majority of staff work in the Centre's main office located at 28 Pippy Place, St. John's. The Registry Integrity Unit, with three staff members, is located in Harbour Grace.

Revenues & Expenditures



Shared Commitments

The Centre for Health Information continues to strengthen positive working relationships with its many clients and stakeholders, and recognizes the significant impact these partnerships have on the organization. Along with advancing the mandate of the Centre for Health Information, these partnerships assist the organization's contribution to the Department of Health and Community Services' strategic directions to ensure that the people of Newfoundland and Labrador have access to services and programs enabling individuals, families and communities to achieve optimal health. Specifically, the Centre's work contributes to the improvement of accountability and stability in the delivery of health and community services within available resources through the development of the electronic health record. Once implemented, the electronic health record will help identify and monitor outcomes for selected programs and assist in the alignment of regional services.

The Centre for Health Information depends on the valuable contribution of many others to achieve its vision of improved health for the people of Newfoundland and Labrador, including, but not limited to, the following:

- Department of Health and Community Services: The Centre works closely with the Department of Health and Community Services in fulfilling its mandate. Along with providing guidance and funding for the Newfoundland and Labrador Electronic Health Record projects, the Department works in collaboration with the Centre on developing and implementing legislation, governance models and policies around the privacy of personal health information. In the area of data management and quality information, the Department supports the Centre in its work to assist data users at all levels of the health system in appropriate collection, interpretation and application of clinical, as well as financial and statistical data. The Centre also works in close partnership with the Department in the area of applied health research and data linkage.
- Regional Health Authorities: The Regional Health Authorities play an integral role in the development and implementation of the Newfoundland and Labrador Electronic Health Record. Along with providing in-kind support, the Regional Health Authorities provide support in project planning, governance and through the implementation and operation of the electronic health record components. In line with this work, the Centre works closely with the Regional Health Authorities on developing and ensuring a common approach to protecting the privacy of personal health information. Additionally, the Centre leads several collaborative initiatives with the Regional Health Authorities to ensure the accurate collection and reporting of clinical, financial and statistical data.
- Canada Health Infoway: Canada Health Infoway (Infoway), the federally-funded, independent not-for-profit organization which invests with public sector partners to accelerate electronic health records across Canada, provides funding for Newfoundland and Labrador Electronic Health Record projects, facilitates knowledge transfer with other jurisdiction, and provides guidance in project

planning. This collaboration is critical to the development of the Newfoundland and Labrador Electronic Health Record, and assists the Centre for Health Information in supporting the Department's strategic direction of improving accountability and stability in the health system.

- Other provincial bodies: Aside from the Department of Health and Community Services, the Centre also collaborates with other provincial government bodies including the Office of the Chief Information Officer and the Vital Statistics Branch of the Department of Government Services.
- Health professionals: To ensure the Newfoundland and Labrador Electronic Health Record is practical and supportive to individuals working in the health field, the Centre for Health Information consults with health professionals through their professional associations and regulatory bodies on clinical practice matters and policy development for the Electronic Health Record.
- Canadian Institute for Health Information: In its data quality and standards work, the Centre for Health Information collaborates with the Canadian Institute for Health Information to support reporting to national databases.
- Research partners: The Centre for Health Information continues to collaborate on research initiatives with various disciplines at Memorial University's Faculty of Medicine, the Janeway Child Health and Rehabilitation Centre, the Patient Research Centre, and the Newfoundland and Labrador Cancer Treatment and Research Foundation. A number of organizations provide funding for health research, aiding the Centre as it works to build an evidence-based health system. These are Infoway; Canadian Institutes for Health Research; Canadian Institute for Health Information; Health Canada; Newlab Clinical Research; the Office of Primary Health Care; and the Public Health Agency of Canada.

Highlights & Achievements

In its first year as a crown agency, the Centre for Health Information maintained its commitment to the vision of improved health for the people of Newfoundland and Labrador, through improved health information. In 2007-08, the Centre achieved progress in the areas of electronic health record development, applied health research, and improvements in the areas of data collection, coding, and standards.

Advancing Newfoundland and Labrador's next generation of health care through the Electronic Health Record

Newfoundland and Labrador is making great progress in the area of electronic health record development. During 2007-08, the Centre, in collaboration with its partners and with funding from the Department of Health and Community Services and Infoway, implemented a core electronic health record clinical information system and finalized work on the foundational registries of the electronic health record, as well as laid the groundwork for the Pharmacy Network and electronic health record interoperability. Through its provincial achievements, the Centre also received recognition on the national stage in 2007-08, strengthening Newfoundland and Labrador's reputation as a leader in electronic health record standards and benefits evaluations. While the Newfoundland and Labrador Electronic Health Record will not be fully implemented until after 2011, components of the system are already working to improve health care in the province.

Accomplishments in Newfoundland and Labrador Electronic Health Record development for 2007-08 include:

- ✓ In December 2007, Newfoundland and Labrador became the second province in Canada to implement a province-wide diagnostic imaging system and the first to provide central storage of images and reports. With the completion of the Picture Archiving and Communications System, diagnostic images and reports are now available digitally throughout the province to health professionals.
- ✓ Construction of the Pharmacy Network continued throughout 2007-08. As well, product testing, policy development and vendor conformance work began. The roll-out of the Pharmacy Network to community pharmacies will begin in 2009.
- √ In November 2007, a major upgrade of the provincial Client Registry, a directory that identifies all people who have received health care in the province, was



completed. The upgrade of the Client Registry Initiate software from version 5.2 to 7.5 will enable its integration with, and support of, the Pharmacy Network, and ultimately, the capabilities and messaging standards required to support future components of the Newfoundland and Labrador Electronic Health Record. Efforts to integrate the Client Registry with the Picture Archiving and Communications System and the Pharmacy Network also began in 2007-08.

✓ The Provider Registry, completed in November 2007, is a single source of information about licensed health professionals and will integrate with the Pharmacy Network and future components of the electronic health record. The application chosen by Newfoundland and Labrador for its Provider Registry was developed by the Western Health Information Collaborative, a group with membership from British Columbia, Alberta, Saskatchewan, and Manitoba. The Provider Registry is currently implemented in each of these provinces. Newfoundland and Labrador is the first province to implement the complete set of Pan-Canadian HL7 V3 messaging standards for a provider registry. HL7 V3 are international messaging standards for communication between healthcare information systems.

- ✓ During 2007-08, telehealth services were used in more than 883 patient visits and in 402 physician case reviews through the telehealth chronic disease management program. In addition to oncology patients, telehealth services were expanded to provide care to patients requiring occupational therapy and treatment of kidney disease, neurology and mental health issues. The groundwork is currently being laid to provide telehealth services to patients with diabetes.
- ✓ The tender for the Health Information Network Core, which will provide connectivity to the Regional Health Authorities and the data centre at the Office of the Chief Information Officer, was awarded to Persona Communications in 2007. Aliant was awarded the contract to provide the Health Information Network connectivity requirements for the Pharmacy Network. These networks will facilitate common solution architecture and technical standards, to ensure interoperability of the primary components of the Newfoundland and Labrador Electronic Health Record.

Helping build an evidence-based health system to improve population health in Newfoundland and Labrador

While 2007-08 marked a significant year for the Centre for Health Information with

regards to development of the Newfoundland and Labrador Electronic Health Record, it was also a year filled with much success and many achievements on the applied health research front.

By engaging in applied health research, the Centre for Health Information continued its contribution to the evaluation, and improvement of health and community services in the province. As a result of health research accomplishments in 2007-08, the Centre continued to build capacity in the area of health research, heightened its reputation as a trusted provincial leader in data management and linkage, and strengthened its role in supporting provincial policy development.



Members of the Research and Evaluation Dept. Sitting from left to right: Nicole Edwards, Kerry LeFresne. Standing: Khokan Sikdar, Anas El Aneed and Neil Gladney.

Notable health research achievements in 2007-08:

- $\sqrt{}$ The Centre continued to foster research partnerships strengthening its collaborative efforts with Memorial University's Faculty of Medicine, and forming new research partnerships with the Janeway Child Health and Rehabilitation Centre, the Patient Research Centre, and the Newfoundland Cancer Treatment and Research Foundation.
- ✓ Providing a return on Government's investment in the Centre for Health Information, the organization received approximately \$589,896 in external research grants in 2007-08. The primary sources of funding were Infoway and the Office of Primary Health Care for benefits evaluation; Canadian Institutes for Health Research; Canadian Institute for Health Information; Health Canada; Newfoundland and Labrador Cancer Treatment and Research Foundation; Newlab Clinical Research; Janeway Foundation; and the Public Health Agency of Canada for applied health research.
- $\sqrt{}$ Signed Memorandum of Agreement with the Public Health Agency of Canada, which will see the Centre for Health Information maintain the National Diabetes and Chronic Disease Surveillance System through 2011.
- \checkmark Commissioned on behalf of the Provincial Government and the Task Force on Adverse Health Events to create a database on estrogen and progesterone receptor (ER/PR) re-testing, playing a significant role in providing critical evidence for the Task Force and the Commission of Inquiry on Hormone Receptor Testing.
- ✓ Don MacDonald, Director of the Centre's Research and Evaluation Department, was recognized nationally and named the benefits evaluation Subject Matter Expert for Picture Archiving and Communications Systems by Infoway. He was also chosen to develop Infoway's evaluation indicators for diagnostic imaging and helped to create Infoway's National Benefits Evaluation Framework.
- $\sqrt{}$ Representing Newfoundland and Labrador, Centre for Health Information staff presented their work at ten national and international conferences during 2007-08.
- √ The Centre for Health Information released eight Fast Facts reports during 2007-08: Adult Obesity, Dental Care, ATV Injuries, Hospital Utilization, Diabetes (NL), Diabetes among Miawpukek First Nation, Community Resiliency and Live Birth Trends. The Centre also released four health status reports focusing on hospital utilization, health indicators, diabetes and live birth trends.
- $\sqrt{}$ During 2007-08, the Centre for Health Information responded to 160 major requests for data and information services. The main requestors for information were the Department of Health and Community Services, the Regional Health

Authorities, and researchers at Memorial University. This marked a twenty-three per cent increase in requests during this time period.

- ✓ Providing guidance and contributing to health research on a provincial and national front, Centre for Health Information staff were active members of the Provincial Wellness Plan Advisory Committee; Provincial Perinatal Advisory Committee; Quality Practice; Informatics and Surveillance Working Group for the Provincial Cancer Control Strategy; Long Term Care Strategy; National Population Health Surveys Advisory Committee; Chronic Disease Management Advisory Committee; Integrated Stroke Strategy Advisory Committee; Stroke Provincial/Territorial Administrative Data Working Group; National Diabetes Surveillance System Scientific Committee; Health Information Management Committee – First Nations and Inuit Branch – Health Information Analysis and e-Health Solutions Unit (Health Canada); and the National Task Group for Chronic Disease and Injury Surveillance during 2007-08.
- \checkmark Members of the Centre for Health Information's research team continued to strive for academic excellence in 2007-08. Building on an already highly-educated staff, twelve members of the department are currently PhD or Masters candidates. Areas of interest include epidemiology, statistics, health technology and health informatics.

Providing essential data to facilitate analysis of Newfoundland and Labrador's health system and the health of the people of the province

The Centre for Health Information provided leadership and guidance to the Regional Health Authorities on the collection and reporting of clinical, financial and statistical data in 2007-08. By supporting the accurate coding of clinical, financial and statistical standards for the day-to-day operations of the Regional Health Authorities, the Centre contributes to accountability reporting by managers for resource use; development of budgets based on meaningful workload and activity projections; more precise resource allocation; and more informed management decision making at the facility, regional and provincial level. In 2007-08, the Centre also contributed to standards development and implementation for the Newfoundland and Labrador Electronic Health Record.

Notable achievements in the area of quality information and standards:

✓ The Centre for Health Information continued to provide a venue for communication among Health Information Management professionals and facilitate the adoption of provincial mandates and best practices for coding and abstracting clinical information through the Provincial Coding Committee. The Centre also provided support to regional coders through several in-house education sessions for Health Information Management professionals.

- ✓ Through its leadership role in the Provincial Health Information Management Leadership Committee, the Centre for Health Information continued to support accurate and consistent clinical coding and abstracting practices in the Regional Health Authorities.
- ✓ The 2006 Re-abstracting Study and Registration Audit Site Visit reports were distributed to the regional health authorities in 2007-08. These reports identified areas of data quality strengths and opportunities for improvement.
- ✓ In June 2007, the Centre for Health Information completed a review of the Clinical Database Management System. The review, which examined the database's business processes, was completed in conjunction with a technical review conducted by the Office of the Chief Information Officer. Recommendations were made to improve the technical infrastructure, quality of the data available, and streamline businesses processes.
- ✓ The Centre for Health Information collaborated with the Client Pay Team and Regional Health Authorities to prepare the Client and Referral Management System for the testing of the system in 2007-08, and anticipated provincial roll out in 2008-09. Integral to the roll out of the Client Pay module of the Client and Referral Management System is the adoption of the 2007 MIS Community Sector Chart of Accounts, within the financial systems of the Regional Health Authorities and alignment of the clinical data to the chart of accounts.
- ✓ As a member of the Infoway Standards Collaborative, the Centre for Health Information continued to play a significant role in national electronic health record standards development in 2007-08, with progress in implementing the national electronic health record standards for the Provider Registry, Client Registry and Diagnostic Imaging Picture Archiving and Communications System projects. Standards such as HL7 V3 within these systems facilitate information exchange and are a critical foundation for the interoperable Newfoundland and Labrador Electronic Health Record.

Free-standing status granted to the Centre for Health Information

The *Centre for Health Information Act* was proclaimed on April 27, 2007. The Act incorporates the Centre as a statutory corporation. As a crown agency, the Centre is now governed by a Board of Directors appointed by the Lieutenant-Governor in Council and reporting to the Minister of Health and Community Services. It is managed by a Chief Executive Officer.

The proclamation of the Act demonstrates the Government's confidence in the Centre's role in providing quality health information for health care, system-wide planning, research and policy development.

Working to ensure the protection of personal health information

In 2007-08, the Centre assumed a leadership role in the development of policies and procedures related to the protection of personal health information. As the organization responsible for establishing the governance structure of the Newfoundland and Labrador Electronic Health Record, the Centre for Health Information represents Newfoundland and Labrador in the development of pan-Canadian privacy and security standards. In 2007-08, the Centre continued to develop a safe and secure electronic health record for the province, and supported the Department of Health and Community Services' strategic mandate of improving accountability and stability in the health care system.

Some of the Centre's key achievements in relation to the protection of personal health information included:

- ✓ In the spring of 2007, the Centre led province-wide consultations on proposed health information legislation. These consultations provided significant feedback to the Department of Health and Community Services, which was then used in preparing the *Personal Health Information Act*, introduced in House of Assembly in March 2007.
- The Director, Privacy and Corporate Services was elected co-chair of the Pan-Canadian Privacy Forum organized by Infoway. The forum members represent the governments and the privacy oversight offices of each jurisdiction in Canada.
- ✓ To ensure the protection of personal information in the Newfoundland and Labrador Electronic Health Record, the Centre for Health Information completed Privacy Impact Assessments for the Provider Registry, Telehealth Program – Chronic Disease Management, and the diagnostic imaging/picture archiving and communications system. Newfoundland and Labrador remains the only jurisdiction to post these privacy impact assessments on the Internet for all clients and the public to read. The Centre for Health Information considers this an important initiative for transparency in development of the Electronic Health Record.
- ✓ The Centre for Health Information provides a venue for the Regional Health Authorities to work together in creating a culture of protecting personal health information, through the sharing of knowledge and development of common polices and procedures.

In accordance with the legislative requirements of the *Transparency and Accountability Act,* the Board of Directors is accountable for developing and implementing the funded components of the Newfoundland and Labrador Electronic Health Record by 2011, through achieving the goals and objectives set out in its Business Plan for the period 2006 to 2008. A second Business Plan has been submitted to the Minister of Health and Community Services for the period 2008 to 2011. Both business plans are available on the Centre's website, <u>www.nlchi.nl.ca</u>, or by calling 709-752-6000. The Centre for Health Information's full mandate is contained in both business plans and is also located in Appendix A of this document.

The outputs section of the annual report is part of the 2006-2011 planning cycle, which takes place over two phases, 2006-2008 and 2008-2011. There were four strategic issues identified as priorities in the Business Plan for 2006-08, with corresponding goals, objectives and measures.

Mission

The Centre is responsible for the development of a confidential and secure Health Information Network that will serve as the foundation for the provincial Electronic Health Record. Through the support of the provincial government and Canada Health Infoway, Inc. the Centre has been recognized for its contribution to the national agenda for development of the Electronic Health Record with the first provincial client registry designed and implemented specifically for the Electronic Health Record.

By March 31, 2011, the Centre for Health Information will have implemented all funded components of the Electronic Health Record, and these will be in use by authorized users.

This mission contributes to the Department of Health and Community Services' strategic direction to ensure that the people of Newfoundland and Labrador have access to services and programs enabling individuals, families and communities to achieve optimal health. Specifically, the development of the electronic health record contributes to the improvement of accountability and stability in the delivery of health and community services within available resources. Once implemented, the electronic health record will provide more accurate, reliable, and comparable data for policy making, program monitoring, and resource allocation. It will also offer efficiencies, such as a decrease in the need to repeat health history and a reduction in duplication of diagnostic procedures.

It should be noted that the Centre's mission was revised in the 2008-2011 Business Plan, which can be viewed on the Centre's website at <u>www.nlchi.nl.ca</u>.

Measure 1: Implemented all funded components of the Electronic Health Record

INDICATORS	ACCOMPLISHMENTS
Implemented the provincial Diagnostic Imaging/Picture Archiving and Communications System Implemented interoperability between Diagnostic Imaging/Picture Archiving and Communications System and the Unique Personal Identifier/Client Registry 	In December 2007, Newfoundland and Labrador became the second province in Canada to implement a province- wide diagnostic imaging system and the first to provide central storage of images and reports. With the completion of the Picture Archiving and Communications System, diagnostic images and reports are now available throughout the province to health professionals. Work to integrate the Client Registry with Picture Archiving and Communications System began in 2007-08.
 Implemented the Newfoundland and Labrador Pharmacy Network All community pharmacies are linked All hospital pharmacies are linked to community pharmacies e-prescribing functionality is available to physicians 	Construction of the Pharmacy Network continued throughout 2007-08. As well, product testing, policy development and vendor conformance work began. The roll-out of the Pharmacy Network to community pharmacies will begin in early 2009, with hospital pharmacies and e-prescribing to follow.
Pursued funding to implement a provincial Laboratory Information System	Discussions with Infoway have been successfully completed. Discussions with the Government of Newfoundland and Labrador are ongoing.
Pursued funding to implement Telehealth in selected sites and programs	During 2007-08, telehealth services were used in more than 883 patient visits and in 402 physician case reviews through the telehealth chronic disease management program. In addition to oncology patients, telehealth services were expanded to provide care to patients requiring occupational therapy and treatment of kidney disease, neurology and mental health issues.

Pursued funding to develop interoperable functionality for information systems that form the basis of the Electronic Health Record o Provided accurate and comprehensive information to Canada Health Infoway and the Department of Health and Community Services to support a funding request	
Documented the achieved benefits to the users and the health system of each information system that is fully implemented	Benefits evaluations are being undertaken on all of the Centre's electronic health record projects. Of note, Don MacDonald, Director of the Centre's Research and Evaluation Department, was recognized nationally and named the benefits evaluation Subject Matter Expert for Picture Archiving and Communications Systems by Infoway.

Measure 2: The Electronic Health Record will be used by authorized users

INDICATORS	ACCOMPLISHMENTS
Working with clients and stakeholders, a process for developing a governance structure for the Electronic Health Record will be approved. The governance structure will include the criteria and process for authorizing users of the Electronic Health Record.	In November 2007, the Minister of Health and Community Services approved the proposed electronic health record governance model, which was developed in consultation with stakeholders. The Centre for Health Information's Board of Directors has accepted the responsibility for this provincial governance and continues to work with key stakeholders and the Minister on further defining the Board's role and responsibilities. The governance structure will include the criteria and process for authorizing users of the Electronic Health Record.

Discussion of Results 2006-2008

As of March 31, 2008, the Centre is on track to achieve all indicators by 2011. The Picture Archiving and Communications System has been implemented and work is underway to integrate the system with the Client Registry. The Centre anticipates that

the Pharmacy Network will be implemented by March 31, 2011 and continues to pursue funding for other components of the Newfoundland and Labrador Electronic Health Record. The Centre continues to work with stakeholders to ensure end user acceptance of all components of the electronic health record, both those that have been implemented and those in development. To assist in this activity, the Centre is conducting benefits evaluations for all electronic health record projects.

The development of the Newfoundland and Labrador Electronic Health Record contributes to the Department of Health and Community Services' strategic direction of improving accountability and stability in the delivery of health and community services within available resources. The electronic health record will assist in resource allocation and provide information that may be used to examine the effectiveness of health service delivery programs, leading to improved program planning.

Issue 1: Organizational Plan

The Board recognizes that it is not able to achieve its Mission Statement without strong planning and monitoring. The Centre for Health Information has demands placed upon it by clients and stakeholders, many of which have financial implications for the Centre's operating budget. The Centre plays an important role in the provincial health system and with the proclamation of the *Centre for Health Information Act*, it needs the continued support of its clients and stakeholders to meet its legislative objectives and its business plan mission. An organizational plan is under development to reflect the Centre's new legal status as an agency of the Crown.

The development of an organizational plan is part of the Centre's contribution to the Department of Health and Community Services' strategic directions. One of the Department's strategic directions is to improve accountability and stability in the delivery of health and community services within available resources. The organizational plan will support the necessary requirements for the development and integration of the provincial electronic health record, which will help accomplish this strategic direction by providing improved program information and a reduction in the duplication of procedures, among other efficiencies.

- Goal 2006-2008: By March 31, 2008 the Newfoundland and Labrador Centre for Health Information will have an overall organizational plan that addresses and supports sustainability.
- Measure 2006-2008: Overall organization plan that addresses and supports sustainability

INDICATORS 2006-2008	ACCOMPLISHMENTS 2006-2008
No operating deficit	As per the financial statements included in this document, the Centre for Health information has no operating deficit.
Operational plans exist for the Electronic Health Record, research, and human resources, and other key operating areas of the Centre	A full operational plan for the electronic health record has not yet been approved, although a consultant has been secured and the Centre anticipates a draft plan will be submitted in April 2008. The delay is due to the magnitude of the project and the changing operating landscape in the province. Planning is an ongoing activity at the Centre for Health Information and the areas of human resources and research, among others, were identified as priorities this fiscal year. Strategies have been developed for these areas.
 Mechanisms exist to ensure reporting to the Board on key indicators: Monthly fiscal reports Status of external funding Performance review against operational plan Quality/excellence standards set Status of transition to incorporation as an agency of the Crown 	The Centre established a Finance and Audit subcommittee of the Board of Directors, which meets monthly except over the summer. This committee receives monthly fiscal reports, updates on the status of external funding, and discusses any variances on monthly financial statements. Each project has a plan that addresses quality standards and goals, with success determined on the project's ability to meet these standards and goals. The Centre's transition to a crown corporation was completed on April 27, 2007 and the Centre has taken over payroll, human resources, banking, and procurement among other items.

Discussion of Results 2006-2008

As of March 31, 2008, all indicators have been achieved, except the development of a full operational plan for the electronic health record. A full operational plan for the electronic health record has not yet been approved, although a consultant has been secured and the Centre anticipates a draft plan will be submitted in April 2008. The delay is due to the magnitude of the project and the changing operating landscape in the province. Once finalized, the operational plan will contribute to the Department of Health and Community Services' strategic direction by ensuring that appropriate resources are in place to develop the provincial electronic health record.

The Centre has a balanced budget and mechanisms are in place to ensure reporting to the Board of Directors including fiscal reports, status of external funding, and performance review against the Business Plan. The achievement of a balanced budget is a focus area of the Department of Health and Community Services' strategic direction and has been addressed by the Centre.

Objective 2007-2008:	By March 31, 2008 the Newfoundland and Labrador Centre
	for Health Information has an overall organizational plan that addresses and supports sustainability.

Measure 2007-2008: Full organizational plan has been approved and a process for monitoring and updating the plan exists.

Discussion of Results 2007-2008

Planning is an ongoing activity at the Centre for Health Information and, as mentioned above, final approval has not yet been received on the overall organizational plan, although a consultant has been secured and the Centre anticipates a draft plan will be submitted in April 2008. The delay is due to the magnitude of the project and the changing operating landscape in the province. Once finalized, the plan will include direction for monitoring progress and how and when to incorporate updates. Even without a formal plan in place, the Centre has long recognized the need to support sustainability and has focused on funding sources and human resources. These activities contribute to the Department of Health and Community Services' strategic direction of improving accountability and stability in the delivery of health and community services within available resources. Further, the organizational plan will support the development of equitable service delivery among regions.

Issue 2: Electronic Health Record Governance

The accountability for the information systems within each Regional Health Authority and the Department of Health and Community Services with only that organization's data is clear. The accountability of a single information system shared by more than one organization can often be managed through Memorandums of Understanding; however, the accountability of several different information systems shared by many different organizations and users is very complex. Before information systems become interoperable, an acceptable governance structure for the Newfoundland and Labrador environment must be developed and accepted by all stakeholders, including the public. To date, the Centre for Health Information's Board of Directors has been approved as the governing body for the Newfoundland and Labrador Electronic Health Record and work continues to outline specific roles and responsibilities. This issue will be addressed before the implementation of an interoperable Electronic Health Record.

Establishing the governance structure for the electronic health record is part of the Centre's contribution to the Department of Health and Community Services' strategic directions. One of the Department's strategic directions is to improve accountability and stability in the delivery of health and community services within available resources. The development of the provincial electronic health record, with appropriate oversight mechanisms, will help accomplish this strategic direction. A fully functioning electronic health record will enable accountability through improved information and provide stability through efficiencies within the health system.

Goal 2006-2008: By March 31, 2008, the Newfoundland and Labrador Centre for Health Information has implemented approved components of the Electronic Health Record and Health Information Network governance model that are assigned to the Centre.

Measure 2006-2008: Implemented approved components assigned to the Centre

INDICATORS 2006-2008	ACCOMPLISHMENTS 2006-2008
	In November 2007, the Minister of Health and Community Services approved the proposed electronic health record governance model.
A proposed governance model for the Electronic Health Record has been submitted to the Minister and some components have been implemented.	Components have not been implemented, as the complexity of the governance committee structure has required further consultations to ensure the involvement and support of key stakeholders. A discussion paper on the roles and responsibilities and membership for the committees has been developed and is being circulated to stakeholders.

Discussion of Results 2006-2008

In November 2007, the Minister of Health and Community Services approved the proposed electronic health record governance model, which the Centre prepared following consultations with Regional Health Authority CEOs; regulatory and professional organizations for nurses, pharmacists, physicians, and social workers; the

Department of Health and Community Services; the Office of the Chief Information Officer; and representatives from the public. As a result, the Minister of Health and Community Services designated the Centre for Health Information as the governing body for the electronic health record and the associated personal health information. Components have not been implemented, as the complexity of the governance committee structure has required further consultations to ensure the involvement and support of key stakeholders.

The development of the electronic health record governance structure is part of the Centre's contribution to the Department of Health and Community Services' strategic directions. One of the Department's strategic directions is to improve accountability and stability in the delivery of health and community services within available resources. The development of the provincial electronic health record and appropriate oversight mechanisms will help accomplish this strategic direction.

Objective 2007-2008: By March 31, 2008, the Newfoundland and Labrador Centre for Health Information has implemented approved components of the governance model that are assigned to the Centre.

Measure 2007-2008: 0	Sovernance model approved by Minister
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INDICATORS 2007-2008	ACCOMPLISHMENTS 2007-2008
	The Centre has been approved as the governing body for the electronic health record.
The Centre has implemented approved components of the governance model that are assigned to the Centre.	Components have not been implemented, as the complexity of the governance committee structure has required further consultations to ensure the involvement and support of key stakeholders. A discussion paper on the roles and responsibilities and membership for the committees has been developed and is being circulated to stakeholders.

Discussion of Results 2007-2008

The Centre for Health Information's Board of Directors has accepted the responsibility for provincial governance of the electronic health record and continues to work with the key stakeholders and the Minister on further defining the Board's role and responsibilities. Components of the governance model have yet to be implemented, as the complexity of the governance committee structure has required further consultations

to ensure the involvement and support of key stakeholders. A discussion paper on the roles and responsibilities and membership for the committees has been developed and is being circulated to stakeholders.

The development of the electronic health record, including an appropriate governance structure, contributes to the Department of Health and Community Services' strategic direction of improving accountability and stability in the delivery of health and community services within available resources. With the appropriate governance model in place, the provincial electronic health record will be able to work effectively across geographies and care settings.

Issue 3: Board Policy Framework

As a recently designated agency of the Crown, the Centre has developed its own corporate bylaws and policy framework for the Board of Directors. The development of a Board policy framework is part of the Centre's contribution to the Department of Health and Community Services' strategic directions. One of the Department's strategic directions is to improve accountability and stability in the delivery of health and community services within available resources. The development of a Board policy framework supports the governance and subsequent operations of the Newfoundland and Labrador Electronic Health Record and includes mechanisms to ensure a balanced budget; activities that will help accomplish this strategic direction.

Goal 2006-2008:	By March 2008, the Newfoundland and Labrador Centre for	
	Health Information has a policy framework.	

Measure 2006-2008: Corporate bylaws and board policy manual are approved and followed

	INDICATORS 2006-2008	ACCOMPLISHMENTS 2006-2008
By La	WS	
0	Appointment of Directors	
0	Duties of the board	
0	Appointment of CEO	
0	Duties of CEO	
0	Voting at meetings	The bylowic address the areas
0	Resignation/dismissal of board members	The bylaws address the areas identified and were approved by the
0	Fiscal year	Board of Directors on June 17, 2007.
0	Privacy and confidentiality	
0	Conflict of interest	
0	Signing authority	
0	Bank account	
0	Adoption of provincial policies	

Board Policy Manual

- o Communications
- Decision-making process through board committees
- CEO spending limitations
- CEO evaluation
- Building local IT capacity
- Evaluation process for all policies
- Accountability framework for CEO
- Board self-evaluation
- Cost recovery requirements
- o Risk management
- o Accountability and transparency
- Equitable use of data by internal
- staff and external stakeholders

The policy areas listed are addressed in the Board Policy Manual, which has been completed. This is a living document that will be regularly reviewed and will continue to grow as governance of the electronic health record is put in place.

Discussion of Results 2006-2008

This goal has been achieved. The *Centre for Health Information Act* was proclaimed on April 27, 2007. As a result, the Centre developed its own corporate bylaws and policy framework for the Board of Directors. As the constitution of the organization, these bylaws include direction on accountability and transparency; duties of the CEO; rules of conduct for Board members; communications; priority setting process; and rules for committees to follow in decision-making.

The achievement of this goal is part of the Centre's contribution to the Department of Health and Community Services' strategic directions. One of the Department's strategic directions is to improve accountability and stability in the delivery of health and community services within available resources. The development of a Board policy framework supports the governance and subsequent operations of the Newfoundland and Labrador Electronic Health Record and includes mechanisms to ensure a balanced budget; activities that will help accomplish this strategic direction.

Objective 2007-2008: By March 31, 2008, the Newfoundland and Labrador Centre for Health Information has a policy framework in effect.

Discussion of Results 2007-2008

This goal has been achieved and a policy framework is in effect for the Centre for Health Information. The by-laws and policies were developed in 2006-2007 and the approval and implementation occurred in 2007-2008 after the passage of the *Centre for Health Information Act*. The achievement of this goal is part of the Centre's contribution to the Department of Health and Community Services' strategic directions. One of the Department's strategic directions is to improve accountability and stability in the delivery of health and community services within available resources. The development of a Board policy framework supports the governance and subsequent operations of the

Newfoundland and Labrador Electronic Health Record and includes mechanisms to ensure a balanced budget.

Issue 4: Communications Plan

The Centre for Health Information provides significant health, economic, and financial benefits, and support to health professionals, which the Centre communicates to its clients and stakeholders. The Centre has developed a strategic communications plan to promote the value of quality health information.

This contributes to the Department of Health and Community Services' strategic direction of improving the accountability and stability in the delivery of health and community services within available resources. By communicating its activities to stakeholders and the public, the Centre is promoting the importance of quality health information and the benefits of the electronic health record, both of which will have a positive impact on the delivery of health and community services in the future.

Goal 2006-2008: By March 31, 2008, the Centre for Health Information has implemented a communications plan that includes strategies for promoting the value of quality health information and the Centre's role in making this information available in Newfoundland and Labrador.

Measure 2006-2008: Completed a communication plan that includes:

- Messaging to explain quality health information
- Improving understanding of the Centre's mandate among clients and stakeholders
- Increasing opportunities and support for the Centre through external partnerships
- Improving the public's and health care professionals' confidence in the privacy and security of the Electronic Health Record and the Health Information Network
- Initiating changes in public policy endorsed and facilitated by the Centre's partners and stakeholders
- Improving recognition of the Centre's expertise in evaluation research; and the Centre's leadership position in EHR development

	INDICATORS 2006-2008	ACCOMPLISHMENTS 2006-2008
	nunications plan has clear roles esponsibilities regarding: Monitoring the implementation of the communications plan	The communications subcommittee of the Board of Directors monitors the implementation of the plan, identifies priority items, establishes timelines,
		and evaluates the progress made on each tactic.
0	Engagement sessions with stakeholders and clients	Information has been collected from a number of stakeholder groups during engagement sessions as part of the work of the Provider Registry and Pharmacy Network projects. The results of the recently completed Change Readiness Assessments for physicians and nurse practitioners will be used to plan and develop future communication to these stakeholder groups.
0	Focus groups / survey of client needs and perceptions	The Centre for Health Information stays in close contact with stakeholders, in part through membership on over 60 committees. The Centre uses a variety of tools to gauge stakeholder perception, including meetings, informal focus groups, and surveys.
0	Corporate image developed	The Centre has developed a corporate image. A standards manual, <i>Document</i> <i>Writing Guidelines</i> and <i>Graphic Style</i> <i>and Standards</i> , has been developed to ensure consistent use of messaging and logo.

Discussion of Results 2006-2008

This goal has been achieved. A communications plan has been developed that addresses the issues identified in the measure for 2006-2008. Through extensive media and stakeholder relations, the Centre has made progress in achieving the goals and objectives outlined in the communications plan. Efforts have largely focused on improving understanding of the Centre for Health Information's mandate for the Electronic Health Record development and recognition of the organization's expertise in evaluation research. It is important for stakeholders to understand the benefits of an electronic health record in order to realize the Department of Health and Community Services' strategic direction that addresses the development of the provincial electronic health record. Without stakeholder support, the system will not be used to its full benefit.

Objective 2007-2008: By 2008, the Newfoundland and Labrador Centre for Health Information has implemented a communications plan that includes strategies for monitoring and strengthening the Centre's image with its clients.

Discussion of Results 2007-2008

This goal has been achieved. Using the communications plan as a guide, the Centre for Health Information continues to strengthen its image among its clients using such tools as publications, meetings, and presentations. It is important for stakeholders to understand the benefits of an electronic health record in order to realize the Department's strategic direction that address the development of the provincial electronic health record. Without stakeholder support, the system will not be used to its full benefit. To assess stakeholder support, the Centre has developed various mechanisms to monitor its image and relationship with clients, including mini-surveys, as well as tactics to strengthen relationships with key stakeholders.

The objectives, measures and indicators for 2007-08 are taken from the Centre for Health Information's Business Plan 2006-2008 and the Centre for Health Information's Business Plan 2008-2011. Both documents are available online at <u>www.nlchi.nl.ca</u> or by calling 709-752-6000.

Goals & Objectives 2008-09

The objectives, measures and indicators for 2008-09 are taken from the Centre for Health Information's *Business Plan 2008-2011*. As evident in the new business plan, the Centre for Health Information has adopted a revised vision and mission statement to better reflect the role it plays in the provincial health system and the organization's desired outcome.

To see a copy of the complete plan, including objectives, measures and indicators for 2009-10 and 2010-11 please visit <u>www.nlchi.nl.ca</u> or call 709-752-6000.

Issue 1: Provincial Health Information Systems

Goal

By March 31, 2011, the Centre for Health Information will have **implemented the priority elements of the provincial health information systems** with a focus on the Newfoundland and Labrador Electronic Health Record priorities.

Measure

Implemented the priority components of the Electronic Health Record and supported the planning and implementation of other provincial health information systems.

Indicators

- Approved and updated as required, a strategic plan for provincial health information system development and operations management
- Transitioned the interoperable Newfoundland and Labrador Electronic Health Record to an operational state
- Ensured benefits evaluations reports are prepared for each provincial health information system development

Year One Objective

By March 31, 2009, the Centre for Health Information has an updated strategic plan for implementing the priority components of the Electronic Health Record

Measure

Identified opportunities for expanding or planning for development of other provincial health information systems

Indicators

- Developed and received approval from the board of directors for the strategic plan for health information systems
- Ensured the plan includes a strong emphasis on
 - The privacy and security of health information systems
 - Change management strategies to ensure adoption by users
- Established development priorities for provincial health information systems
 - Prioritized Electronic Health Records systems projects
 - Identified other health information systems
- Approved funding is in place
 - Identified Infoway funding commitments and opportunities
 - Identified provincial and other funding commitments and opportunities
- Prepared quarterly reports for the board of directors

Issue 2: Data Quality

As the Centre for Health Information becomes the custodian of more databases of personal health information its role in supporting evidence-based decision-making through assessing data quality becomes more important. Data quality is defined as having five attributes: accuracy, timeliness, usefulness, comparability, and relevance.

Goal

By March 31, 2011 the Centre for Health Information will have developed and **implemented a corporate data quality program** for key databases of which it is the custodian.

Measure

Implemented a corporate data quality framework to assess the quality of databases at the Centre for Health Information's databases

Indicators

- Developed a data quality framework
- Reported regularly to the board of directors on the quality of data in the Centre for Health Information's databases

Year One Objective

By March 31, 2009, the Centre for Health Information has developed the conceptual model of a data quality framework and identified the databases to be included in that framework.

Measure

Developed the conceptual model of a data quality framework

Indicators

- Identified and documented the databases to be included in that framework
- Developed a draft conceptual model
- Stakeholder consultations have been completed

Issue 3: Health Research Plan

The Centre for Health Information plays an increasingly important role in applied health research which contributes to evidenced-based planning in the health system. The Centre needs to have in place a strategy to continue its role, particularly in light of new data available from the Electronic Health Record.

Goal

By March 31, 2011 the Centre for Health Information will have **developed**, **approved and implemented a comprehensive health research plan** that supports the use of quality information that can lead to improved health and health policy.

Measure

A comprehensive health research plan is implemented by the Centre for Health Information's Board of Directors

Indicators

- Developed a research plan with input from key stakeholders
- Approved research plan
- Implemented research activities in line with the plan

Year One Objective

By March 31, 2009, the Centre for Health Information has developed a research plan that incorporates feedback from key stakeholders

Measure Completed research plan

Indicators

- Developed a preliminary framework for a health research plan
- Developed a stakeholder consultation plan
- Organized stakeholder consultations (internal and external)
- Completed consultations
- Developed a research plan that incorporated broad stakeholder feedback

Issue 4: Organizational Planning

The Board recognizes that strong planning and monitoring is necessary to achieve its Mission Statement.

Goal

By March 31, 2011, the Centre for Health Information will have **reported on the effectiveness of its organization** that includes a financial plan, a human resources plan, and an operational plan that supports the management of provincial health information systems operations under its jurisdiction.

Measure

Used an appropriate reporting mechanism

Indicators

- Determined the appropriate reporting mechanism
- Approved a three-year financial plan
- Approved a three year human resource plan
- Approved the electronic health record operational plan
- Approved a revenue-generating strategy for the Centre for Health Information

Year One Objective

By March 31, 2009, the Centre for Health Information has an improved operational reporting mechanism in place for reporting to the Board and the Department of Health and Community Services

Measure

The Board of Directors has approved three-year financial, human resources and health information systems operation plans.

Indicators

- Implemented the Electronic Health Record governance model
- Developed a reporting mechanism, such as a balanced score card

- Developed health information systems operation plans, including funding of each approved electronic health record systems development project
- A three-year financial plan is developed
- A human resources plan is developed
- Developed an internal communications plan and implemented appropriate communications activities
- Submitted an annual report to the Minister of Health and Community Services

Issue 5: Communications

The Newfoundland and Labrador Centre for Health Information provides significant health, economic, and financial benefits to the province, and support to health professionals, which the Centre needs to communicate to its clients and stakeholders. The Centre's accountability to the public includes making reasonable efforts to increase awareness of the value of its work.

Goal 5

By March 31, 2011, the Centre for Health Information will be **recognized among stakeholders, researchers and the public for its role** in promoting and using quality health information.

Measure

An increased awareness by stakeholders and the public of the Centre's role in providing quality health information

Indicators

- Annual monitoring of stakeholders awareness and understanding of the Centre for Health Information mission and activities
- Appropriate changes made to the Centre's strategies and plan based on this monitoring

Year One Objective

By March 31, 2009, the Centre for Health Information has developed and executed its strategic directions for creating awareness among the public and stakeholders of the Centre's role in promoting and using quality information.

Measure

Executed communication activities

Indicators

- Developed communications strategic directions
- Developed annual communications priorities
- Developed and undertook public opinion polls
- Prepared and undertook key informant interviews
- Participated in and monitored stakeholders consultations

- Developed monitoring reports
- Issued public releases and engaged in other public relations activities
- Submitted quarterly reports to the board of directors

Opportunities & Challenges

Opportunities

- The Centre has been working to strengthen and communicate its data management and access policies and procedures, striking an acceptable balance between protection of privacy and confidentiality and improved access to usable data for research and surveillance activities. Setting a precedent for other agencies and organizations, the Centre is poised to provide leadership and guidance on data management and the protection of personal health information in Newfoundland and Labrador.
- In the coming years, the Centre hopes to expand on opportunities to support policy development through health research and build capacity for data development and management. This will particularly be the case with data being collected through the electronic health record.
- As a trusted source of data management and linkage, the Centre has a team of highly-educated and experienced research staff and is helping to build research capacity across the province.
- Opportunities exist to expand research to include data that will be collected through the electronic health record.
- The Centre for Health Information is poised to take advantage of its recognition as a national leader in electronic health record development and benefits evaluation.
- Continued progress on the development of the electronic health record will present opportunities to improve patient care and accountability in the health system.
- Electronic data exchange between stakeholders could dramatically increase the timeliness of report distribution/data exchange, reduce data entry and increase security.

Challenges

 Newfoundland and Labrador Electronic Health Record projects are moving from the planning to implementation stage and the Centre for Health Information's role in conducting research and providing provincial information services and database management is expanding. Human resources with specialized skill sets will be required to ensure the organization achieves its full potential. Attracting and retaining experienced and qualified staff will require considerable attention and careful planning in the coming year.

- The Pharmacy Network, which will improve the sharing of personal health information among private community pharmacists and health professionals in the Regional Health Authorities, among others, will be in use before the proclamation of the *Personal Health Information Act*. This presents challenges for the legal authority, for the disclosure of personal health information to the Pharmacy Network via the Health Information Network.
- The Centre for Health Information will be working with the Department of Health and Community Services and the Regional Health Authorities, to prepare the provincial health system for the proclamation of the *Personal Health Information Act.* This will require a significant commitment from all entities involved in the process.
- The Centre for Health Information is recognized as an independent and trusted third-party for data management and linkage by custodians of personal health information and researchers. As such, the Centre is faced with the challenge of ensuring the confidentiality of individuals by enforcing rules around de-identification, and "psuedonomizing" information and educating other users on these and other standards of data usage. Infoway is currently considering defining "pseudonymous" health data as personal health data in which the identity has been encrypted or otherwise concealed, but nonetheless individualized so that it is possible to follow each person through the health system without his or her identity being revealed.
- In 2007-08, the Centre for Health Information welcomed eleven new employees. During 2008-09, the Centre will continue to grow in size. While continued growth is a reflection of the Centre's achievements, it continues to be a challenge to the organization to obtain adequate office space for its growing staff, and to successfully integrate them into the organization.
- The Centre will continue to be challenged by growth in its Newfoundland and Labrador Electronic Health Record project portfolio, and the additional complexity of coordinating the interoperability of the various electronic health record components, as they move from planning to implementation stage.
- As Newfoundland and Labrador Electronic Health Record projects move from the planning to implementation phase, the Centre will be challenged by the additional complexity this brings to coordinating other provincial information system initiatives, and increasing workloads for the Regional Health Authorities.

 Keeping pace with evolving national standards development work, while providing the necessary support to provincial applications of those standards in multiple information systems and databases, will remain a challenge for 2008-09
 particularly, with a new version of national MIS Standards being released in 2009 which will require significant effort from the Centre for Health Information to facilitate provincial adoption.

Financial Statements

Provincial Plan revenues of \$3.11M and respective operational related expenditures are relatively consistent year over year. The decrease in Infoway funding revenues in 2008 was a result of less activity in this area; expenses related to these revenues have also decreased.

Government project grant revenue was comprised of provincial funding towards the Diagnostic Imaging/Picture Archiving and Communications System, Pharmacy, Telehealth and Primary Health Care initiatives. Deferred Capital Amortization decreased in 2008 compared to 2007 as the majority of the benefit from amortization had been realized in previous years. Interest income was earned by the Centre on funds held in trust by Eastern Health.

Total expenses were lower in 2008 than 2007 as a result of less activity relating to Infoway funding in the current year.

The Audited Financial Statements, approved by the Centre's Board of Directors, are located in the next section of this report.



Financial Statements

Newfoundland and Labrador Centre for Health Information

March 31, 2008

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Auditors' report

Grant Thornton LLP 187 Kenmount Road St. John's, NL A1B 3P9 T (709) 722-5960 F (709) 722-7892 www.GrantThornton.ca

To the Directors of the

Newfoundland and Labrador Centre for Health Information

We have audited the statement of financial position of the Newfoundland and Labrador Centre for Health Information at March 31, 2008 and the statements of operations, changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the Centre's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Newfoundland and Labrador Centre for Health Information as at March 31, 2008 and the results of its operations and its cash flow for the year then ended in accordance with Canadian generally accepted accounting principles.

Grant Thornton LLP

St. John's, Newfoundland and Labrador

June 14, 2008

Chartered Accountants

Statements of Operations and Changes in Net Assets Year Ended March 31 2008

	2000	2001
Revenue Government operating grants Canada Health Infoway Research funding Government project grants Amortization of deferred capital contributions	\$ 3,113,694 3,607,828 589,896 1,961,252 111,442	\$ 3,071,151 5,560,610 416,104 2,574,978 434,779 270,000
Interest income Other	197,110 	270,000 20,400 12,348,022
Expenditure		
Advertising	3,690	4,042
Consulting fees	1,051,385	2,898,275
Data communications	363,155	138,795
Depreciation	211,715	486,723
Human Resources initiatives	10,058	12,500
Insurance	20,235	-
Miscellaneous	6,160	4,368
Office supplies	149,964	130,995
Picture Archiving and Communication System		
Regional Integrated Health Authority reimbursements	3,488,315	4,621,505
Primary health care equipment	-	444,702
Pharmacy network change management	194,759	-
Professional fees	104,254	59,395
Rent	286,051	188,891
Salaries and benefits	2,963,559	2,619,076
Software maintenance	291,253	237,081
Telephone	79,955	89,467
Training Travel	58,423	84,298
Travel	175,574	188,217
	<u>9,458,505</u>	12,208,330
Excess of revenue over expenditure	\$ 122,717	\$ 139,692
Net assets, beginning of year	\$ 799,826	\$ 660,134
Excess of revenue over expenditure	122,717	139,692
Net assets, end of year	\$ 922,543	\$ 799 , 826

See accompanying notes to the financial statements.

2007

Statement of Financial Position March 31	2008	2007
Assets		
Current		
Cash and cash equivalents Receivables (Note 3)	\$ 2,178,397 6,396,883	\$ 10,886,872
Prepaids	43,998	-
Deferred project costs	4,557,401	4,719,475
	13,176,679	15,606,347
Equipment (Note 4)	8,619,647	5,562,153
	\$ 21,796,326	\$ 21,168,500
Liabilities		
Current Payables and accruals (Note 5)	\$ 3,255,106	\$ 7,199,246
Deferred capital contributions (Note 6)	624,790	435,167
Deferred revenue	9,524,440	7,333,325
	13,404,336	14,967,738
Deferred capital contributions (Note 6)	7,048,536	5,016,490
Accrued severance pay	420,911	384,446
	20,873,783	20,368,674
Net Assets	000 542	700.826
Net assets	922,543	799,826
	\$ 21,796,326	\$ 21,168,500
Commitment (Note 8)	A	
On behalf of the Board		
1. CP.	WW.	
Director	117	Director

Newfoundland and Labrador Centre for

See accompanying notes to the financial statements.

Health Information		
Statement of Cash Flows Year Ended March 31	2008	2007
Increase (decrease) in cash and cash equivalents		
Operating Excess of revenue over expenditure Items not requiring a cash outlay Depreciation Amortization of deferred capital contributions Increase in severance pay accrual	\$ 122,717 211,715 (111,442) <u>36,465</u>	\$ 139,692 486,723 (434,779) <u>138,833</u>
Change in non-cash operating working capital (Note 7)	259,455 <u>2,855,040</u> <u>3,114,495</u>	330,469 (251,691) 78,778
Financing Capital contributions	2,333,111	5,372,491
Investing Purchase of capital assets	<u>(3,269,209)</u>	(5,451,269)
Increase in cash and cash equivalents	2,178,397	-
Cash and cash equivalents		
Beginning of year	<u> </u>	<u> </u>
End of year	\$ 2,178,397	\$

Newfoundland and Labrador Centre for

See accompanying notes to the financial statements.

Notes to the Financial Statements March 31, 2008

1. Nature of operations

The Newfoundland and Labrador Centre for Health Information (the Centre) was established by the Government of Newfoundland and Labrador in 1996 following the recommendation of the Health System Information Task Force (1995). Through the support of the provincial government and Canada Health Infoway, Inc., the Centre has been recognized for its contribution to the national agenda for development of the Electronic Health Record with the first provincial client registry designed and implemented for the Electronic Health Record. The Centre is also involved with data standards development and dissemination, applied health research and the evaluation of health information systems.

The Newfoundland and Labrador Centre for Health Information Act was proclaimed on April 27, 2007, thereby establishing the Centre as a Corporation without share capital under the Corporations Act. The Centre now acts as an agent of the Crown.

2. Summary of significant accounting policies

These financial statements have been prepared within the framework of Canadian generally accepted accounting principles, the more significant of which are as follows:

Basis of accounting

These financial statements include only the assets, liabilities, revenues and expenditures relating to the operations carried on under the name of Newfoundland and Labrador Centre for Health Information.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, balances with banks, and short term deposits with original maturities of three months or less. Bank borrowings are considered to be financing activities.

Use of estimates

In preparing the Centre's financial statements in conformity with Canadian generally accepted accounting principles, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and reported amounts of revenue and expenditure during the year. Actual results could differ from these estimates.

Notes to the Financial Statements March 31, 2008

2. Summary of significant accounting policies (cont'd.)

Revenue recognition

Government grants are recognized in the period in which entitlement arises. Revenue received for a future period is deferred until that future period and is reflected as deferred revenue. Revenue from research and other contracts is recognized as the related expenditures are incurred.

Administrative expenditures

The Centre is administered by contractual employees, salaried employees and employees seconded from and paid by the provincial Department of Health and Community Services. Administrative expenditures related to the Centre which are paid through the Department of Health and Community Services are not reflected in these statements.

Depreciation

Rates and basis of depreciation applied to write off the cost of equipment over their estimated lives are as follows:

Computer equipment	20%, straight line
Office furniture	15%, straight line
Computer software	33%, straight line
Pharmacy Network	33%, straight line
Unique Personal Identifier	33%, straight line

Impairment of long-lived assets

Long-lived assets are reviewed for impairment upon the occurrence of events or changes in circumstances indicating that the value of the assets may not be recoverable, as measured by comparing their net book value to the estimated undiscounted cash flows generated by their use. Impaired assets are recorded at fair value, determined principally using discounted future cash flows expected from their use and eventual disposition.

Capital contributions

Capital contributions are recorded as deferred contributions and amortized to income on a straight line basis using the same rates as the depreciation expense related to the capital assets purchased.

Notes to the Financial Statements March 31, 2008

2. Summary of significant accounting policies (cont'd.)

Severance pay

Severance pay is accounted for on an accrual basis and is calculated based upon years of service and current salary levels. The right to be paid severance pay vests with employees with nine years of continual service, and accordingly no provision has been made in accounts for employees with less than nine years of continual service. As well, no provision has been made for contractual employees and employees seconded from the provincial Department of Health and Community Services. Severance pay is payable when the employee ceases employment with the Centre.

Pension costs

Employees of the Centre are covered by the Public Service Pension Plan administered by the Government of Newfoundland and Labrador. Contributions to the plan are required from both the employees and the Centre. The annual contributions for pensions are recognized in the accounts on a current basis.

Accounting standards and policies adopted during the year

(i) Accounting changes

In July 2006, the Canadian Institute of Chartered Accountants ("CICA") issued Section 1506 of the CICA Handbook, "Accounting Changes", which describes the criteria for changing accounting policies, along with the accounting and disclosure for changes in accounting policies, changes in accounting estimates and correction of errors. These changes came into effect as of January 1, 2007 and are applicable for the Centre's year ended March 31, 2008.

(ii) Financial instruments - Recognition and Measurement

On April 1, 2007, the Centre implemented the CICA Handbook Sections 3855, "Financial Instruments - Recognition and Measurement" and 3861, "Financial Instruments - Disclosure and Presentation". These standards have been applied without restatement of prior years. There are no transitional adjustments resulting from these standards to be recognized in the opening balance of net assets.

Section 3855, "Financial Instruments - Recognition and Measurement", requires the Organization to revalue all of its financial assets and liabilities at fair value on the initial date of implementation.

This standard also requires the Centre to classify financial assets and liabilities according to their characteristics and management's choices and intentions related thereto for the purposes of ongoing measurements. Classification choices for financial assets include: a) held for trading - measured at fair value with changes in fair value recorded in net earnings; b) held to maturity –

Notes to the Financial Statements

March 31, 2008

2. Summary of significant accounting policies (cont'd.)

recorded at amortized cost with gains and losses recognized in net earnings in the period that the asset is no longer recognized or impaired; c) available-for-sale - measured at fair value with changes in fair value recognized in net assets for the current period until realized through disposal or impairment; and d) loans and receivables - recorded at amortized cost with gains and losses recognized in net earnings in the period that the asset is no longer recognized or impaired.

Classification choices for financial liabilities include: a) held for trading - measured at fair value with changes in fair value recorded in net earnings and b) other - measured at amortized cost with gains and losses recognized in net earnings in the period that the liability is no longer recognized.

Subsequent measurement for these assets and liabilities are based on either fair value or amortized cost using the effective interest method, depending upon their classification. Any financial asset or liability can be classified as held for trading as long as its fair value is reliably determinable.

In accordance with the new standard, the Centre's financial assets and liabilities are generally classified and measured as follows:

Asset/Liability	Classification	Measurement
Cash and cash equivalents	Held for trading	Fair value
Receivables	Loans and receivables	Amortized cost
Payables and accruals	Other liabilities	Amortized cost

Other balance sheet accounts, such as prepaids, deferred project costs, equipment, deferred capital contributions and deferred revenue are not within the scope of the new accounting standards as they are not financial instruments.

Embedded derivatives are required to be separated and measured at fair values if certain criteria are met. Under an election permitted by the new standard, management reviewed contracts entered into or modified subsequent to April 1, 2007 and determined that the Centre does not currently have any significant embedded derivatives in its contracts that require separate accounting treatment.

The fair value of a financial instrument is the estimated amount that the Centre would receive or pay to terminate the instrument agreement at the reporting date. To estimate the fair value of each type of financial instrument various market value data and other valuation techniques were used as appropriate. The fair values of cash approximated its carrying value.

Notes to the Financial Statements

March 31, 2008

2. Summary of significant accounting policies (cont'd.)

(iii) Financial instruments - Disclosure and Presentation

Section 3861, "Financial Instruments - Disclosure and Presentation", which replaces CICA Section 3860, of the same title, establishes standards for the presentation of financial instruments and non-financial derivatives, and identifies the information that should be disclosed about them.

Future changes in accounting policies

(i) Financial Instruments – Disclosure – Presentation

CICA Section 3862 "Financial Instruments – Disclosure" and section 3863 "Financial Instruments - Presentation" replaces CICA Section 3861, "Financial Instruments – Disclosure and Presentation". CICA Section 3862 requires increased disclosures regarding the risks associated with financial instruments such as credit risk, liquidity risk and market risks and the techniques used to identify, monitor and manage these risks. CICA Section 3863 carries forward standards for presentation of financial instruments and non-financial derivatives and provides additional guidance for the classification of financial instruments, from the perspective of the issuer, between liabilities and equity. These standards are effective for financial statements relating to fiscal years beginning on or after October 1, 2007.

The Centre does not expect the adoption of this standard to have a significant impact on its financial disclosure and results of operations.

3. Receivables	<u>2008</u>	<u>2007</u>
Government of Newfoundland and Labrador	\$ 1,328,434	\$ 564,021
Eastern Health	4,253,175	5,014,735
Health Infostructure Atlantic	-	215,403
H.S.T receivable	594,785	-
Canada Health Infoway	-	4,955,117
Other	220,489	137,596
	\$ 6,396,883	\$ 10,886,872

Notes to the Financial Statements

March 31, 2008

4.	Equipment				<u>2008</u>		<u>2007</u>
		<u>Cost</u>	 ccumulated	Be	Net ook Value	<u>B</u>	Net ook Value
Office Compu Pharma	iter equipment furniture iter software icy network Personal Identifier	\$ 1,864,430 157,252 9,024,924 787,757 3,401,478	\$ 874,731 90,094 1,462,134 787,757 <u>3,401,478</u>	\$	989,699 67,158 7,562,790 - -	\$	121,932 36,784 5,403,437 -
		\$ 15,235,841	\$ 6,616,194	\$	8,619,647	\$	5,562,153

During the year, the Centre purchased \$3,269,209 of capital assets, however, as of March 31, 2008 no capital funding has been received for \$2,691,780 of these assets. The Centre is in the process of preparing claims to be submitted to Canada Health Infoway with regards to these assets and no amounts have been recorded as accounts receivable as of March 31, 2008

5. Payables and accruals	<u>2008</u>	<u>2007</u>
Trade and sundry Vacation and compensatory pay	\$ 2,933,017 322,089 \$ 3,255,106	\$ 6,969,981 229,265 \$ 7,199,246
6. Deferred capital contributions	<u>2008</u>	<u>2007</u>
Opening balance Capital contributions from Government Capital contribution from Infoway Amortization of deferred contribution	\$ 5,451,657 863,861 1,469,250 (111,442)	\$ 513,945 1,343,123 4,029,368 (434,779)
Less: current portion	7,673,326 <u>624,790</u>	5,451,657 <u>435,167</u>
	\$ 7,048,536	\$ 5,016,490

Notes to the Financial Statements

March 31, 2008

7. Supplemental cash flow information	<u>2008</u>	2007
Change in non-cash operating working capital		
Receivables Prepaids Deferred project costs Payables and accruals Deferred revenue	<pre>\$ 4,489,989</pre>	\$ (3,763,480) (4,719,475) 6,945,496 1,285,768 \$ (251,691)

8. Commitment

The Centre is committed under a five year operating lease agreement for the rental of office space to make annual payments of \$261,351. This lease agreement will terminate on March 31, 2012.

Appendix A

Centre for Health Information's Mandate and Mission

Mandate

Section 4, subsection 1 of the Centre for Health Information Act is:

(1) The object of the centre is to assist individuals, communities, health service providers and policy makers at federal, provincial and regional levels in making informed decisions to enhance the health and well-being of persons in the province by providing a comprehensive province-wide information system that

- a) protects the confidentiality and security of personal information that is collected, used, disclosed, stored or disposed of by the centre;
- b) provides accurate and current information to users of the health and community services system;
- c) integrates data from all components of the health and community services system;
- d) is efficient and cost-effective; and
- e) is flexible and responsive to the changing requirements of users of the system.
- f) The centre shall operate without the purpose of gain and any excess revenue shall be used for the objects in subsection (1).

The provincial health information system, linking all partners in the delivery of care and service, is known as the Health Information Network. It currently connects the Department of Health and Community Services, the Regional Health Authorities, and the Centre for Health Information. In the future, other authorized users will also be connected to the Health Information Network (e.g. community pharmacies). The Unique Personal Identifier/Client Registry uses the Health Information Network to transmit demographic information. Other information systems developed by the health sector will use the Health Information Network to share information among users, meeting the privacy, technical and data standards set by the Centre. These health information systems together will enable the creation of an Electronic Health Record for every person in the province.

Working Together... For Better Health Information – A Memorandum of Understanding between the Department of Health and Community Services and the Newfoundland and Labrador Centre for Health Information (June 2002)

- The Memorandum of Understanding is intended to promote effective and efficient working relationships between the Department of Health and Community Services and the Centre.
- The Memorandum assigns primary and shared responsibility to the Centre for several databases of personal information.

- The Centre is granted full authority on behalf of the province to access databases held by the Department of Health and Community Services and the Centre for purposes of research and report production.
- Reports will be provincial in scope, with regional reports done as required.
- The Centre will assist stakeholders, through its consultation services, to utilize and generate reports using data held by stakeholders.
- The Privacy, Confidentiality and Access Standards (now Principles) of the Centre, federal and provincial legislation, policy and standards will govern all data access, use, and release from these databases.
- Public/private/third sector partnerships are endorsed to support common goals.
- The Centre is responsible for providing provincial coordination and leadership regarding technical and data standards for health information systems, working closely with all stakeholders and partners.
- The Centre will collaborate closely with the Department of Health and Community Services to protect the privacy of personal information.

Mission

The Centre is responsible for the development of a confidential and secure Health Information Network that will serve as the foundation for the provincial Electronic Health Record. Through the support of the provincial government and Canada Health Infoway, Inc. the Centre has been recognized for its contribution to the national agenda for development of the Electronic Health Record with the first provincial client registry designed and implemented specifically for the Electronic Health Record.

By March 31, 2011, the Centre for Health Information will have implemented all funded components of the Electronic Health Record, and these will be in use by authorized users.

Measure 1

Implemented all funded components of the Electronic Health Record

Indicators

- Implemented the provincial Diagnostic Imaging/Picture Archiving and Communications System
 - Implemented interoperability between Diagnostic Imaging/Picture Archiving and Communications System and the Unique Personal Identifier/Client Registry
- Implemented the Newfoundland and Labrador Pharmacy Network
 - All community pharmacies are linked
 - All hospital pharmacies are linked to community pharmacies
 - o e-prescribing functionality is available to physicians

- Pursued funding to implement a provincial Laboratory Information System
 - Provided accurate and comprehensive information to Canada Health Infoway and the Department of Health and Community Services to support a funding request
- Pursued funding to implement Telehealth in selected sites and programs
 - Provided accurate and comprehensive information to Canada Health Infoway and the Department of Health and Community Services to support a funding request.
- Pursued funding to develop interoperable functionality for information systems that form the basis of the Electronic Health Record
 - Provided accurate and comprehensive information to Canada Health Infoway and the Department of Health and Community Services to support a funding request
- Documented the achieved benefits to the users and the health system of each information system that is fully implemented

Measure 2

The Electronic Health Record will be used by authorized users

Indicators

• Working with clients and stakeholders, a process for developing a governance structure for the Electronic Health Record will be approved. The governance structure will include the criteria and process for authorizing users of the Electronic Health Record.

Appendix B

List of Databases at the Centre for Health Information

The Centre for Health Information is required under its Regulations to give notice of the collection, use or disclosure of personal health information by publishing on its website and in its annual report an exhaustive list of all the databases used in its operations.

List of Databases at the Centre for Health Information As of June 23, 2008

The Centre for Health Information is the custodian* **of the** Client Registry (formerly known as the Unique Personal Identifier/Client Registry)

The Centre for Health Information is the custodian for these databases at the request of the Department of Health and Community Services

- Clinical Database Management System (CDMS) (1995/96 to 2005/06)
- National Diabetes Surveillance System (1995 to 2006)
- Provincial Rehabilitation Database (2004/05 and 2005/06)
- National Population Health Survey (NPHS) (1994/95 to 2002/03)
- Canadian Tobacco Use Monitoring Survey (2000 to 2006)
- The Canadian Community Health Survey (CCHS) (Cycle 1.1, General Household Survey 2000/01; Cycle 1.2, Mental Health Survey 2002, Cycle 2.1, General Household Survey 2003, Cycle 2.2, General Nutrition Survey 2004, Cycle 3.1 General Household Survey 2005, Cycle 4.1 General Household Survey 2007)
- ER/PR Patient Listing and Communication Events database

The Centre is an authorized user of these Medical Care Plan, Department of Health and Community Services databases for approved analysis and research:

- MCP Claims database (1995 to 2007)
- MCP Beneficiary database (1995 to 2007)
- MCP Provider Registry (2003)

The Centre through agreements with Statistics Canada is custodian for the following databases

- Census (1996 and 2001)
- Population Estimates (1991 to 2006)
- National Longitudinal Survey of Children and Youth (1994/95 and 1996/97)

The Centre is the custodian of databases containing vital statistics information provided by the Department of Government Services, Vital Statistics Branch and personal health information provided by the Department of Health and Community Services

- Statistics Canada Annual Mortality Data Files (1991 to 2005)
- Centre for Health Information Live Birth System (1992 to 2006)
- Centre for Health Information Mortality System (1991 to 2006)

The Centre holds these databases as an information manager* on behalf of specific research studies

- Psoriasis clinical data, NewLab Clinical Research Inc.
- Colorectal Cancer Database, Memorial University, Genetics
- Cardiac Death Database, Memorial University, Genetics
- Miwpukek Diabetes Data, Conne River Health and Social Services
- Prescription Drug Study Data, RxCanada
- Suicide Data, Office of the Chief Medical Examiner (1997 to 2006)
- Cervical Cancer Surveillance System
- Emergency Room Triage Data, Eastern Health
- Adolescent Health Survey, Central Health
- Public Health Lab data , Health Sciences Centre, and Carbonear and Gander hospitals
- Primary Health Care Survey data
- Wait List Data for Hip and Knee Replacement (2002-2005), Eastern Health

* The definitions used for "custodian" and "information manager" are from the Personal Health Information Act (pending).

- A custodian means a person described in the Act who has custody or control of personal health information as a result of or in connection with the performance of the person's powers or duties or the work.
- An information manager means a person or body, other than an employee of a custodian acting in the course of his or her employment, that processes, retrieves, stores or disposes of personal health information for a custodian, or provides information management or information technology services to a custodian;

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