Newfoundland & Labrador
Centre for Health Information

Annual Business Report
2008 - 2009

Building the Path to Improved Health
Through Quality Health Information

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Message from the Chair

On behalf of the Board of Directors, I am pleased to submit the 2008-09 Annual Business Report for the Newfoundland and Labrador Centre for Health Information to the Minister of Health and Community Services.

During 2008-09, the Centre made great progress towards our vision of *improved health through quality health information.* The provincial electronic health record took major steps in its development, with the Pharmacy Network poised for implementation in community pharmacies, the announcement of funding for the interoperable Electronic Health Records/Laboratory project, and planning for a public health surveillance system. The tele-nephrology Telehealth program was well received and is seen as a catalyst for teleheath expansion across other chronic disease management initiatives. The Health Information Network, which provides the infrastructure required for these projects, is in place and a service desk was launched to provide support to users of the system.

The Centre's Research and Evaluation Department continued their stellar work and attracted funding from a variety of sources. Centre staff continued to work with partners on improving the quality of health information toward supporting an efficient and effective health system for the people of this province.

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.

Bill Fanning
Chair, Board of Directors

Message from the CEO

They say that change is the only constant and that is quite applicable to the Centre for Health Information. During 2008-09, the Centre's second year as a crown corporation, we welcomed 43 new employees, effectively doubling in size. A change of this magnitude creates both challenges and opportunities.

The expansion of the Centre's team provides more resources to help us achieve our mission, to develop the priority elements of the electronic health record and support the planning and implementation of other new or improved provincial health information systems, improve the quality of data we hold, and expand our health research capacity, all in an effort to contribute to the improved health of the people of Newfoundland and Labrador.

As we move forward with projects and secure more resources, organizational restructuring has occurred and will continue as required. New is the Clinical Information Programs Department, which is responsible for the clinical integration of the electronic health record within the provincial health system. The Health Information Network Department, which contributes to national standards setting for managing the development and operations of the secure electronic health record and infrastructure, now has three Divisions: EHR (Electronic Health Records) Projects, Operations, and Infrastructure and Special Projects.

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
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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 Quality Health Information

Mission
The Centre is responsible for the development of a confidential and secure Health Information Network which 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. The Centre is also responsible for the appropriate use of quality health data to support improvements in the health system.

By March 31, 2011, the Centre for Health Information will have implemented the priority elements of the electronic health record and supported the planning and implementation of other new or improved provincial health information systems, improved the quality of data held by the Centre, and expanded health research capacity at the Centre to contribute to the improved health of the people of Newfoundland and Labrador.

Lines of Business
The Centre for Health Information is an integral part of the Newfoundland and Labrador health system through supporting improvements in the collection of data and use of information for individual care, administration, planning, and research. The Centre's services are available to the Provincial and Federal Governments and their agencies, community organizations, health professionals, and researchers. Information is also available to the public. While the Centre strives to deliver its services without cost to clients, there are instances when a fee is charged.

The Centre ensures that all collection, use, and disclosure of personal health information is compliant with the _Access to Information and Protection of Privacy Act_, the _Centre for Health Information Act_ and other relevant legislation.

1. Provincial Health Information Systems

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, designing, implementing, and maintaining the Newfoundland and Labrador electronic health record and the Health Information Network,
- collaborating with its clients to ensure the desired outcomes of the comprehensive province-wide information system are achieved,
- managing the privacy and security of personal information transmitted to or via the Health Information Network,
- coordinating provincial participation in national standard setting activities for the electronic health record, and
- managing the planning, designing, and implementation of specific provincial health information systems.

2. Quality Information

Quality health information is information that is accurate, timely, useable, relevant, and comparable. 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. 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. The Centre is responsible for the development of financial, statistical, social, demographic, and clinical data standards in the health sector, thereby ensuring that data collected is uniform in definition, measurement, collection, and interpretation. The Centre is also responsible for developing and maintaining health databases on behalf of the Province. The activities that support this are:

Standards Development and Implementation

- participating in national standard setting committees and initiatives,
- interpreting national standards and developing provincial customization, thereby adding value for the Newfoundland and Labrador health environment, and
- working closely with provincial stakeholders on the development and adoption of national and provincial standards, and supporting implementation through education and consultative services.

Data Quality Initiatives
- managing the provincial database of demographic information associated with the Client Registry[1],
- managing databases on behalf of other custodians, including the Department of Health and Community Services,
- evaluating data quality through assessing the accuracy of coding in health records, an activity known as reabstracting, and
- audits and training for the users of the Client Registry.

3. Research

The Centre engages in applied health research which is the study into the health of populations, and issues related to access, use, cost, quality, delivery, organizational management, financing, and outcome of health information systems. The Centre uses administrative databases, surveys, focus groups and key informant interviews to conduct this work. The Centre assists the Department of Health and Community Services, Regional Health Authorities, researchers and others in similar research that they undertake. The Centre collaborates with Memorial University, the Patient Research Centre, and other research organizations within the province. The Centre supports others by:
- preparing reports and analyzing data using health databases available to the Centre,
- conducting applied health research independently and in collaboration with clients, and
- performing data linkages for researchers and public bodies.

## Number of Employees and Physical Location

The Centre is structured into five departments: Health Information Network; Research and Evaluation; Clinical Information Programs; Privacy and Corporate Services; and Finance and Administration. It currently employs 99 full and part-time staff; 39 males and 60 females, as well as two part-time students and one work-term student (two males and one female). The majority of staff work in the Centre's main office located at 28 Pippy Place, St. John's. Some staff from Finance and the service desk work out of 33 Pippy Place. The Centre will be moving to 70 O'Leary Avenue in April 2009, hosting all St. John's staff in one location. The Registry Integrity Unit, with four staff members (one male and three females), moved from Harbour Grace to Bay Roberts this fiscal year.

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[1] The Client Registry was formerly known as the Unique Personal Identifier/Client Registry. In 2007 the Client Registry was upgraded to incorporate functionality that makes it superior to the system built in 2000, and for which the term Unique Personal Identifier is not applicable.
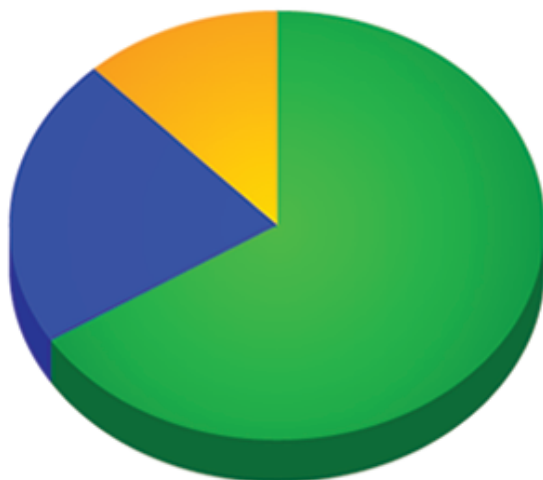
Revenues and Expenditures

Revenue by Category

- 42.96% - Government Grants
- 33.94% - Canada Health Infoway
- 15.05% - Government Project Grants
- 6.65% - Research Funding
- 1.40% - Other
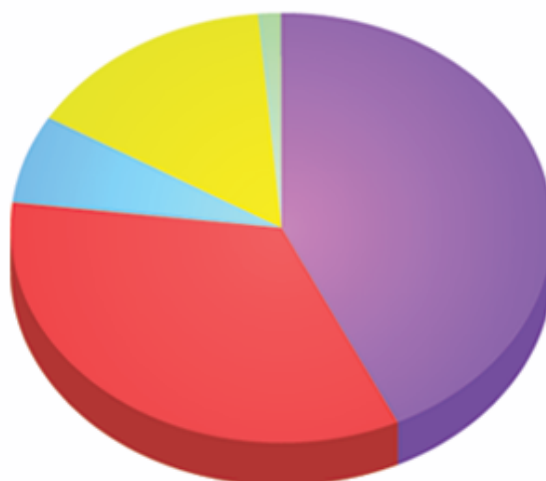
Expense 2008 – 2009

- 66% - Projects
- 22% - Administrative
- 12% - Other Operating

Shared Commitments

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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. As more components of the provincial electronic health record are developed and implemented, one anticipated benefit is a reduction in the number of repeated procedures and test orders, which may lead to improved accessibility to priority services for individuals. The provincial Telehealth program also contributes to improved accessibility by expanding the services available to individuals in their own community or in near-by centres.

In addition to the development of the provincial electronic health record, the Centre contributes to improving population health through the maintenance of key data holdings on behalf of the provincial health system and through the work conducted in its Research and Evaluation Department. The knowledge generated through this Department's research supports health policy and decision-making within the health system. The Centre's Data Quality and Standards Division updates the Chart of Accounts on an annual basis, helping to ensure that accurate data is available at the regional level, which assists in policy development and resource allocation. The Centre also contributes to strengthening public health capacity, specifically in the area of surveillance of communicable disease through the development of Panorama.

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.

- *Department of Health and Community Services:* The Centre works closely with the Department of Health and Community Services in fulfilling its mandate. The Department provides guidance and funding for the Newfoundland and Labrador electronic health record projects. In the area of data management and quality information, the Department supports the Centre in its work to assist data/ information users at all levels of the health system in the appropriate collection, interpretation and application of clinical, financial and statistical data. The Centre also works in close partnership with the Department in the areas of applied health research and policy, and in the preparation for implementation of the *Personal Health information Act.*

- *Regional Health Authorities:* The Regional Health Authorities play an integral role in the development and implementation of the Newfoundland and Labrador electronic health record. The Regional Health Authorities participate in project planning, governance and the implementation and operation of some of the electronic health record components. In line with this work, the Centre works closely with the Department of Health and Community Services and 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. The Centre partners with the health authorities on research and provides consulting and information services upon request. Staff of the Centre participate in regional committees related to data quality and information management and project committees upon the request of the Regional Health Authorities.

- *Canada Health Infoway*: Canada Health Infoway (Infoway) is a federally-funded, independent, not-for-profit organization that invests with public sector partners to accelerate electronic health record development across Canada. It provides co-funding with the Department of Health and Community Services for Newfoundland and Labrador electronic health record projects, facilitates knowledge transfer with other jurisdictions, 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*: In addition to the Department of Health and Community Services, the Centre also collaborates with other provincial government departments and entities including the Office of the Chief Information Officer, the Vital Statistics Branch of the Department of Government Services, and the Office of the Information and Privacy Commissioner.

- *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, validate provincial data published in Canadian Institute for Health Information reports, and identify and address national and provincial data quality issues.

- *Other Organizations:* In recognition of the impact that the Centre's work has and will continue to have on stakeholders, the Centre is working with a variety of organizations to achieve it's goals, including community groups, patient representatives, and advocacy groups. The Centre is a member of the Western Health Information Collaborative and has representation on several of the organization's committees. The Centre also works with the local and national vendor community and other organizations on identifying and implementing the most appropriate electronic health record solutions for the Newfoundland and Labrador environment.

- *Research partners*: The Centre for Health Information continues to collaborate on research initiatives with various disciplines at Memorial University's Faculty of Medicine and Eastern Health, the Janeway Children's Health and Rehabilitation Centre, the Patient Research Centre, and the Population Therapeutics Research Group (PTRG). The Centre collaborates with private sector researchers, as well as researchers and universities outside the province, including Dalhousie University, University of Western Ontario, University of Saskatchewan and University of Ottawa. A number of organizations provide funding for health research, including Canada Health Infoway, Health Canada, and the Public Health Agency of Canada.

Highlights and Achievements
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In 2008-09, the Centre for Health Information maintained its commitment to the vision of improved health for the people of Newfoundland and Labrador through quality health information. During the year, the Centre made progress in all areas of operation.

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

During 2008-09, the Centre, in collaboration with its partners and with funding from the Department of Health and Community Services and Canada Health Infoway, made great progress in the area of electronic health record development. Through the Centre's work, Newfoundland and Labrador has established itself as a leader in electronic health record standards and benefits evaluations. The Newfoundland and Labrador electronic health record is being developed and implemented in a phased, incremental approach; components with committed funding in 2007 will be implemented by 2011. Some components are in use now and others may not be implemented for several more years. The electronic health record is already contributing to improved health care in the province.

The work on the provincial electronic health record in 2008-09 contributed to several of the Department of Health and Community Services' strategic directions. It contributed to the improvement of accountability and stability in the delivery of health and community services within available resources and to improving population health. Once implemented, the electronic health record will provide more accurate, reliable, and comparable data for health care and services policy making, program monitoring, and resource allocation. It also contributed to strengthened public health capacity, specifically in the area of surveillance of communicable disease through the development of Panorama. As more components of the provincial electronic health record are developed and implemented, one anticipated benefit is a reduction in the number of repeated procedures and tests, which may lead to improved accessibility to priority services for individuals.

Accomplishments in Newfoundland and Labrador electronic health record development for 2008-09 include:

- Delivered the Pharmacy Network software during 2009, with the testing of the software currently in the final stages of completion. Community pharmacists will be connecting and using the Pharmacy Network to benefit patient care in 2009. A major focus for Pharmacy Network Program and operational staff has been on the development of operational policies and procedures. This involved the engagement of, and consultation with, numerous external stakeholder groups operating within the provincial health care system.

- Used the Picture Archiving and Communications System for diagnostic imaging services in the four Regional Health Authorities. A Picture Archiving and Communications System Information Governance Advisory Committee is in place to advise the Centre for Health Information on all matters related to the program.

- Used the Client Registry in hospitals, community services offices, long-term care facilities and the Medical Care Plan (MCP) to accurately identify clients. The Client Registry is integrated with the Picture Archiving and Communications System and is now preparing to integrate with the Pharmacy Network. The Registry Integrity Unit has been moved to a new location in Bay Roberts and is continuing with preparations to provide support to the Client Registry and the Provider Registry as the Pharmacy Network transitions into production in 2009. Additional resources have been recruited at the Registry Integrity Unit in preparation for the increased use of the Client Registry and the new Provider Registry.

- Established the second foundational registry of the Newfoundland and Labrador electronic health record, the Provider Registry. The Provider Registry is collecting the name, address, telephone numbers, license number, and status of the licensed members of the Newfoundland and Labrador Pharmacy Board, the College of Physicians and Surgeons of Newfoundland and Labrador, the Newfoundland and Labrador Dental Association, and the Newfoundland and Labrador Optometric Board. The Association of Registered Nurses of Newfoundland and Labrador is submitting the name, license number and status of the licensed members. This information will then be used by pharmacists through the Pharmacy Network to confirm the status of any prescriber of prescription medication in Newfoundland and Labrador. 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.

- Established the Peer-to-Peer Network to assist with adoption of information technology in the clinical environment by health professionals. The Newfoundland and Labrador Peer-to-Peer Network team includes four Physician,

two Pharmacist, and two Nurse Peer Leaders. This initiative was launched in 2007 by Canada Health Infoway as a tool to assist with transition periods and adoption of electronic clinical technology, such as the Pharmacy Network. A series of regional Peer-to-Peer Launch Workshops were held across the province in Fall 2008.

- Participated in discussions on the Pan-Canadian Public Health Communicable Disease Surveillance and Management Project (Panorama), which will build a set of consistent public health surveillance system components that each Canadian jurisdiction will acquire and implement within their own health information systems infrastructure. When implemented, Panorama will provide authorized health care professionals with the real-time ability to collect and analyze health information that is critical for managing incidents such as SARS and other communicable diseases at the regional, provincial/territorial and federal levels. The Centre for Health Information and the Department of Health and Community Services are reviewing the Panorama Project to determine priority components for Newfoundland and Labrador.

- Developed and implemented an appropriate model for electronic health record change management. Change management staff are currently fully integrated with project teams for the Pharmacy Network Program and Panorama. Given the Centre's responsibilities to support adoption of the innovative information technology solutions being deployed for the electronic health record, the role of change management is critical. As part of the change management strategy for the electronic health record, the Centre is working with the Regional Health Authorities to build capacity with regional change management coordinators. The model in place will enable a strategic approach to provincial electronic health record project change management to support adoption by specific health professionals.

- Received approval from the Government of Newfoundland and Labrador and funding and approval from Canada Health Infoway for the interoperable Electronic Health Records/Laboratories project. This project continues the work on building and implementing a complete provincial electronic health record. The project will leverage the basic infrastructure already in place for existing systems, such as the Pharmacy Network, Picture Archiving and Communications System, Client Registry, and Provider Registry. A significant component of the interoperable Electronic Health Records/Laboratory project will be the implementation of a provincial laboratory information system, which will allow clinicians to view laboratory results regardless of where they are located or where the test was conducted. In addition to working on defining requirements for the project, which was approved in early 2009, solution design work is also underway.

- Held over 2000 consultations this fiscal year with the tele-nephrology Telehealth program. This uptake will continue to grow as the program is expanded across

other chronic disease management initiatives. The Provincial Chronic Disease Management (CDM) Telehealth program involves the delivery of clinical video-conference-based services, providing services in oncology, psychiatry, out-of-province specialist consultations, neurology, and occupational therapy. The Telehealth videoconference project is scheduled for completion in the fourth quarter of 2009 and existing partnerships and collaborations will continue as the Telehealth program is transitioned from a Department of Health and Community Services - Infoway co-funded project to a provincial program by the end of 2009. A benefits evaluation of the Telehealth project is currently underway and a plan is being developed for the implementation of a provincial scheduling system, which will assist in coordinating equipment availability. In 2008-09, the provincial Chronic Disease Management Telehealth program contributed to the Department of Health and Community Services' strategic direction of improved accessibility by expanding the services available to individuals in their own community or in near-by centres.

- Worked on defining the requirements for electronic medical records and preparing a strategy to inform the province's position on electronic medical records. An electronic medical record is a comprehensive electronic record of a patient's health information held within a single office or clinic. The Centre is well positioned to manage a provincial program if approved by the Government of Newfoundland and Labrador.

- Launched its Service Desk to provide tier I support to electronic health record end-users. The Service Desk provides a single point of contact for those needing technical and service support. It ensures that there is full tracking of requests for assistance, allows users to get status updates on their requests for help, and ensures that issues have been resolved. In October 2008, the Service Desk opened for operation and provided support to internal Centre staff and the Pharmacy User Acceptance Training team. This 24/7 support acted as a testing ground for provincial service. In December 2008, the Service Desk started to provide technical and service support to individuals using the Client Registry and the Health Information Network core. As part of the Health Information Network core, the Service Desk currently supports the Picture Archiving and Communications System and the Teleheath project. The Service Desk will be providing tier II support to pharmacy practice management system vendors and community pharmacies once the Pharmacy Network is deployed.

- Started to build an electronic health record conformance team, with representatives from three areas of the organization. Conformance tests the ability of a vendor's software to communicate with the electronic health record. Current conformance testing is with vendors of pharmacy practice management systems. Electronic health record conformance will be a key component of a successful provincial electronic health record.

- Enhanced the Health Information Network, which provides connectivity to the Regional Health Authorities and the Office of the Chief Information Officer. All provincial electronic health record programs (Client Registry, Picture Archiving and Communications System, and Telehealth) are utilizing this network and the ground work has been laid for future programs. The Centre is coordinating the implementation of Health Information Network connectivity for the Pharmacy Network and the Centre expects to have all data links to community pharmacies in place by the fourth quarter of 2009. The Health Information Network facilitates common architecture and technical standards to ensure interoperability of the primary components of the Newfoundland and Labrador electronic health record. The data centre and network infrastructure is in place and ready for the initial deployment of the Pharmacy Network component of the electronic health record. Planning and design have begun to accommodate future projects that will extend the scope and functionality of the electronic health record systems.

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

During 2008-09, the Centre had 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. In 2008-09, the Centre continued to build capacity in the area of health research, heightened its reputation as a trusted provincial leader in information management, and strengthened its role in supporting provincial policy development.

The work conducted by the Research and Evaluation Department in 2008-09 contributed to the Department of Health and Community Services' strategic direction of improving population health. This Department's research provides valuable information that can be used in health policy and decision-making within the health system. For example, the Department is carrying out a study to assess the impact of dispensing fess on seniors' well being. Knowledge generated through this study will be used to support policy and planning related to dispensing fees for the senior population enrolled in the Newfoundland and Labrador Prescription Drug Program. The Department is also working with aboriginal communities in the province to provide health information that is culturally specific and locally relevant.

Notable health research achievements in 2008-09:
- Continued to foster research partnerships through its collaborative efforts with Memorial University's Faculty of Medicine, the Janeway Children's Health and Rehabilitation Centre, the Cancer Care Program of Eastern Health, Health Canada, the Public Health Agency of Canada, and private sector companies such as Newlab Clinical Research and Nexus Clinical Research.

- Provided a return on Government's investment in the Centre for Health Information by receiving approximately $1,701,858 in external research grants.

Primary sources of external research funding were Canada Health Infoway and the Public Health Agency of Canada.

- Updated the 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 to 2012, to include a project to enhance chronic disease surveillance in the province. Two other Memorandums of Agreement were signed with the Public Health Agency of Canada; one to investigate the risk of cardiac events among individuals diagnosed early and late with diabetes and another to examine the association between diabetes and cancer.

- Signed a Memorandum of Agreement in September 2008 with the First Nations Inuit Health Branch of Health Canada to enhance health information management in First Nations Communities, including Conne River, Natuashish, and Sheshatshiu.

- Published the report *Evaluating the Benefits of Picture Archiving and Communications System (PACS) in Newfoundland and Labrador* in Fall 2008. This was completed as part of the PhD studies for the Senior Director of the Centre's Research and Evaluation Department and Subject Matter Expert for Picture Archiving and Communications Systems (as named by Infoway). This Senior Director recently had part of this research, the financial benefits of the Picture Archiving and Communications System, accepted for publication in the *Journal of Digital Imaging*.

- Started an evaluation of the Provincial Chronic Disease Management (CDM) Telehealth program. The evaluation will provide information on the impact of telehealth services on patient access and empowerment and is intended, in part, to allow the provincial government and Regional Health Authorities to determine the suitability of telehealth as a feasible mechanism to expand the range of clinical services available in rural and remote communities. The study will also contribute to international evaluation literature pertaining to the impact of information and communication technologies and components of the electronic health record.

- Completed the pre-implementation component of four pre-/post-implementation benefits evaluations to determine the impact of the Pharmacy Network on various aspects of medication use. Two studies focused on adverse drug events in the community by completing emergency room chart reviews in both the adult and pediatric population. A third study evaluated the expected impact of the Pharmacy Network on prescription drug abuse. The fourth study examined the impact of the Pharmacy Network on appropriate use of medication among seniors.

- Commissioned on behalf of the Provincial Government and the Task Force on Adverse Health Events to develop a database specific to estrogen and progesterone receptor (ER/PR) re-testing, playing a significant role in the proceedings of the Commission of Inquiry on Hormone Receptor Testing. The work on the database is expected to be completed by the end of June 2009.

- Represented the Centre at 11 national and international conferences. Two articles were accepted by peer-reviewed journals for publication, with three others submitted and awaiting decision.

- Released five *Fast Facts* reports: Tobacco Use, Diabetes in Children and Youth, Suicide, ATV Injuries, as well as How to Interpret Data: Incidence versus Prevalence.

- Responded to 94 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 community based organizations. Requests took between 15 minutes to 10 weeks to complete.

- Continued to achieve academic excellence. In total, staff in the Research and Evaluation Department have 26 undergraduate degrees, eight health research diplomas, 13 Masters degrees and one PhD. A further two PhDs are expected in 2009, two in 2010 and three more in 2011. Areas of study for graduate programs include epidemiology, community health, public health and health technology assessment.

- Provided guidance and contributed to health research on a provincial and national front through active membership in a variety of groups. The complete list is located in Appendix C.

- Started work on the pseudonymization program, a data de-identification process, for the Centre's data holdings. Although secondary use of administrative data is a valuable method of maximizing the usefulness of the collected information, the data must be managed such that the privacy of individuals and confidentiality of their personal health information are maintained. As part of the process of compliance with privacy and access best practices, it was deemed that identifiable data would be replaced by a new unique research identifier in applicable microdata files used for research and surveillance purposes by the Research and Evaluation Department. Through a process involving Data Quality and Standards and Operations, data files used by the Research and Evaluation Department will be stripped of personally identifiable information, and replaced by a unique research identifier. The unique research identifier is used to identify a person as a unique individual in a database and is important for linkage across databases. Data linkage is an integral activity within the Department in the creation of composite databases used for research and surveillance purposes. Data Quality and Standards will be responsible for receiving and

managing most of the identifiable data sets for the Centre. As a result, Research and Evaluation staff will receive and use de-identified data to the greatest extent possible to carry out approved health research activities.

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

In 2008-09, the Centre for Health Information provided leadership and guidance to the provincial health system on the collection, reporting and use of clinical, demographic, financial, and statistical data. The quality information and standards work conducted at the Centre in 2008-09 contributed to the Department of Health and Community Services' strategic direction of improved accountability and stability in the delivery of health and community services within available resources and improved population health. By supporting the development and adoption of standards in the day-to-day operations of the Regional Health Authorities, provincial electronic health record systems and its data holdings, the Centre contributes to the management and sustainability of the health system, efficient and effective service delivery and research. It is critical that the data contained within these information systems is of the highest quality, able to meet the needs of users of that data. Data quality is a corporate goal that is actively supported by the Data Quality and Standards Division.

Notable achievements in the area of quality information and standards:

- Developed a corporate Data Quality Framework based upon that of the Canadian Institute for Health Information. The framework provides a structure to foster a culture of quality, ensure processes and information regarding data holdings are documented consistently and completely, and ensures that the quality of the data is measurable. The framework will initially be applied to the administrative databases held by the Centre. Over the coming year, specific indicators and metrics will be defined for the many components of quality. Over the next few years, the framework will be adapted to apply to electronic health record databases.

- Continued to play a leadership role and to provide a venue for communication among health information management professionals. The Provincial Coding Committee facilitates the adoption of provincial mandates and best practices for coding and abstracting clinical information. Through the Provincial Health Information Management Leadership Committee, the Centre continued to support the development and adoption of coding, abstracting and registration standards in the Regional Health Authorities, and the quality of the data contained within the Client Registry.

- Provided regional education and training programs for health information management professionals in Labrador-Grenfell Health and Western Health to enhance coding abilities. Education and consultation to regional coding staff is continuously available to individuals via telephone.

- Accepted a leadership role in standardizing the Provider, Laboratory and Diagnostic Imaging Dictionaries of the regional Meditech systems at the request of various provincial Committees.

- Commenced the 2009 re-abstracting study in March in partnership with the Canadian Institute for Health Information, encompassing five facilities from four Regional Health Authorities. Data is being collected by both Centre and Canadian Institute for Health Information staff. The Canadian Institute for Health Information is observing the Newfoundland and Labrador re-abstracting process with the intention of including its adjudication feedback in future Canadian Institute for Health Information studies. The study is expected to be complete by August 2009, with reports being issued in the fourth quarter of 2009.

- Participated in the development of a new governance committee structure for the Client and Referral Management System through the Community Provincial Information Systems Steering Committee. Staff of the Centre also are Chairing the Documentation Standards and Statistical Reporting Working Group for Community Youth Corrections. This group works to ensure community program areas use standardized documentation practices in the Client and Referral Management System, which will support accurate MIS (Management Information Systems) statistical reporting and other national and provincial reporting requirements. [2]

- Noted improvements in annual data quality reports submitted by Newfoundland and Labrador to the Canadian MIS Database and Discharge Abstract Database at the Canadian Institute for Health Information. These improvements are because of collaborative efforts of staff at the Canadian Institute for Health Information, Regional Health Authorities, and the Centre. MIS staff provided education sessions to senior executive and management staff of the Regional Health Authorities to support their efforts to establish regional MIS Data Quality Committees and to use the data for regional performance evaluation.

- Continued to play a significant role in national electronic health record standards development in 2008-09 as a member of the Infoway Standards Collaborative. The Centre expanded its staffing in the electronic health record standards area and is investing significantly in training and education. Provincial electronic health record systems planning and development requires considerable standards expertise. Standards such as HL7 V3 within these systems facilitate information exchange and are a critical foundation for the Newfoundland and Labrador electronic health record.

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[2] The MIS (Management Information Systems) Standards are the national data standards for the collection and reporting of financial and statistical information related to the operations of all publicly funded health service organizations in Canada. The acronym is widely recognized and is used with greater frequency than the term Management Information Systems.

Organizational Re-Structuring

As the Centre for Health Information prepares for the electronic health record operational environment and the increasing interest by the health sector in applied health research and electronic health record evaluation, it has undergone some restructuring. New is the Clinical Information Programs Department, which is responsible for the clinical integration and adoption of the electronic health record within the provincial health system. It will support the implementation of the electronic health record by ensuring relevance of projects and programs to clinicians through collaboration and partnering with appropriate provincial stakeholders. Current programs within this department include Telehealth, Picture Archiving and Communications System, and the Pharmacy Network. Change management staff are part of the Clinical Information Programs Department, playing an integral role throughout the lifecycle of projects through operations.

The Department also includes the Data Quality and Standards Division. Data Quality and Standards was re-structured into three core functions: Clinical Standards and Information, MIS Standards and Electronic Health Record Standards. The Registry Integrity Unit was moved to Operations.

The Health Information Network Department, which contributes to national standard setting for managing the development and operations of the secure electronic health record and infrastructure, now has three Divisions. The Department includes the EHR (Electronic Health Records) Projects Division responsible for bringing new electronic health record projects from the proposal stage to implementation and operations, the Operations Division that is responsible for managing the applications that run on the Health Information Network and providing user support, and the Infrastructure and Special Projects Division responsible for the technical infrastructure for the electronic health record and the Centre.

Working to ensure the protection of personal health information

As the organization responsible for the governance of the Newfoundland and Labrador electronic health record, the Centre for Health Information is involved in the development of pan-Canadian privacy and security standards. In 2008-09, 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. Specifically, the privacy work conducted at the Centre contributed to the Department of Health and Community Services' strategic direction of improved accountability and stability in the delivery of health community services within available resources.

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

- Established the electronic health record governance model to ensure stakeholders are meaningfully involved. There is an active governance committee for the Picture Archiving and Communication System. The committee

for the Pharmacy Network is currently being discussed with key stakeholders and specific organizations have been asked to recommend a member for the committee.

- Participated in two groups established by Canada Health Infoway to develop a common understanding on the governance and privacy requirements of the Pan-Canadian electronic health record. This work is essential to supporting jurisdictional efforts of the same nature. The Pan-Canadian Privacy Forum is comprised of representatives of the Ministries of Health and the privacy oversight offices from each Canadian jurisdiction. The Health Information Privacy Group has representatives from the Ministries from each jurisdiction. The Chief Privacy Officer / Corporate Secretary at the Centre represents Newfoundland and Labrador on both groups and is also the co-chair of both groups.

- Undertook many activities to prepare for the proclamation of the *Personal Health Information Act*. The Centre continues to develop policies and procedures for all projects and overall operations to ensure compliance with the new Act when it is proclaimed. As well, the Centre is actively involved with the Department of Health and Community Services in the provincial preparedness for the proclamation of the Act through representation on several *Personal Health Information Act* committees and working groups.

- Conducted Privacy Impact Assessments for the Pharmacy Network, Provider Registry, and the Data Warehouse, as well as conducting a new Privacy Impact Assessment for the Client Registry. The Centre will post these privacy impact assessments on the Internet for all stakeholders and the public later in 2009. The Centre for Health Information considers this an important initiative for transparency in the development of the electronic health record.

Report on Performance 2008-09
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In accordance with the legislative requirements of the *Transparency and Accountability Act,* the Board of Directors is accountable for developing and implementing the priority 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 2008 to 2011. The Business Plan is available on the Centre's website, www.nlchi.nl.ca, or by calling 709-752-6000. The Centre for Health Information's full mandate is contained in the business plan and is also located in Appendix A of this document.

The outputs section of the annual report is part of the 2008-2011 planning cycle. There were five strategic issues identified as priorities in the Business Plan for 2008-11, with corresponding goals, objectives and measures.

Mission
The Centre is responsible for the development of a confidential and secure Health

Information Network which 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. The Centre is also responsible for the appropriate use of quality health data to support improvements in the health system.

By March 31, 2011, the Centre for Health Information will have **implemented the priority elements of the electronic health record and supported the planning and implementation of other new or improved provincial health information systems**, **improved the quality of data** held by the Centre, and **expanded health research capacity** at the Centre to contribute to the improved health of the people of Newfoundland and Labrador.

Since 1996, when the Centre for Health Information was created, there has been a significant increase in the use of health information systems to assist in providing quality care and services for the people of Newfoundland and Labrador. Two core systems remain the primary health information systems in the province; the provincial Client and Referral Management System used in the community setting and Meditech used in the institutional and long term care settings.

The Centre for Health Information's mission of implementing the priority elements of the electronic health record will have a significant impact on health informatics in the province. A priority project is one in which there is approval by all funders, the funding and budget are in place, the users of the information system support the implementation, it is a ministerial priority, it is logical in sequential development, the level of risk is manageable, it is sustainable, and it supports quality health care and patient safety.

The Centre's mission contributes to several of the Department of Health and Community Services' strategic directions. 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.

The mission will also contribute to strengthened public health capacity, specifically in the area of surveillance of communicable disease through the development of Panorama. As more components of the provincial electronic health record are developed and implemented, one anticipated benefit is a reduction in the number of repeated procedures and tests, which may lead to improved accessibility to priority services for individuals. The provincial Chronic Disease Management Telehealth program also contributes to improved accessibility by expanding the services available to individuals in their own community or in near-by centres.

The Centre's contribution to improving population health is achieved through the development of the electronic health record and through the work conducted in its Research and Evaluation Department. This Department's research provides valuable

information that can be used in health policy and decision-making within the health system. For example, the Department is carrying out a study to assess the impact of out-of-pocket prescription costs on the well-being of seniors. Knowledge generated through this study will be used to support policy and planning related to dispensing fees for the senior population enrolled in the Newfoundland and Labrador Prescription Drug Program. The Department is also working with aboriginal communities in the province to provide health information that is culturally specific and locally relevant.

Measure 1
Designed, developed and implemented priority elements of the electronic health record

Planned for 2008-11	Actual for 2008-09
Implemented the Pharmacy Network • All community pharmacies are connected • All hospital pharmacies are connected • E-prescribing functionality is available to authorized prescribers	Final testing of the system is underway and, once complete, there will be deployment to reference site(s), followed by full deployment to all community pharmacies. Community pharmacists will be connecting and using the Pharmacy Network to impact patient care in 2009.
Implemented the funded components of a provincial Laboratory Information System • Information from the Laboratory Information System is available to authorized users	Funding for the provincial Laboratory Information System was announced in March 2009. Planning will begin in the second quarter of 2009.
Incorporated the necessary functionality in the Health Information Access Layer to allow approved provincial health information systems to become part of the electronic health record	While funding from Canada Health Infoway was approved in past fiscal years, provincial funding for the interoperable Electronic Health Records/Laboratory project was not approved until March 2009. As accomplishing this indicator was contingent on this funding, work could not commence until funding was approved. Planning will begin in the second quarter of 2009.

Expanded use of electronic medical records (EMRs) by physicians in accordance with an approved strategic plan • An EMR governance model is adopted • Physicians offices employ an EMR	The Centre has defined requirements and prepared an electronic medical record strategy, ensuring that it is well positioned if a provincial program is approved by the province. The Centre also has recruited four physician Peer Leaders, all of whom use electronic medical records in their practices, to mentor other physicians on the adoption of technology.
Implemented the funded components of the provincial Telehealth strategy for delivery of services and management of chronic diseases in conjunction with the priorities of the Regional Health Authorities	The Chronic Disease Management Telehealth program is currently used by a broad spectrum of services, including oncology, nephrology, psychiatry, out-of-province specialist consultations, neurology, and occupational therapy, with plans to expand across other chronic disease management initiatives in the future. A plan is being developed for the implementation of a provincial scheduling system, which will assist in coordinating equipment and resource availability.

Measure 2
Supported the Department of Health and Community Services and the Regional Health Authorities in the planning, development and implementation or upgrading of provincial health information systems.

Planned for 2008-11	Actual for 2008-09
Participated in and supported provincial and Regional Health Authority committees related to all provincial health information systems	The Centre participates in the provincial Health Information Management Committee and coordinates the provincial Health Information Management Leadership Committee. The Centre engaged the Chief Executive Officers and Vice Presidents of the Regional Health Authorities in strategic discussions on the electronic health record.

Participated in and supported provincial and Regional Health Authority discussions on the future directions of the Client and Referral Management System	The Centre participates in and supports discussions on the future directions of the Client and Referral Management system in a variety of ways. The Centre is a member of the Community Provincial Information Systems Steering Committee, formerly known as the Client and Referral Management System Committee. As well, the Centre is participating in discussions with the Department of Health and Community Services and the Regional Health Authorities regarding a new governance model for the system. A technical review was completed and a business review is underway for the Office of the Chief Information Officer by an external company, with representatives from the Centre participating as interview subjects.
Participated in and supported provincial discussion on the future directions of Panorama, the public health surveillance system	In 2008-09, the Centre participated in and supported provincial discussions on the future directions of Panorama. A due diligence review of the Panorama Project was conducted to determine next steps with the province.
Undertook communications activities to promote the role of the Centre for Health Information in supporting provincial and regional health information systems development and operations activities	On March 31 and April 1, 2009, the Centre hosted a two-day conference that promoted the role of the Centre in supporting provincial and regional health information systems development and operations activities. The event attracted 264 attendees and national speakers. As well, the Centre distributed three electronic health records fast facts brochures and two *Pharmacy Network: At a Glance* brochures, publications that outline progress on health information systems. The Centre also has two change management positions within the organization that are working with stakeholders on adoption of provincial and regional health information systems and the role that the Centre plays in their development and operations.

Measure 3

Designed and implemented a data quality framework that supports the continuous improvement in the data quality of provincial health information databases.

Planned for 2008-11	Actual for 2008-09
Developed a corporate Data Quality Framework used to evaluate and assess the quality of health information databases	During 2008-09, work began on a corporate Data Quality Framework and a draft was presented for review. Work is underway to determine measures and indicators for individual databases. Once finalized, this framework will be used to evaluate and assess the quality of health information databases.
Determined the process to adapt the corporate Data Quality Framework to other databases	The process of adapting the Data Quality Framework to other databases was identified as a year three goal in the Data Quality Framework. Further details on progress will be included in future annual reports and the Centre is well-positioned to achieve this indicator by 2011.

Measure 4
Expanded health research capacity

Planned for 2008-11	Actual for 2008-09
Increased number of full-time research staff	During 2008-09, there were 10 new hires in the Research and Evaluation Department.
Increased number of staff who have PhD's	During 2008-09, a staff member of the Research and Evaluation Department received a PhD from Memorial University's Faculty of Medicine. A further two PhD's are expected in 2009, two in 2010 and three more in 2011.
Completed and implemented a research plan that identifies research themes, priorities, partners and resources	The Research and Evaluation Department is engaged in a two-phase strategic planning exercise that will result in a strategic research plan for the Centre. The first phase, which included a current state assessment and identified next steps and priority areas for the research plan, is complete. The second phase will be completed in 2009.
Identified applied and other health research projects	During 2008-09, the Centre identified and worked on 41 health research projects. A full list of research projects is located in Appendix C.
Completed research projects	During 2008-09, the Centre completed 12 research projects. A full list of completed projects is located in Appendix C.
Reported annually on the results of the research plan	Results of the research plan will be reported annually through the Centre for Health Information's annual business report and throughout the year to the Centre's Board of Directors.

Discussion of Results 2008-09

As of March 31, 2009, the Centre is on track to achieve all indicators by 2011. The Centre's mission and above indicators contribute to several of the Department of Health and Community Services' strategic directions.

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.

The mission will also contribute to strengthened public health capacity, specifically in the area of surveillance of communicable disease through the development of Panorama. In 2008-09, the Centre participated in and supported provincial discussions on the future directions of Panorama and a review of the Panorama Project was conducted to determine priority components.

As more components of the provincial electronic health record are developed and implemented, one anticipated benefit is a reduction in the number of repeated procedures and tests, which may lead to improved accessibility to priority services for individuals. As the Centre is conducting benefits evaluations of electronic health record components to identify benefits realized, further information will be available in future annual reports. The provincial Chronic Disease Management Telehealth program also contributes to improved accessibility by expanding the services available to individuals in their own community or in near-by centres.

The Centre's contribution to improving population health comes through the development of the electronic health record and other provincial health information systems, as well as through the work carried out by its Research and Evaluation Department. This Department's research provides valuable information that can be used in health policy and decision-making within the health system. The Department is currently developing a strategic research plan to identify, among other things, resources and partners to continue and strengthen its contribution.

Issue 1: Provincial Health Information Systems

Provincial health information systems are an essential tool for supporting and improving accountability in the health system through improved quality health information available for healthcare, system and program planning, and health research.

Two core systems remain the primary health information systems in the province; the provincial Client and Referral Management System used in the community setting and Meditech used in the institutional and long term care settings. Current and future provincial health information systems as part of the electronic health record include registries, a drug information system, a diagnostic imaging system, a laboratory information system, telehealth, public health surveillance (Panorama) and Electronic Medical Records. Once implemented, the electronic health record will provide more accurate, reliable, and comparable data for policy making, program monitoring, and resource allocation.

Goal 2008-2011

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 2008-2011

Implemented the priority components of the electronic health record and supported the planning and implementation of other provincial health information systems.

Indicators 2008-2011

- 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 2008-09

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

Planned for 2008-09	Actual for 2008-09
Developed and received approval from the Board of Directors for the strategic plan for health information systems	This indicator has not been achieved as of March 31, 2009. The Centre has been actively engaged with the Department of Health and Community Services on the role of the Centre with other provincial health information systems. With this further direction from the Department of Health and Community Services and approved funding for the interoperable electronic health records/laboratories project, the technical review of Meditech, and the occurrence reporting system announced in March 2009 by the Government of Newfoundland and Labrador, the Centre will proceed with the strategic plan. The Centre now anticipates a draft strategic plan will be available for review in the third quarter of 2009.

Ensured the plan includes a strong emphasis on • The privacy and security of health information systems • Change management strategies to ensure adoption by users	This indicator has not been achieved as of March 31, 2009, for the reasons outlined above. However, the privacy and security of health information systems and change management strategies to ensure adoption by users have been identified as priority items for the plan.
Established development priorities for provincial health information systems • Prioritized electronic health record systems projects • Identified other health information systems	The project framework has been completed and includes development priorities for provincial health information systems and the identification of other projects and health information systems of the Centre. This project plan identifies actual and possible timelines, and required resources and collaborations.
Approved funding is in place • Identified Infoway funding commitments and opportunities • Identified provincial and other funding commitments and opportunities	Approved funding from Canada Health Infoway is in place and approval was received from the Department of Health and Community Services for the interoperable electronic health records/laboratories project in March 2009, with funding expected to follow in the coming months. The Centre has developed a solid working relationship with funders, especially the Department of Health and Community Services and Canada Health Infoway, and continuously works with these organizations to identify future opportunities.
Prepared quarterly reports for the Board of Directors	The Centre prepared quarterly reports for the Board of Directors on the status of all provincial health information systems.

Discussion of Results 2008-09

The Centre made great progress in the development of provincial health information systems during 2008-09. Although the Centre did not complete the strategic plan for health information systems, the engagement with the Department of Health and Community Services on the Centre's role in these systems has provided the necessary direction for the Centre to proceed in 2009-10.

The Centre did establish development priorities[3] for health information systems, including components of the provincial electronic health record. While funding is in place for current projects, the Centre continues to work with current and potential funders to ensure funding is in place for future system development and implementation. Through

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[3] A definition of the priorities is located on page 19 of this report.

solid relationships built over time, the Centre is well positioned to leverage funding opportunities as soon as they are announced.

The development of provincial health information systems contribute to several of the Department of Health and Community Services' strategic directions. Specifically, the development of health information systems, such as components 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.

As more components of the provincial electronic health record are developed and implemented, one anticipated benefit is a reduction in the number of repeated procedures and tests, which may lead to improved accessibility to priority services for individuals. As the Centre is conducting benefits evaluations of electronic health record systems to identify benefits realized, more detailed information will be available in future annual reports. The provincial Telehealth project also contributes to improved accessibility by expanding the services available to individuals in their own community or in near-by centres and removes geographic barriers for physician coverage.

Issue 1: Provincial Health Information Systems Indicator Development for 2009-10

Year Two Objective
By March 31, 2010, the Centre for Health Information has applied and reported on the Electronic Health Record Evaluation Framework on identified Electronic Health Record systems implementation and other health information systems initiatives.

Measure
Reported on the identified electronic health record and other health information systems using the Electronic Health Record Evaluation Framework.

Indicators
- Developed and received approval from the Board of Directors for the strategic plan for health information systems.
- Consulted with Regional Health Authorities, the Department of Health and Community Services and other key stakeholders on their readiness for further implementation of the priority components of the electronic health record and submitted semi-annual reports to the Board of Directors.
- Submitted quarterly reports to the Board of Directors on user adoption of implemented components of the electronic health record.
- Submitted semi-annual reports to the Board of Directors on the benefits evaluation of the implemented components of the electronic health record and other designated provincial health information systems.

Year Three Objective

By March 31, 2011, the Centre for Health Information has an interoperable electronic health record.

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.

Data quality is critical to the attainment of the Centre's vision. It is intricately linked to the degree of use of the data holdings of the Centre, the confidence of users in the data, and the accuracy, validity, and reliability of the outcomes of decisions made based upon data provided by the Centre. The corporate Data Quality Framework will provide a coordinated and consistent method to evaluate the data holdings of the Centre within the overarching continuous quality improvement process.

Many processes are already in place within the Centre and the provincial health system that supports quality within key health information systems. It is necessary to build upon this foundation to increase the health systems capacity and culture for data quality in the long term by leveraging existing partnerships to share findings, identify data quality issues and information gaps, and collaborate to address these issues at all levels. Partnerships with stakeholders will support adoption of the framework to achieve optimal quality of data holdings of the Centre.

Goal 2008-2011

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 2008-2011

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

Indicators 2008-2011
- 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 2008-09
Developed the conceptual model of a data quality framework

Planned for 2008-09	Actual for 2008-09
Identified and documented the databases to be included in that framework	The databases to be included in the data quality framework have been identified and documented in the draft document.
Developed a draft conceptual model	During 2008-09, work began on a corporate Data Quality Framework, which includes a conceptual model, and a draft was presented for review. Once finalized, this framework will be used to evaluate and assess the quality of health information databases. The framework will initially be applied to the administrative databases held by the Centre. Over the coming year, specific indicators and metrics will be defined for the many components of quality.
Stakeholder consultations have been completed	Stakeholder consultations were completed during the development of the Data Quality Framework document. Once a draft document was available, suggestions, input, and comments were solicited from members of the Health Information Management Committee, Canadian Institute for Health Information, the Department of Health and Community Services, and Centre staff.

Discussion of Results 2008-09
The Centre achieved all data quality indicators by March 31, 2009, positioning it well to complete the overall goal by 2011. In the coming years, the Centre will use the Data Quality Framework to support the quality of databases at the Centre, developing a data quality assessment for key databases.

Data quality contributes to the Department of Health and Community Services' strategic direction of improvement of accountability and stability in the delivery of health and community services within available resources. Data that is accurate, timely, useful, comparable, and relevant will assist in identifying priorities and setting policies in healthcare. This may lead to an increase in accountability and stability in the healthcare system.

Issue 2: Data Quality Indicator Development for 2009-10

Year Two Objective
By March 31, 2010, the Centre for Health Information has identified the components of a data quality framework, the indicators and the measures for each database covered by the framework.

Measure
Identified the components of a data quality framework and the indicators and measures that for each database covered by the framework.

Indicators
- Developed the conceptual model of a data quality framework
- Identified the components of a data quality framework
- Submitted the indicators and measures for the identified databases

Year Three Objective
By March 31, 2011, the Centre for Health Information has implemented the Data Quality Framework.

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.

Opportunities for undertaking innovative population/applied health research through secondary uses of administrative health data has grown significantly over the last five to seven years. Research revenues at the Centre for Health Information, excluding provincial government operating grant, grew from $240,000 in 2002-03 to $1.7 million in 2008-09. This increase in research capacity has provided significant value to both the provincial and federal governments. With respect to the provincial government, examples in 2008-09 include work on the ER/PR Patient Database, evaluation of the *Mental Health Care and Treatment Act*, an assessment of the impact of prescription drug dispensing fees on the senior population enrolled in the Newfoundland and Labrador Prescription Drug Program, and a study on the scope of practice of nurses working in the community. The Centre for Health Information also works closely with the federal government on many initiatives, including building capacity in Aboriginal research, establishing and maintaining the provincial component of the National Diabetes and Chronic Diseases Surveillance System, and providing a pilot site for new surveillance initiatives prior to national engagement.

There are emerging trends in health research that are expected to grow over the next three years. The most important of these is genetics research, particularly following the implementation of priority components of the electronic health record in the province, including the Pharmacy Network and Provincial Laboratory Information System.

Newfoundland and Labrador will have one of the first fully functional, population-based electronic health records encompassing a founder population in the world. To realize this opportunity, the Centre for Health Information will need to establish relationships with both the private sector and academia in providing applied health/population research and database management services in support of pharmacogenetics and pharmacoepidemiolgy.

Goal 2008-2011

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 2008-2011

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

Indicators 2008-2011

- 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 2008-09

Completed research plan

Planned for 2008-09	Actual for 2008-09
Developed a preliminary framework for a health research plan	During 2008-09, the Research and Evaluation Department developed a preliminary framework for a health research plan in consultation with an external consultant.
Developed a stakeholder consultation plan	A two-phase stakeholder consultation plan was developed.
Organized stakeholder consultations (internal and external)	Internal and external stakeholder consultations were organized as part of the Centre's overall key informant interview process. Further stakeholder consultations will be organized as part of the second phase of a strategic planning exercise that will result in a strategic research plan.

Completed consultations	Consultations with key stakeholders having an interest in research were completed as part of the Centre's overall key informant interview process. Further stakeholder consultations will be completed as part of the second phase of a strategic planning exercise that will result in a strategic research plan.
Developed a research plan that incorporated broad stakeholder feedback	This indicator was not achieved by March 31, 2009. Once work started on the strategic research plan, it was determined that the plan needed to be split in two phases. The first phase, an assessment of the current state and identification of priority research areas, is complete. The second phase will detail the opportunities for extension of the Centre's research services to support growth in both private and academic research, in particular genetic research. Extensive consultations with key stakeholders will also be undertaken as part of the strategic research plan. The strategic research plan is expected to be completed by December 31, 2009.

Discussion of Results 2008-09

Indicators for the health research plan have not been fully achieved. While the process of gathering stakeholder feedback for the strategic research plan is ongoing, stakeholder consultation is recognized as an important step in the development of the strategic research plan. Work continues on the second phase of the strategic research plan.

The development of a research plan contributes to the Department of Health and Community Services' strategic directions. Specifically, a research plan that includes priority research areas for the province can contribute to the improvement of accountability and stability in the delivery of health and community services within available resources. The Centre provides valuable information that may be used by government and the Regional Health Authorities in setting priorities and allocating resources. As well, the research plan addresses the area of electronic health record benefits evaluation.

The Centre also contributes to improving population health through the work carried out by its Research and Evaluation Department. This Department's research provides valuable information that can be used in health policy and decision-making within the health system. For example, the Department is carrying out a study to assess the

impact of dispensing fess on seniors' well being. The Centre's strategic research plan will identify opportunities and priority areas for the future.

Issue 3: Health Research Plan Indicator Development for 2009-10

Year Two Objective
By March 31, 2010, the Centre for Health Information has approved a health research plan.

Measure
A health research plan has been approved by the Board of Directors.

Indicators
- Developed a health research plan that incorporated broad stakeholder feedback.
- Reviewed existing legislation and regulations to determine authority for the Centre for Health Information to expand its research capacity as identified in the preliminary health research plan.
- Conducted an environmental scan of other health research activities in Newfoundland and Labrador.
- Approved the health research plan for activities at the Centre for Health Information.
- Identified priority elements of the research plan for implementation by 2011.

Year Three Objective
By March 31, 2011, the Centre for Health Information has implemented approved elements of the health research plan.

Issue 4: Organizational Planning

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

The Centre for Health Information has undergone significant growth over the past three years. Total revenues have increased from $12,348,022 in 2007 to $16,677,894 in 2009 and the number of employees has grown from 40 to 99 in that same time period. The Centre for Health Information anticipates another year or two of change before it stabilizes. The organization must put in place strategies and structures to monitor its effectiveness.

Goal 2008-2011
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 2008-2011
Used an appropriate reporting mechanism.

Indicators 2008-2011

- 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 2008-09

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

Planned for 2008-09	Actual for 2008-09
Implemented the electronic health record governance model	The Centre has implemented the electronic health record governance model. Individual committees to oversee specific projects are currently being formed. The Picture Archiving and Communications System Information Governance Advisory Committee has been formed and the Pharmacy Network Information Governance Advisory Committee will be in place for the third quarter of 2009.
Developed a reporting mechanism, such as a balanced score card	This indicator has not been achieved as of March 31, 2009. Because of the expansion and growth of the Centre, the Board determined that a more detailed planning process was required, one that would create alignment across the organization as a preliminary measure to identify the most appropriate reporting mechanism. In 2009, the ground work is being laid for a reporting mechanism that will be implemented across the organization in 2010.

Developed health information systems operation plans, including funding of each approved electronic health record systems development project	A high level operating plan has been developed for 2008 through to 2014 and was received by the Board of Directors at the October 22, 2008 meeting. This plan includes information on funding of approved projects. The Centre continues to grow at a significant rate, as does the organization's complexity and challenges. The Board has commented on the plan but will not approve the final plan until closer to the end of this business planning cycle (2008-2011), which represents a variance in the measure for 2008-09.
A three-year financial plan is developed	The Centre has developed a three-year financial plan that was reviewed by the Board's Finance and Audit Committee in February 2009 and was to be submitted to the Board at the next Board meeting, April 2009. The Centre continues to grow at a significant rate, as does the organization's complexity and challenges. The Committee has commented on the plan and the Board will review, but the final plan will not be approved until closer to the end of this business planning cycle (2008-2011), which represents a variance in the measure for 2008-09.
A human resources plan is developed	A human resources plan has been developed for 2008-2011. This plan discussed a revised organizational structure, staffing projections, the identification of recruitment and retention issues and solutions, and the identification of organizational competencies, skills profiles and related professional development solutions. The Centre continues to grow at a significant rate, as does the organization's complexity and challenges. The Board has commented on the plan but will not approve the final plan until closer to the end of this business planning cycle (2008-2011), which represents a variance in the measure for 2008-09.

Developed an internal communications plan and implemented appropriate communications activities	In January 2009, an internal communications plan was completed. Implementation has begun on appropriate communications activities, which involves working on at least one tactic for each issue identified. As work continues on implementing all components of this plan, not all issues have been addressed as of March 31, 2009.
Submitted an annual report to the Minister of Health and Community Services	The Centre for Health Information submitted the 2007-08 annual report to the Minister of Health and Community Services. The Centre worked closely with staff at both the Department of Health and Community Services and Transparency and Accountability to ensure that this report met legislative requirements.

Discussion of Results 2008-09

Most indicators for organizational planning have been achieved, including implementing the electronic health record governance model; developing health information system operating plans, a three year financial plan, a human resources plan, and an internal communications plan; and submitting an annual report. While the reporting mechanism has yet to be developed because of the expansion and growth of the Centre, work on this initiative is ongoing and a reporting mechanism will be implemented in 2010. The significant growth at the Centre also accounts for the variance in Board approval on the financial, human resources and operating plan. The Board will review all plans, but will not approve the final plan until closer to the end of this business planning cycle (2008-2011).

These indicators contribute to the Department of Health and Community Services' strategic directions, specifically the improvement of accountability and stability in the delivery of health and community services within available resources. By planning ahead, the Centre is able to ensure that required financial and human resources are in place to efficiently and effectively accomplish the Centre's mission.

Issue 4: Organizational Planning Indicator Development for 2009-10

Year Two Objective

By March 31, 2010, the Centre for Health Information has implemented the reporting mechanism format for all its operations and approved a business development plan for revenue generation.

Measure

Implemented the reporting mechanism format for all its operations and approved a business development plan for revenue generation.

Indicators

- Developed a reporting mechanism, such as a balanced score card
- Continued to finalize health information system operations, financial and human resources plans.
- Approved a business development plan for revenue generation
- Reported quarterly to the Board of Directors on:
  o Operations of the Electronic Health Record
  o Research activities
  o Standards development and implementation
  o Data quality framework implementation
  o Revenue Generation
- Submitted to the Board of Directors semi-annual reports on:
  o Three-year financial plan
  o Human Resource plan
  o Organizational strategic plan
  o Communications plan
- Submitted an annual report to the Minister of Health and Community Services.

Year Three Objective

By March 31, 2011, the Centre for Health Information has implemented and reported on the effectiveness of its organization plan.

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 2008-2011

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 2008-2011

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

Indicators 2008-2011

- Annual monitoring of stakeholders' awareness and understanding of the Centre for Health Information's 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 2008-09

Executed communication activities

Planned for 2008-09	Actual for 2008-09
Developed communications strategic directions	In the fourth quarter of 2008, strategic communications directions were developed that build upon the strategic goals of the Centre as outlined in the 2008-2011 Business Plan.
Developed annual communications priorities	Annual communications priorities were developed in the fourth quarter of 2008 once the strategic communications directions were identified. While these will be reviewed and updated on a regular basis, many communication activities are ongoing and will remain on the priority list. One priority was to host a two day conference, *Raising the Bar: Opportunities and challenges in improving health through quality health information*, from March 31-April 1, 2009. The conference, which covered such topics as research, data quality, standards development, privacy, and progress on the provincial electronic health record, attracted 264 stakeholders.
Developed and undertook public opinion polls	On behalf of the Centre, a local research firm conducted public opinion polling during the fourth quarter of 2008. The polling involved 387 residents of the province and the results are being used to guide the communications planning and the setting of communication priorities for the Centre. The polling included questions on awareness of the Centre, support for the electronic health record, and concerns relating to the privacy and security of the electronic health record.

Prepared and undertook key informant interviews	On behalf of the Centre, a local research firm conducted key informant interviews with 23 stakeholders representing a number of principal audiences during 2008-09. The purpose of these in-depth interviews was to gain an understanding of how stakeholders feel the Centre can improve and expand its role in the province. The information gathered during the interviews is being used to guide communications and other activities of the Centre.
Participated in and monitored stakeholders consultations	The Centre participated in and monitored a variety of stakeholder consultations during 2008-09. The Centre stays in close contact with stakeholders, in part through membership on over 60 committees, and uses a variety of tools to gauge stakeholder perception, including meetings and informal focus groups. Information has been collected from a number of stakeholder groups during engagement sessions as part of the work of individual projects, such as the Pharmacy Network. Information gathered during the consultation process is used to plan and develop future communication to these stakeholder groups.
Developed monitoring reports	The Centre has developed monitoring reports. The Pharmacy Network has both a stakeholder journal that tracks all contact with various groups and a communication planning and tracking documents that follows all communications activities throughout the year.
Issued public releases and engaged in other public relations activities	In addition to the conference, the Centre engaged in many public relations activities during 2008-09, including the distribution of four news releases, three electronic health record fast fact brochures, two Pharmacy Network at a glance brochures, and one newsletter.

Submitted quarterly reports to the Board of Directors	The communications division submits updates for every Board of Directors meeting, which occur approximately seven times each fiscal year. These updates include Centre publications, progress on communications activities, and media coverage.

Discussion of Results 2008-09

During 2008-09, the Centre for Health Information 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. To accomplish this objective, the Centre undertook public opinion polling and key informant interviews, as well as stakeholder consultations. This information was used to identify communications strategies and set communication priorities. The Centre also held a two-day conference *Raising the Bar: Opportunities and challenges in improving health through quality health information*, which attracted 264 stakeholders to hear about such topics as research, data quality, standards development, privacy, and progress on the provincial electronic health record.

This contributed to the Department of Health and Community Services' strategic direction to improve accountability and stability in the delivery of health and community services within available resources. By increasing awareness of the Centre's role in promoting and using quality health information, the Centre is identifying itself as a possible information source for the healthcare system. If key stakeholders know where to get the information they need for planning and resource allocation, the health system as a whole will benefit.

Issue 5: Communications Indicator Development for 2009-10

Year Two Objective
By March 31, 2010, the Centre for Health Information has executed key strategic communications initiatives with respect to the data quality framework and health research plans.

Measures
Executed key communications strategic communications initiatives for the data quality framework and the health research plan.

Indicators
- Developed and implemented a communications plan for the approved data quality framework.
- Developed and implemented a communications plan for the health research

activities of the Centre for Health Information.
- Reported on the changes in stakeholder awareness of the Centre for Health Information.

Year Three Objective
By March 31, 2011, the Centre for Health Information reported on the effectiveness of its role in the provincial health information systems development and operations, data quality and health research through its communications plan and activities.

Opportunities and Challenges
_____

The next few years will present many exciting opportunities for the Centre, but will also include a number of challenges and risks.

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. 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.

- As electronic health record components become operational, they present many opportunities that the Centre is poised to take advantage of, including:

  o The opportunity to expand research to include data that will be collected through the electronic health record.

  o The opportunity to take advantage of the Centre's recognition as a national leader in electronic health record development and benefits evaluation.

  o The opportunity to improve patient care and accountability in the health system.

o The opportunity for electronic data exchange between non-clinical stakeholders to increase the timeliness of report distribution/data exchange, reduce data entry and increase security.

Challenges
- The Centre continues to be challenged by growth in its Newfoundland and Labrador electronic health record portfolio and the lack of qualified resources available. The Centre has been very fortunate to have recruited a number of skilled individuals that will form the basis of future teams and allow for the transfer of knowledge to additional staff. The Centre also works closely with the local vendor community to source the skills and expertise required. In many cases, these consultants train Centre staff, building capacity in the existing workforce.

- 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.

- As more components of the electronic health record are built and implemented, more round the clock service and support is required. It will be difficult to recruit and train resources with the necessary skills and a willingness to be on call.

- The Centre has been challenged with the lack of adequate data centre facilities within the province and has begun discussions with the Office of the Chief Information Officer on the future requirements of the provincial electronic health record.

- The Centre for Health Information will be working with the Department of Health and Community Services, the Regional Health Authorities, and others 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 personal health information by enforcing rules around de-identification, 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 2008-09, the Centre for Health Information welcomed 43 new employees. During 2009-10, 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 successfully integrate new staff 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 2009-10. In particular, a new version of national MIS Standards is 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 $7.16 million have increased in 2009 over 2007-08, mainly due to funding received for the Electronic Health Record initiative. On the project side, additional project milestones were achieved this year leading to higher revenues from Canada Health Infoway and Government Project Grants. Government project grant revenue was comprised of provincial funding towards the Diagnostic Imaging/Picture Archiving and Communications System, the Pharmacy Network, Telehealth and other initiatives.

Total expenses were higher for the year as the Electronic Health Record work proceeded and as previously deferred project-related expenses were recognized with the completion of milestones.

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, 2009

Contents

Grant Thornton

Auditors' report

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, 2009 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, 2009 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 3, 2009   Chartered Accountants

Newfoundland and Labrador Centre for Health Information

Statements of Operations and Changes in Net Assets

Year Ended March 31	2009	2008
Revenue		
Government operating grants	$ 7,164,089	$ 3,113,694
Canada Health Infoway	5,660,958	3,607,828
Research funding	1,109,024	589,896
Government project grants	2,510,358	1,961,252
Amortization of deferred capital contributions	88,293	111,442
Interest income	145,172	197,110
	16,677,894	9,581,222
Expenditure		
Advertising	79,755	3,690
Consulting fees	4,959,928	1,256,202
Data communications	928,589	363,155
Depreciation	207,453	211,715
Insurance	32,464	20,235
Miscellaneous	21,098	6,160
Office supplies	364,964	149,964
Picture Archiving and Communication System		
Regional Integrated Health Authority reimbursements	1,219,684	3,488,315
Professional fees	324,076	104,254
Rent	291,904	286,051
Salaries and benefits	6,275,767	2,963,559
Software maintenance	1,103,643	291,253
Telephone	114,440	79,955
Training	174,834	58,423
Travel	356,667	175,574
	16,455,266	9,458,505
Excess of revenue over expenditure	$ 222,628	$ 122,717
Net assets, beginning of year	$ 922,543	$ 799,826
Excess of revenue over expenditure	222,628	122,717
Net assets, end of year	$ 1,145,171	$ 922,543

See accompanying notes to the financial statements.

Newfoundland and Labrador Centre for Health Information

Statement of Financial Position

March 31	**2009**	2008
Assets		
Current		
Cash and cash equivalents	**$ 4,457,193**	$ 2,178,397
Receivables (Note 4)	**7,383,936**	6,396,883
Prepaids	**821,544**	43,998
Deferred project costs	**2,964,562**	4,557,401
	15,627,235	13,176,679
Property and equipment (Note 5)	**14,419,239**	8,619,647
	$ 30,046,474	$ 21,796,326
Liabilities		
Current		
Payables and accruals (Note 6)	**$ 4,715,670**	$ 3,255,106
Deferred revenue	**14,298,576**	9,524,440
	19,014,246	12,779,546
Deferred capital contributions (Note 7)	**9,306,981**	7,673,326
Accrued severance pay	**580,076**	420,911
	28,901,303	20,873,783
Net Assets		
Net assets	**1,145,171**	922,543
	$ 30,046,474	$ 21,796,326

Commitments (Note 9)

On behalf of the Board

_____ Director   _____ Director

See accompanying notes to the financial statements.

Newfoundland and Labrador Centre for Health Information
Statement of Cash Flows

Year Ended March 31	2009	2008
Increase (decrease) in cash and cash equivalents		
Operating		
Excess of revenue over expenditure	$ **222,628**	$ 122,717
Items not requiring a cash outlay		
Depreciation	**207,453**	211,715
Amortization of deferred capital contributions	**(88,293)**	(111,442)
Increase in severance pay accrual	**159,165**	36,465
	500,953	259,455
Change in non-cash operating working capital (Note 8)	**6,062,940**	2,855,040
	6,563,893	3,114,495
Financing		
Capital contributions	**1,721,948**	2,333,111
Investing		
Purchase of capital assets	**(6,007,045)**	(3,269,209)
Increase in cash and cash equivalents	**2,278,796**	2,178,397
Cash and cash equivalents		
Beginning of year	**2,178,397**	-
End of year	$ **4,457,193**	$ 2,178,397

See accompanying notes to the financial statements.

Newfoundland and Labrador Centre for Health Information
Notes to the Financial Statements
March 31, 2009

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.

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.

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.

Newfoundland and Labrador Centre for Health Information
Notes to the Financial Statements
March 31, 2009

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. Interest income is recognized as it is earned.

Administrative expenditures

The Centre is administered by contractual employees and salaried employees. 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 property and equipment over their estimated lives are as follows:

Computer equipment	20%, straight line
Office furniture	15%, straight line
Computer software	33%, straight line
Leasehold improvements	10%, 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 are amortized to income on a straight line basis using the same rates as the depreciation expense related to the capital assets purchased.

Newfoundland and Labrador Centre for Health Information
Notes to the Financial Statements
March 31, 2009

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

Deferred project costs

Project costs are deferred as incurred until the same period in which the related revenue can be recognized as per the terms of the project contract.

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. 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. Total pension expense for the Centre in the year was $362,750 (2008 – $189,152).

Financial instruments

The CICA Handbook 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 excess of revenue over expenditure; b) held to maturity – recorded at amortized cost with gains and losses recognized in excess of revenue over expenditure 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 excess of revenue over expenditure 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 excess of revenue over expenditure and b) other - measured at amortized cost with gains and losses recognized in excess of revenue over expenditure in the period that the liability is no longer recognized.

Newfoundland and Labrador Centre for Health Information
Notes to the Financial Statements
March 31, 2009

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

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 this 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, property and equipment, deferred capital contributions and deferred revenue are not within the scope of these 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 this 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.

Accounting standard adopted during the year

(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.

Newfoundland and Labrador Centre for Health Information
Notes to the Financial Statements
March 31, 2009

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

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.

3. Risk management

The Centre's policy for managing significant risks includes a comprehensive infrastructure of policies, procedures and oversight designed to reduce the risks identified to an appropriate threshold. The Board of Directors is provided with timely and relevant reports on the management of significant risks. Significant risks managed by the Centre include liquidity and credit risks.

Liquidity risk

Liquidity risk is the risk that the centre will be unable to meet its contractual obligations and financial liabilities. The Centre manages liquidity risk by monitoring its cash flows and ensuring that it has sufficient cash available to meet its obligations and liabilities.

Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Centre's credit risk is attributable to receivables. Management believes that the credit risk concentration with respect to financial instruments included in receivables is remote.

4. Receivables	2009	2008
Government of Newfoundland and Labrador	$ 3,080,298	$ 1,328,434
Canada Health Infoway	4,025,702	-
Eastern Health	-	4,253,175
Harmonized sales tax	-	594,785
Other	277,936	220,489
	$ 7,383,936	$ 6,396,883

Newfoundland and Labrador Centre for Health Information

Notes to the Financial Statements

March 31, 2009

5. Property and equipment

	Cost	Accumulated Depreciation	**Net Book Value** 2009	Net Book Value 2008
Computer equipment	$ 4,686,960	$ 963,248	**$ 3,723,712**	$ 989,699
Office furniture	400,922	113,792	**287,130**	67,158
Computer software	11,900,224	1,557,372	**10,342,852**	7,562,790
Leasehold improvements	65,545	-	**65,545**	-
Pharmacy network	787,757	787,757	**-**	-
Unique Personal Identifier	3,401,478	3,401,478	**-**	-
	$ 21,242,886	$ 6,823,647	**$ 14,419,239**	$ 8,619,647

During the year, the Centre purchased $6,007,045 of capital assets, however, as of March 31, 2009 no capital funding has been received for $4,909,710 of these assets. Furthermore, $692,583 of unfunded additions remain from prior years. 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, 2009.

During the year, the Centre acquired property and equipment totaling $5,578,511 which was not available for use during the year and was not depreciated. Prior year purchases of equipment totaling $800,000 were also not subject to depreciation during the year.

6. Payables and accruals

	2009	2008
Trade and sundry	$ 4,085,279	$ 2,933,017
Harmonized sales tax	58,153	-
Vacation and compensatory pay	572,238	322,089
	$ 4,715,670	$ 3,255,106

7. Deferred capital contributions

	2009	2008
Opening balance	$ 7,673,326	$ 5,451,657
Capital contributions from Government	688,062	863,861
Capital contribution from Canada Health Infoway	1,033,886	1,469,250
Amortization of deferred capital contribution	(88,293)	(111,442)
	$ 9,306,981	$ 7,673,326

Newfoundland and Labrador Centre for Health Information
Notes to the Financial Statements
March 31, 2009

8. Supplemental cash flow information	2009	2008
Change in non-cash operating working capital		
Receivables	$ **(987,053)**	$ 4,489,989
Prepaids	**(777,546)**	(43,999)
Deferred project costs	**1,592,839**	162,075
Payables and accruals	**1,460,564**	(3,944,140)
Deferred revenue	**4,774,136**	2,191,115
	$ **6,062,940**	$ 2,855,040

9. Commitments

Under the terms of several long-term contracts related to the rental of office space and equipment rental, the Centre is committed to make the approximate lease payments for the next five years as follows:

2010 - $1,226,461; 2011 - $1,226,461; 2012 - $1,226,461; 2013 - $916,697; and 2014 - $898,511

10. Comparative figures

Certain of the comparative figures have been reclassified to conform to the financial statement presentation adopted for the current year.

Appendix A

Centre for Health Information's Mandate and Mission

Mandate and Mission

Mandate as per the *Centre for Health Information Act*

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.

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.

Electronic Health Record Governance

A letter received in November 2007 from the Minister of the Department of Health and Community Services approved the Centre's Board of Directors as the governing body for the provincial Electronic Health Record.

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 which 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. The Centre is also responsible for the appropriate use of quality health data to support improvements in the health system.

By March 31, 2011, the Centre for Health Information will have implemented the priority elements of the electronic health record and supported the planning and implementation of other new or improved provincial health information systems, improved the quality of data held by the Centre, and expanded health research capacity at the Centre to contribute to the improved health of the people of Newfoundland and Labrador.

Measure 1

Designed, developed and implemented priority elements of the electronic health record.

Indicators

- Implemented the Pharmacy Network
    - o All community pharmacies are connected
    - o All hospital pharmacies are connected
    - o E-prescribing functionality is available to authorized prescribers
- Implemented the funded components of a provincial Laboratory Information System
    - o Information from the Laboratory Information System is available to authorized users

- Incorporated the necessary functionality in the Health Information Access Layer to allow approved provincial health information systems to become part of the Electronic Health Record
- Expanded use of Electronic Medical Records (EMRs) by physicians in accordance with an approved strategic plan
  - An EMR governance model is adopted
  - Physicians offices employ an EMR
- Implemented the funded components of the provincial Telehealth strategy for delivery of services and management of chronic diseases in conjunction with the priorities of the Regional Health Authorities

Measure 2

Supported the Department of Health and Community Services and the Regional Health Authorities in the planning, development and implementation or upgrading of provincial health information systems.

Indicators

- Participated in and supported provincial and Regional Health Authority committees related to all provincial health information systems
- Participated in and supported provincial and Regional Health Authority discussions on the future directions of the Client and Referral Management System
- Participated in and supported provincial discussion on the future directions of Panorama, the public health surveillance system
- Undertook communications activities to promote the role of the Centre for Health Information in supporting provincial and regional health information systems development and operations activities

Measure 3

Designed and implemented a data quality framework that supports the continuous improvement in the data quality of provincial health information databases.

Indicators

- Developed a corporate Data Quality Framework used to evaluate and assess the quality of health information databases
- Determined the process to adapt the corporate Data Quality Framework to other databases

Measure 4

Expanded health research capacity

Indicators

- Increased number of full-time research staff

- Increased number of staff who have PhD's
- Completed and implemented a research plan that identifies research themes, priorities, partners and resources
- Identified applied and other health research projects
- Completed research projects
- Reported annually on the results of the research plan

Appendix B

List of Databases at the Centre for Health Information

List of data holding at the Centre for Health Information As of March 31, 2009

The Centre for Health Information is the custodian of these Electronic Health Record databases

1. Client Registry
2. Provider Registry

The Centre is the custodian of these administrative data holding

3. Provider Listing (used by Clinical Database Management System)
4. Community Table (used by Clinical Database Management System)
5. Telehealth Utilization Database (2004 - 2009)

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

6. Clinical Database Management System (1995/96 to 2005/06)
7. Provincial Rehabilitation Database (2004/05 and 2005/06)
8. National Population Health Survey (NPHS) (1994/95 to 2002/03)
9. Canadian Tobacco Use Monitoring Survey (2000 to 2006)
10. ER/PR Patient Listing and Communication Events database (1997-2009)
11. National Diabetes and Chronic Diseases Surveillance System
    Statistics Canada data on behalf of the Department of Health and Community Services
12. Census (2001 and 2006)
13. National Longitudinal Survey of Children and Youth (1994/95 to 2005/05)
14. Canadian Community Health Survey (CCHS), Public Use Microdata File 2000/01, 2003, 2005, 2007

The Centre is an authorized user of these Medical Care Plan (MCP), Department of Health and Community Services data sets for analysis and research approved by the Department of Health and Community Services:

15. MCP Claims database (1995 to 2007)
16. MCP Beneficiary database (1995 to 2007)
17. MCP Provider Registry (2003)
18. MCP Health Insurance Registry (2003, 2005-2007)
19. MCP fee-for-service physician claims (1995-2007)

The Centre is the custodian of data holdings 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

20. Statistics Canada Annual Mortality Data Files (1991 to 2005)
21. Centre for Health Information Live Birth System (1992 to 2007)
22. Centre for Health Information Mortality System (1991 to 2007)
23. Stillbirth Database (1992-2007)

The Centre holds these data sets for specific research studies

24. Psoriasis Clinical Data, NewLab Clinical Research Inc. (1989-2006)
25. Miwpukek Diabetes Data, Conne River Health and Social Services
26. Prescription Drug Study Data, RxCanada
27. Suicide Data, Office of the Chief Medical Examiner (1997 to 2006)
28. Cervical Cancer Surveillance System (1995-2006)
29. Emergency Room Triage Data, Eastern Health
30. Adolescent Health Survey, Central Health
31. Primary Health Care Survey data
32. Total Joint Replacement Wait List Database (1995-2005), Eastern Health
33. Childhood Leukemia Database (1983-2006
34. Illegal Drug Use: Pharmacist Survey (2007-2008)
35. Longitudinal Pediatric Research Database Births 1996-2002, hospitalization 1996-2003)
36. Newfoundland and Labrador Prescription Drug Program (1998-1998 / 2002-2003 / 2007-2008)
37. Adverse Drug Events in pediatric patients presenting to Emergency Departments (2006-2007)
38. Adverse Drug Events in adult patients presenting to Emergency Departments (2005)
39. Childhood Injury Research Database
40. Continuity of Care Research dataset (1999-2002)
41. Assessing administrative databases for surveillance of depressive disorders in NL (in development)
42. Seniors Medication Use Database (2007-2009)

Appendix C

List of Research and Evaluation Department Committee
Memberships, and Current and Completed Research Projects

Memberships

Provided guidance and contributed to health research on a provincial and national front through active membership in the following groups:

- National Diabetes and Chronic Diseases Surveillance System Technical and Scientific Working Groups
- National Task Group on Surveillance of Chronic Disease and Injury
- National Benefits Evaluation Collaborative Group
- Stroke Provincial/Territorial Administrative Data Working Group
- Health Information Management Committee, First Nations and Inuit Health, Health Canada
- National Population Health Surveys Advisory Committee
- Live Birth/Mortality Advisory Committee
- Breastfeeding Coalition of Newfoundland and Labrador Research/ Monitoring Working Group
- Newfoundland and Labrador Centre for Applied Health Research Affinity Group on Quantitative Analysis
- Provincial Integrated Stroke Strategy Advisory Committee
- Personal Health Information Act Health Research Working Group
- Provincial Breastfeeding Working Group
- Provincial Perinatal Committee
- Ontario Telemedicine Network Benefits Evaluation Advisory Committee
- Cancer Registry Advisory Committee
- Newfoundland and Labrador Centre for Applied Health Research Environment and Health Affinity Group

Research projects completed during the 2008-09 fiscal year:

- Comorbidities Associated with Psoriasis in the Newfoundland and Labrador Founder Population
- Reducing Serious Adverse Drug Events in the Emergency Room among Adult Patients. Benefits of a Pharmacy Network: A Baseline Study
- Reducing Serious Adverse Drug Events in the Emergency Room Among Pediatric Patients. Benefits of a Pharmacy Network: A Baseline Study
- Illegal Use of Prescription Drugs prior to Implementation of the Pharmacy Network
- The Canadian First Nations Diabetes Clinical Management Epidemiologic Study (CIRCLE)
- Enhancing internal capacity in health information management in First Nations communities in Newfoundland and Labrador (Phase 1 – Step 1)
- Evaluation of *HealthLine*

Research projects in progress during the 2008-09 fiscal year:
- Determinants of Early versus Late Diagnosis of Type 2 Diabetes
- Suicide in Newfoundland and Labrador: A Linkage Study Using Medical Examiner and Vital Statistics Data
- Diabetes and other Chronic Disease Surveillance
- Enhancing Chronic Disease Surveillance in Newfoundland and Labrador
- Booster Seat Use among Canadian Children
- Enhancements to Cervical Cancer Database
- Inappropriate Medication Utilization Among Seniors Prior to the Implementation of the Pharmacy Network
- Assessing Administrative Databases for Surveillance of Depressive Disorders in NL
- Evaluation of Turnings' Circles of Support and Accountability
- Assessing the Impact of Out-of-Pocket Costs for Medications on Seniors' Well-being in Newfoundland and Labrador
- Enhancing internal capacity in health information management in First Nations communities in Newfoundland and Labrador (Phase 1 – Step 2)
- Effects of Previous Caesarean Section, Small for Gestational Age and Preterm Birth on the Risk of Future Stillbirth
- Cardiac Events in Early Diagnosed and Late Diagnosed Type 2-Diabetes Patients in Newfoundland and Labrador
- The role of high birth weight on incidence of childhood leukemia
- Atlantic iEHR (interoperable Electronic Health Records) Benefits Evaluation
- Telehealth Evaluation
- Mental Health Act Evaluation
- Baie Verte Linkage Project
- Cervical Screening Study
- Building of a Cardiac Care Database
- Researching Nursing Practice in the Community
- ER/PR Patient Identification Database
- Canadian Primary Care Sentinel Surveillance Network (CPCSSN)

During 2008-09, work was also underway on three reports, including Mortality Statistics 2002-2006, Live Birth Trends 2003-2007, and My People Where 2005/06 & 2006/07; and on eight *Fast Facts* brochures, including Digestive System Diseases, Cardiovascular Disease, Population Trends, Acute Care Hospitalizations, Mortality Statistics, Live Birth Trends, How to Interpret Data: Statistical Significance, and Hospital Utilization (My People Where).