

Annual Business Report 2011-2012





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Message from the Board Chair and the President/CEO

On behalf of the Board of Directors, we are pleased to submit the Newfoundland and Labrador Centre for Health Information's 2011-2012 Annual Business Report. This report has been prepared according to the guidelines for Category 2 Government Entities per the *Transparency and Accountability Act*. The Board accepts accountability for the results and variances outlined within.

The past year was challenging and productive for the Centre on many fronts. We continued to work with our key partners to add value to the health system through implementation of strategic health information systems, including the Pharmacy Network and the Clinical Safety Reporting System. We planned and prepared for implementation of the remaining core components of the provincial electronic health record, the iEHR/Labs project. We also continued planning work toward an end goal of increasing electronic health records adoption by the physician community. Additionally, we saw progress in numerous other activities under our purview, including relevant applied health research, data quality initiatives, health systems information support, benefits evaluation projects, and coordination of provincial collaboration.

All of the Centre's initiatives are undertaken on behalf of the provincial health system and are possible only with continued meaningful engagement, collaboration, and direct involvement of clinicians and other health professionals. Our strong partnership with the Department of Health and Community Services and the four Regional Health Authorities continues to be the critical success factor for province-wide initiatives supporting quality patient care through best practices in health information management and technology.

The Centre remains committed to supporting the health system and ultimately realizing improved population health for the people of Newfoundland and Labrador. We extend a sincere thanks to our Board of Directors, executive team, employees, key partners, and the Government of Newfoundland and Labrador. Our achievements from the past year were made possible only through their leadership, dedication, and commitment to our shared vision of improved health through quality health information.



Jerry Vink
Board Chair (*Acting*)



Mike Barron
President & CEO



About the Centre for Health Information

The Newfoundland and Labrador Centre for Health Information (the Centre) 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 (EHR), including the change management required to support adoption by end user clinicians. In addition to the EHR, the Centre also manages the planning, design, and implementation of specific provincial health information systems.

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, 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, 2017, the Centre will have planned and implemented provincial health information systems, including priority elements of the electronic health record, and provided quality health information that contributes to improved population health in Newfoundland and Labrador.

Core Values

The following values guide the Centre's Board of Directors and staff in their actions:

Empowerment

Each person is empowered within their knowledge and skills to contribute to the goals of the Centre.

Accountability

Each person is accountable for their actions to achieve the goals of the Centre.

Respect

Each person provides opportunities to others to express their opinions in an open and supportive environment.

Collaboration

Each person engages in a positive way with others in conducting the work of the Centre.

Flexibility

Each person is open to the suggestions of others and recognizes the different perspectives of board members, staff, clients, and stakeholders.

Privacy

Each person ensures all actions provide the greatest protection for personal information under the custodianship or management of the Centre.

Transparency

Each person is open about the actions taken in the work of the Centre and the decision-making process in support of these actions.

Excellence

Each person uses his or her knowledge and skills to strive for the best outcome in the actions taken in their work for the Centre.



Lines of Business

The Centre is an integral part of the provincial health system, supporting improvements in the collection of data and use of information for individual and population level care, administration, planning, and research. The Centre's services are available to provincial and federal governments and their agencies, community organizations, health professionals, and researchers. Information is also available to the public. The Centre ensures that collection, use, and disclosure of personal health information are compliant with the *Access to Information and Protection of Privacy Act*, the *Centre for Health Information Act*, the *Personal Health Information Act*, and other relevant legislation.

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 either led 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 provincial electronic health record (EHR) 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 EHR.
- Managing the planning, designing, and implementation of specific provincial health information systems.

Quality Information

Good decisions require good data. Data quality is critical to attaining the Centre's vision, improved health through quality health information. It was the recognition of the connection between quality health information and healthier people and communities that led to the establishment of the Centre in 1996. Since then, the Centre has collaborated with the provincial health system to ensure quality health information is available for system-wide planning, research, and policy development.

The need and expectations for high quality data have risen as the scope and magnitude of decisions made about and within the health system has increased at the national, provincial, and regional levels. The Centre responds to this need through its role as custodian of many health information systems on behalf of the province, including the numerous components of the provincial EHR system. The Centre is a leader in provincial standards development and implementation and the active pursuit of optimal quality of the data contained within the systems for which it is responsible.

Quality health information is information that is accurate, timely, useable, relevant, and comparable. To achieve the optimal level of quality for the information used and provided by the Centre to the health system, quality initiatives of various types are undertaken throughout the Centre. The following summarizes work undertaken by the Centre to ensure quality information is provided to its stakeholders:

Custodian of Health Information Systems

- Creating datasets from various sources of information for use by the Centre and the health system.
- Receiving and using data sets from other organizations.
- Operating provincial health information systems, including components of the provincial EHR.
- Providing a secure environment to house health information systems and use the data with the highest regard for privacy.

Standards Development and Implementation

- Developing financial, statistical, social, demographic, and clinical data standards for the health sector in collaboration with stakeholders, thereby ensuring that data collected is uniform in definition, measurement, collection, and interpretation.
- Participating in national and provincial health information standards committees and initiatives; customizing standards where necessary for provincial application, thereby adding value for the Newfoundland and Labrador health environment.
- Participating in the development of technical, messaging, and data standards for EHR components; supporting implementation of such standards in support of interoperability, which is an important goal - enabling appropriate sharing of select information.
- Supporting implementation of health information standards through education and consultative services.

Data Quality Initiatives

- Developing and adopting a corporate Data Quality Framework that fosters a corporate culture for quality, guides daily quality assurance activities, provides periodic evaluation of data quality, and reports results to internal and external stakeholders.
- Conducting various types of audits to identify data standards and quality issues and develop an action plan to address the matter. The solution may require revision to existing standards or development of new standards to fully resolve the issue.
- Providing education and training for data collectors and users to ensure data is accurately recorded and processed, and is used and interpreted appropriately.
- Publishing health information standards reference materials for use by stakeholders.
- Supporting and participating in the data quality initiatives of other organizations, such as the Canadian Institute for Health Information (CIHI), that complement and enhance provincial quality initiatives.

Research

The Centre supports the provincial Department of Health and Community Services and the Regional Health Authorities by providing research, evaluation, and information services used to inform provincial policy and program development and implementation. The Centre carries out and supports applied health research, which is the study of population health issues including risk factors for disease and health outcomes, as well as issues related to access, use, cost, safety, quality, delivery, and organization of health systems. It also includes the evaluation of information systems and government policy and programs. The Centre uses existing health data, surveys, focus groups, and interviews, along with other relevant data sources and methods of data collection in carrying out this work. The Centre also supports its stakeholders with their information and research needs by providing data extraction, data linkage, data management, and other information and analytical services. The Centre collaborates with Memorial University and many other organizations within and outside the province.

Number of Employees and Physical Location

The Centre is structured into five departments: Research and Evaluation; Health Information Network; Clinical Information Programs and Quality; Human Resources and Strategic Planning; and, Business Services and Finance. It currently employs 156 full-time staff; 65 males and 91 females.

Most Centre employees are based in the head office located at 70 O'Leary Avenue in St. John's, Newfoundland and Labrador. The Registry Integrity Unit, with six employees, is located in Bay Roberts, Newfoundland and Labrador.



Financial Statements

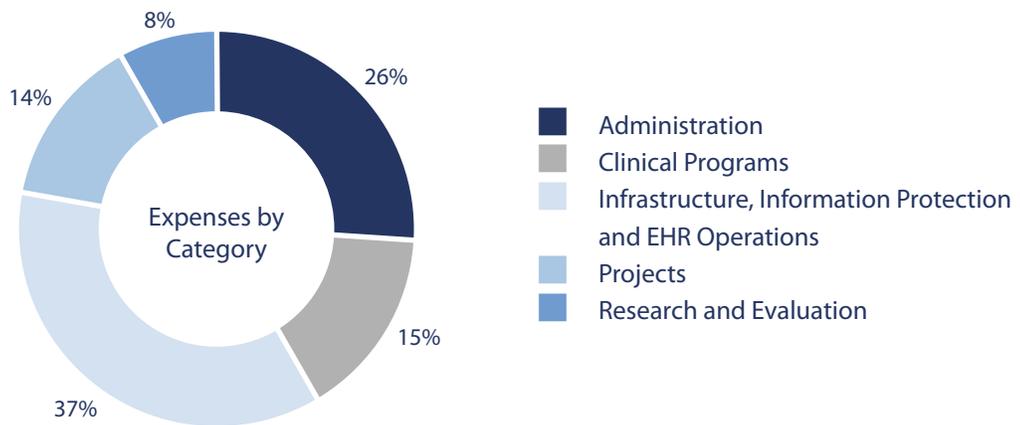
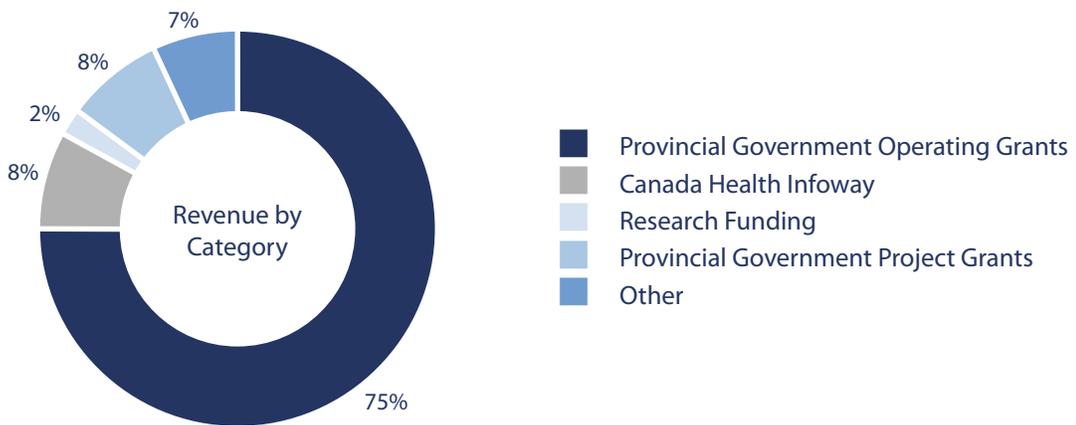
Effective for fiscal years beginning after January 1, 2011, other government organizations were required by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants (CICA) to adopt new accounting standards. These are the first financial statements for which the Centre has applied PSAB standards. The date of transition from generally accepted accounting principles (GAAP) to PSAB is April 1, 2010 and comparative information presented in these financial statements has been restated accordingly. Full details of the impact of the change in the basis of accounting are presented in Note 3 to the audited financial statements.

The Centre's revenue experiences annual fluctuations as projects commence and conclude and according to the placement and achievement of funding for project milestones. Revenue from Canada Health Infoway in 2012 was \$2.1 million, a reduction of \$2.6 million from the funding for project milestones achieved in 2011. Provincial Grant revenues increased by 6% over the previous year. Other revenue is comprised of provincial funding towards Clinical Safety and Reporting Systems, Picture Archiving and Communications Systems, Interoperable Electronic Health Records/Labs, and other initiatives.

Total expenses were higher for the year as electronic health record work proceeded, including increased depreciation and maintenance costs related to the acquisition of new computer assets.

The Audited Financial Statements, approved by the Centre's Board of Directors, are located on page 48 of this report.

Revenues and Expenditures





Shared Commitments

The Centre's success always depends on successful partnerships with its stakeholders. Building and maintaining these working relationships allowed the organization to advance its mandate and to successfully contribute to government's strategic directions of population health, access to priority services, and accountability and stability of health and community services.

Through these partnerships, development and implementation of the provincial electronic health record (EHR) continued to advance. The provincial EHR is intended to support enhanced patient care and improve the efficiency and effectiveness of the health care system. As well, the EHR provides a better ability to consolidate clinical findings and offers a higher probability of positive patient outcomes.

The Centre also contributed to improving population health by maintaining key data holdings on behalf of the provincial health system and through work conducted by its Research and Evaluation Department. The availability of this data and the knowledge generated through research and evaluation work supported health policy and decision-making within the health system.

Several key partners the Centre worked closely with in fulfilling its mandate included:

Canada Health Infoway

Canada Health Infoway is a federally-funded, independent, not-for-profit organization that invests with public sector partners to accelerate EHR development across Canada. It provides joint funding with the Department of Health and Community Services for provincial EHR projects, facilitates knowledge transfer with other jurisdictions, and supports project planning.

Canada Health Informatics Association (COACH)

COACH provides access to a diverse community of accomplished, influential professionals who work to make a difference in advancing health care through information technology. COACH is recognized nationally for its work around technology and systems and its focus on effective use of health information for decision-making. The association offers a broad range of services for networking, forums, information and best practice sharing, peer awards, national conferences, and professional development, including specialized career resources and professional certification. A number of Centre employees are active members of COACH. As well, the Centre's President & CEO serves on the Board of Directors.

Canadian Institute for Health Information

The Centre collaborated with the Canadian Institute for Health Information (CIHI) in its data quality and standards work. This included supporting national database reporting, validating provincial data published in CIHI reports, and identifying national and provincial data quality issues and opportunities.

Department of Health and Community Services

The Department of Health and Community Services (the Department) provided guidance and funding for provincial EHR projects, as well as supported the Centre in managing quality data and information. The Centre responded to numerous requests for information from, and worked closely with, the Department in the areas of applied health research and policy, including joint participation in the Evidence-to-Policy Liaison Committee, as well as in support activities related to the *Personal Health Information Act*.



Regional Health Authorities

Regional Health Authorities (RHAs) have an integral role in developing and implementing the provincial EHR, including engaging in planning, governance, implementation, and operation of various EHR components. The Centre engaged the RHAs to provide advice for governance-related issues around the EHR. The Centre worked with RHAs and the Department to ensure common approaches to protecting the privacy of personal health information and worked with the RHAs on initiatives supporting accurate collection and reporting of clinical, financial, and statistical data. The Centre also provided research, consulting, and information services upon request.

Other Provincial Bodies

The Centre collaborated with various government departments and entities, including the Office of the Chief Information Officer, the Vital Statistics Division of Service NL, and the Office of the Information and Privacy Commissioner.

Health Professionals

Health professionals provide the Centre with valuable guidance and input for developing an EHR that is practical and supportive for individuals working in the health field. The Centre engaged in ongoing consultation with health professionals through their professional associations, regulatory bodies, and provincial committees on clinical practice and policy development matters, as well as numerous meetings of key professional groups. Developing partnerships and gathering input from these groups supported increased adoption of the EHR.

Research Partners

The Centre continues to collaborate on research initiatives with various research partners including Memorial University's Faculty of Medicine and School of Pharmacy, the Department of Health and Community Services, Eastern Health, the Janeway Pediatric Research Unit, the Patient Research Centre, and the Population Therapeutics Research Group. The Centre collaborates with private sector researchers, as well as universities outside the province, including the University of Ottawa, University of Toronto, University of Calgary, University of British Columbia, University of Saskatchewan, University of Western Ontario, and McMaster University. A number of federal organizations also provide funding to the Centre's research, including Canada Health Infoway, Health Canada, and the Public Health Agency of Canada.

Other Organizations

The Centre regularly works with a variety of organizations to achieve its goals, including community groups, patient representatives, and advocacy groups. The Centre also works with the local and national vendor community and other organizations to identify and implement the most appropriate EHR solutions for the provincial environment.



Highlights and Accomplishments

The Centre is committed to realizing its vision of improved health through quality health information and supporting government in its strategic directions of population health, access to priority services, and accountability and stability of health and community services. Below are just a few of the many significant accomplishments the Centre achieved in 2011-2012.

Population Health

The Centre Continued its Role in Provincial Diabetes Research

In 2011-2012, the Centre's Research and Evaluation (R&E) Department completed a research study in collaboration with the Janeway Pediatric Research Unit that examined maternal and neonatal risk factors for type 1 diabetes mellitus (T1DM) among children aged 0 to 15 years in Newfoundland and Labrador. The study was funded by the Dr. Albert R. Cox Research Award from the Medical Research Fund at Memorial University's Faculty of Medicine.

Led by pediatrician Dr. Leigh Anne Newhook, this study involved the linkage of data on children who have been diagnosed with type 1 diabetes with birth registration data to identify potential risk factors for the development of T1DM. Maternal factors examined in the analysis included mother's age, marital status, education, T1DM status, and hypertension. Infant factors of interest included birth order, delivery method, prematurity or full-term birth, size-for-gestational-age, and birth weight.

Results from the study suggested that method of delivery is associated with increased risk of T1DM among children in Newfoundland and Labrador. This finding was significant given that Newfoundland and Labrador has the highest reported rates of type 1 diabetes in

North America and researchers are working to identify environmental factors that may be contributing to this trend.

The Centre's participation in this and other applied health research studies and policy evaluations helped fulfill its mandate to assist individuals, communities, health service providers, and policy makers in making informed decisions to enhance the health and well-being of persons in the province.

Other notable achievements:

- The Centre's R&E Department continued to work closely with the Department of Health and Community Services, Regional Health Authorities, and other key stakeholders to carry out chronic disease surveillance activities to support the development of chronic disease-related policy and programs.
- Four R&E staff members were appointed to adjunct positions with Memorial University's Faculty of Medicine.
- Over the past year the R&E Department positioned itself to take advantage of significant opportunities in pharmaco-genetics and pharmaco-epidemiology research that will present with the full deployment of the Pharmacy Network.

Access to Priority Services

Telehealth Connected its Sixtieth Community Site

Remote communities throughout the province gain increased access to health care services through the use of Telehealth technology. In 2011-2012, Ramea joined that list of communities when the Telehealth program connected its 60th community site on the island.



In the past, limited bandwidth to Ramea prohibited the use of Telehealth; however a bandwidth upgrade provided access for the technology. Now, residents of Ramea are able to access health care services and attend medical appointments with the help of Telehealth technology. Residents, who would often otherwise have to travel off the small island, can now see their health care provider by traveling only minutes from their home.

In addition to connecting the 60th community site, the Telehealth program continued to experience significant growth. Between April 2011 and March 2012, there were over 10,000 scheduled Telehealth appointments; an increase of 19% from the previous year. Telehealth technology continues to redefine “face-to-face” visits. With reductions in travel, time, and cost for patients and providers, Telehealth is and will continue to be a key factor in improving access to services across Newfoundland and Labrador.

Other notable achievements:

- The Provincial Telepathology Project was approved and officially began. Representing a joint partnership with Canada Health Infoway; University Health Network in Toronto; the Province of Manitoba; and the Province of Newfoundland and Labrador, this project will enable the creation of a Telepathology Network to be used for secondary consultation within the province and across the country.
- The Centre’s change management team and project managers, in collaboration with the Regional Health Authorities, held consultation visits in several facilities where pathology services are located to support successful implementation. Laboratory technologists and pathologists were fully engaged throughout implementation planning to ensure full benefits realization for patients and clinicians across the province.

Accountability and Stability of Health and Community Services

The Interoperable Electronic Health Records/Laboratory Project – Bringing the Reality of a Provincial EHR in Full View

The Interoperable Electronic Health Records/Laboratory (iEHR/Labs) Project will add several new components and functionality to the province's existing electronic health record (EHR). It will enable the storage of pertinent and timely patient health data including lab results, radiology reports, and priority elements of the patient's medical history into Clinical Data Repositories (CDRs). Within the current project scope, results from the province's tertiary care centre will be available to authorized clinicians for viewing, serving to enhance a patient's quality of care.

All planning and design work (Phase 2.1) for the project has been completed and in October 2011, it entered the development and implementation stage (Phase 2.2). Phase 2.2 will take the project through to implementation in the province's tertiary care centre within Eastern Health. The Centre worked with key partners in order to position the project for success. Based on the lessons learned from the planning and design phase of the project, the Centre was able to identify improvements in the schedule, resulting in early delivery of clinical value in the project.

The benefits of the iEHR/Labs Project, including its centralization and accessibility of a more complete picture of a patient's health profile, will be a turning point for our province's health care. The Centre has made great progress in its commitment to enabling improved health care in the province, overcoming challenges including vast geographic expanse, remote locations, and sparse population, all by enabling the provision of patient data at a clinician's fingertips.

Other notable achievements:

- A successful electronic medical record (EMR) planning phase called the EMR Definition Project was completed in 2011-2012. This project was undertaken on behalf of the Department of Health and Community Services and used a wide range of Centre resources to develop a model for a provincial EMR Program along with an EMR solution recommendation document.
- The Centre and the Province were recognized leaders on eHealth solution adoption and implementation planning in the April 2012 edition of "Electronic Healthcare" with an article co-authored by Cassie Frazer, Canada Health Infoway, and Ian Hodder, the Centre's Manager of Change Management
- The provincial Clinical Safety Reporting System Project, which is intended to improve the quality of care by contributing to making health care safer, completed the first two phases on time and within budget. These phases involved defining, developing, testing, and piloting a plan to support the regional implementation taking place in Phase 3.
- The Data Quality Framework was successfully applied to the Client Registry, contributing to improved quality of data available to the health care system.
- The Centre continued to emphasize and focus on maintaining the privacy of information in its custody. Throughout 2011-2012, Centre staff presented at several conferences and workshops, enhanced skill sets with additional certifications, and implemented new processes, all focused on continued adherence to best practices in information protection and privacy.

Bringing the Pharmacy Network into Emergency Departments

Over the past year, the Centre's Pharmacy Network Program prepared for connection of the Pharmacy Network in emergency departments across the province. The Care Provider Portal (CPP) - a 'viewer' that allows clinicians working in hospitals and emergency departments access to patient medication profiles - is part of the second phase of Pharmacy Network connections. The work completed throughout 2011-2012 set the foundation for the first connection of the CPP in an emergency department. Scheduled for mid-2012, this pilot will mark an exciting next step in developing the provincial EHR. The Centre also continued to work toward the goal of connecting all community pharmacies, with 40% connected as of March 2012, in order to realize the full potential of this important initiative for the people of the province.

Other notable achievements:

- In July 2011, the Centre hosted the second annual Pharmacy Vendor Workshop with representatives from major pharmacy vendors, the Pharmacy Association of Newfoundland and Labrador, and the Newfoundland and Labrador Pharmacy Board. Due to its success, it has become an annual event with another planned for 2012.





Report on Performance

Since the Centre was created in 1996, 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. Provincial health information systems are an essential tool for supporting and improving accountability in the health system by making quality health information available for the delivery of health care, for system and program planning, and for health research.

The Centre's mission of implementing priority elements of the EHR will have a significant impact on health informatics in the province. As a priority project, the EHR was approved by all funders and the funding and budget were in place to support sustainability. Development was logical (i.e. sequential) and the level of risk was manageable. As a priority of the Department of Health and Community Services, the EHR supports quality health care and patient safety and the users of the information system supported the implementation.

The Centre's work in developing provincial health systems contributed to government's strategic direction of accountability and stability of health and community services. As EHR implementation continues, the EHR will increasingly provide more accurate, reliable, and comparable data for policy making, program monitoring, and resource allocation. The Centre's work, through both EHR development and research and evaluation, also contributed to government's strategic direction of population health.

Progress made on achieving the Centre's mission to date can be found in past annual reports available on the Centre's website: www.nlchi.nl.ca. This report focuses on the 2011-2012 progress in achieving the goals and objectives identified in the Business Plan 2011-2014, also available online at www.nlchi.nl.ca.

2011-2012 Progress

As noted on page 6 of this report, the Centre's mission is:

By March 31, 2017, the Centre will have planned and implemented provincial health information systems, including priority elements of the electronic health record, and provided quality health information that contributes to improved population health in Newfoundland and Labrador.

The Centre's Board of Directors identified four key areas, or issues, the organization will focus on from 2011 to 2014 supporting the strategic directions of the Department of Health and Community Services and working toward realization of this vision. These four areas include the provincial health information systems, quality data, research and evaluation, and stakeholder engagement. From these issues, corresponding goals and objectives were established to define the direction and outcomes the Centre is seeking to address. The indicators associated with these goals and objectives allow the Centre to regularly ensure positive momentum. The following details the 2011-2012 progress and plans related to these goals and objectives.





Issue 1: Provincial Health Information Systems

Provincial health information systems are an essential tool for supporting and improving accountability in the health system by making quality health information available for health care delivery, system and program planning, and health research. In the past year, the Centre strived to initiate implementation of approved aspects of an EHR strategic plan and to support other provincial health information systems.

The Centre's work in developing provincial health information systems, such as the electronic health record, contributed to government's strategic direction of accountability and stability of health and community services. Upon implementation, the electronic health record will help identify and monitor outcomes for select programs, support alignment of regional services, and improve efficiency and effectiveness of the health care system.

Two core information 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 components that are part of the provincial EHR include: registries, a drug information system, a digital diagnostic imaging system, a laboratory information system, public health surveillance, and electronic medical records. Once implemented, the provincial EHR will provide accurate, reliable, and comparable data for policy making, program monitoring, and resource allocation.

Goal 2011-2014	By March 31, 2014, the Centre will have initiated implementation of priority elements of provincial health information systems.
Measure 2011-2014	Initiated implementation of priority elements of provincial health information systems.
Indicators 2011-2014	<ul style="list-style-type: none"> • Implemented priority elements of the approved provincial EHR strategic plan. • Managed the development, integration, and operation of EHR components. • Supported development and management of other provincial health information systems.

Year One Objective

By March 2012, the Centre will have initiated implementation of an EHR strategic plan and supported other provincial health information systems, with emphasis on priority elements of the provincial EHR.

Measure 2011-2012

- Initiated implementation of approved aspects of an EHR strategic plan.
- Supported other provincial health information systems.

Planned for 2011-2012	Actual for 2011-2012
Continued implementation of the Pharmacy Network in community pharmacies province-wide.	<ul style="list-style-type: none"> Continued implementation of Pharmacy Network, connecting an additional 33 pharmacies (17%) between April 2011 and March 2012. This brought the total connected pharmacies to 74 (39%) as of March 31, 2012.
Implemented the provincial Client Safety Reporting System (CSRS) pilot.	<ul style="list-style-type: none"> Defined and developed a provincial system in collaboration with key partners, including all RHAs and the DHCS. Tested final system, planned, and implemented the provincial CSRS pilot project.
Supported initial regional implementations of CSRS.	<ul style="list-style-type: none"> This initiative began May 2011 with the pilot in Western Health. Regional implementations are expected to be completed by October 2012, with final evaluation completed by the Centre by March 2013. Provided Regional Health Authorities with tools to move forward with regional implementation, training, and evaluation. The Centre acted as a funding agent on behalf of the DHCS (i.e. reimbursing RHAs for approved expenditures) and monitored and reported to the DHCS and the CSRS Governance Committee.
Developed plan for implementation of a physician office system program.	<ul style="list-style-type: none"> Completed a plan for implementation of a physician office system program.

Planned for 2011-2012

Encouraged end user adoption of EHR and other provincial health information systems.

Actual for 2011-2012

The following activities and initiatives encouraged end user adoption of the EHR and other provincial health systems by ensuring end users are informed, educated, prepared, and supported in use of these systems:

- Held planning meeting with Western Health emergency department clinical and health information technology staff to prepare for pilot site implementation and adoption.
- Developed lessons learned document to be applied to future RHA pilots.
- Completed initial recruitment of Clinical Working Group that included representation of provincial and RHA clinical leaders.
- Conducted Provincial Telepathology site readiness visits. Consulted clinical end users about initial site implementation and adoption needs at all nine pathology sites.
- Facilitated inclusion of EHR course in Nurse Practitioner Health Systems course at the Centre for Nursing Studies.
- Continued preparation for installation of care provider viewer at a pilot hospital emergency department in Western Health, scheduled for mid-2012.
- Completed assorted initiatives related to training, education, and support for pharmacy staff connecting to the Pharmacy Network, including site visits, training, and post-connection support processes.

Planned for 2011-2012	Actual for 2011-2012
<p>Completed approved elements of iEHR/Labs project.</p>	<ul style="list-style-type: none"> • Approved elements of the iEHR/Labs project, including plan approval, project initiation, and early development of the viewer interface were completed as committed. • The project is continuing with further development of the viewer interface. Implementation of the interface is expected in early 2013 and project completion expected in 2014.
<p>Implemented Tele-ophthalmology pilot project in Burin.</p>	<ul style="list-style-type: none"> • Implementation of the pilot project was rescheduled for April 2012 to align with resource requirements in Eastern Health.
<p>Completed Phase I planning for the Multijurisdictional Telepathology (MJT) project.</p>	<ul style="list-style-type: none"> • Phase 1 planning for the MJT project was completed.

Discussion of Results

The Centre had solid achievements related to priority elements of provincial health information systems throughout 2011-2012. Deployment of the Pharmacy Network continued with the connection of an additional 33 pharmacies bringing the total connections to approximately 40 percent by the end of year. The Centre also completed significant work readying for the first emergency department connection to the Network, scheduled for June 2012. In addition, the Centre partnered with the Regional Health Authorities and the Department of Health and Community Services on the provincial Client Safety Reporting System (CSRS) pilot, including supporting the RHAs in regional implementations. This initiative will contribute to improved safety throughout the provincial health care system.

The Centre initiated the next phase of iEHR/Labs project, which will enhance the existing provincial EHR by enabling storage of and authorized access to pertinent and timely patient health data, such as lab results and radiology reports. Work on the project advanced in 2011-2012, including project initiation and early development of the viewer interface that will enable clinician viewing of the patient data. Implementation of the viewer is expected by early 2013, with project completion in the province's tertiary care facility expected in 2014.

Finally, the Centre continued to make strides toward supporting end user adoption of various provincial health information systems through collaboration with health care professionals across the province. Ensuring end users feel prepared for, informed on, and supported in using EHR provincial health information systems encourages their successful adoption of those systems. The extensive efforts of the Centre in offering presentations, training, working groups, and site visits ensure end users are informed, educated, and have the resources they need for adoption.

Year Two Objective	Measure	Indicators
<p>By March 2013, the Centre will have continued implementation of priority elements of the provincial EHR.</p>	<p>Continued implementation of priority elements of the provincial EHR.</p>	<ul style="list-style-type: none"> • Continued implementation of the Pharmacy Network in community pharmacies province-wide. • Implemented Pharmacy Network viewer in one emergency department. • Completed priority elements of the iEHR/Labs project. • Worked with the DHCS to develop the Public Health Surveillance System proposal. • Continued implementation of Tele-ophthalmology with pilot project in Burin. • Initiated implementation of Multijurisdictional Telepathology (MJT).

Year Three Objective

By March 2014, the Centre will have implemented funded components of the provincial EHR and other provincial health information systems.

Issue 2: Quality Data

As the Centre's data holdings grow and that information is used to support evidence-based decision-making, the Centre's ability to define and measure the quality of its data holdings grows in importance. Data quality is critical to the attainment of the Centre's vision and supports government's strategic direction of population health.

A Data Quality Framework (DQF) was developed in 2009 to foster a culture of quality and integrate quality processes into our day-to-day information management processes. The DQF also provides an integrated approach to defining, measuring, and improving the quality of the data contained within the databases managed by the Centre. To date, the DQF has been applied to the Centre's key clinical administrative databases and has been adapted for use by the EHR Client and Provider Registries. It will continue to evolve over time as it is applied to additional databases.

Goal 2011-2014	By March 31, 2014, the Centre will have provided quality data from the key databases of which it is the custodian.
Measure 2011-2014	Provided quality data from key databases.
Indicators 2011-2014	<ul style="list-style-type: none">• Implemented the DQF for selected databases.• Assessed the quality of data within those databases.• Improved data quality and documentation for health information databases.

Year One Objective

By March 2012, the Centre will have applied the DQF to assess the data quality of selected databases.

Measure 2011-2012

Applied the DQF to assess the data quality.

Planned for 2011-2012	Actual for 2011-2012
Identified databases which the DQF will be applied.	<ul style="list-style-type: none">• The NLCHI Out of Province Database and the Provider Registry were identified for application of the DQF. In addition, the DQF supported ongoing quality processes for the Clinical Database Management System, NLCHI Live Birth, Stillbirth, and Mortality Systems, and the Client Registry.
Documented opportunities for improvement based on data quality assessments.	<ul style="list-style-type: none">• Each data quality assessment completed resulted in an action plan for continuous quality improvement.
Developed data quality documentation for selected databases.	<ul style="list-style-type: none">• Developed draft Master Methodology and User Guide documents for the NLCHI Out of Province Database.• Developed a Master Methodology document and a data quality assessment tool for the Provider Registry.• Viewed and updated existing quality documents for the NLCHI Live Birth, Stillbirth, and Mortality Systems, and the Client Registry.

Discussion of Results

The Centre achieved all quality data indicators it set out for 2011-2012, positioning it well for completing the overall end data quality goal by 2014. Quality data is that which is accurate, timely, useful, comparable, and relevant. The Centre's ongoing efforts toward continuous improvement of the data in its custody contribute to increased accountability and stability in health and community services.

Year Two Objective	Measure	Indicators
By March 2013, the Centre will have adapted the DQF for use with other EHR component systems and associated databases.	Adapted the DQF for use with other EHR component systems and associated databases, including for Provider Registry and Client Registry.	<ul style="list-style-type: none">• Completed annual data quality assessment for the Client Registry.• Completed pilot application of the data quality assessment to the Provider Registry.• Developed action plans for continuous quality improvement based on each data quality assessment.• Determined feasibility of adaptability of the data quality framework to the PN.

Year Three Objective

By March 2014, the Centre will have evaluated the effectiveness of DQF implementation.

Issue 3: Research and Evaluation

The Centre played an increasingly important role in applied health research and evaluation in the province, which contributed to evidenced-based planning in the health system. The Centre will continue that role, particularly following the implementation of priority components of the electronic health record. Providing health professionals, program planners, and policy makers with quality health information to support decision-making contributed to government's strategic direction of population health.

Opportunities for undertaking innovative applied health research involving the use of existing health data has grown significantly over the past decade and will continue to grow in light of emerging trends in health research, such as genetics and personalized medicine. During 2011-2012, the Centre was awarded approximately \$1 million in external research funding.

The Centre ensures alignment of its research with provincial and national strategies and priority areas through the Evidence-to-Policy Liaison Committee. The mandate of this committee is to facilitate the use of information, research, and evaluation to support provincial policy and program development and implementation.



Goal 2011-2014	By March 31, 2014, the Centre will have provided information through research and evaluation services to support health policy and improved population health.
Measure 2011-2014	Provided information, research, and evaluation services.
Indicators 2011-2014	<ul style="list-style-type: none"> • Supported the Centre and stakeholder's information needs through applied health research, evaluation, and information services. • Supported the Department of Health and Community Services by providing information for the development of evidence-based policy. • Engaged in a collaborative model for health research.

Year One Objective

By March 2012, the Centre will have assessed opportunities for collaborative research.

Measure 2011-2012

Assessed opportunities for collaborative research.

Planned for 2011-2012	Actual for 2011-2012
Developed communications material to promote collaborative research opportunities.	<ul style="list-style-type: none"> Completed communications plan that included communications materials, such as presentations and newsletter articles.
Presented at conferences and to relevant stakeholder groups.	<ul style="list-style-type: none"> Presented at seven conferences and held over 25 presentations to stakeholder groups.
Continued participation in the Research and Evaluation, Department of Health and Community Services Evidence-to-Policy Liaison Committee.	<ul style="list-style-type: none"> Research and Evaluation management actively participated in four Evidence-to-Policy Liaison Committee meetings in 2011-2012.

Discussion of Results

The Centre continued to make progress in its work in applied health research and evaluation throughout 2011-2012, seeing all of the year's indicators achieved. The Centre ensured it promoted opportunities for collaborative research through various presentations and workshops, raised awareness of the research work it is engaged in, and supported the Department of Health and Community Services research needs. In the coming years, the Centre will build upon this work in applied health research and evaluation, particularly following the implementation of priority components of the electronic health record.

Year Two Objective	Measure	Indicators
<p>By March 2013, the Centre will have engaged in collaborative research and evaluation with stakeholders.</p>	<p>Engaged in collaborative research and evaluation opportunities.</p>	<ul style="list-style-type: none"> • Submitted proposals in partnership with stakeholders for new research and evaluation studies. • Provided services in support of research and evaluation by external stakeholders. • Presented findings of collaborative research and evaluation at annual Research and Evaluation Day.

Year Three Objective

By March 2014, the Centre will have increased information assets in support of improved population health in Newfoundland and Labrador.

Issue 4: Stakeholder Engagement

The Centre provides significant health, economic, and financial benefits to the province, along with support to health professionals and the organization's work in these areas must be shared with its broad base of clients and stakeholders. The Centre's accountability to the public includes making reasonable efforts to increase stakeholder engagement and awareness of the value of its work. With this in mind, the Centre will engage, inform, and assess awareness of its many different stakeholders about its role in improving population health through the provision of quality health information. Evaluation of work in this area will vary by stakeholder and be specific to each stakeholder group based on types and levels of interaction with the Centre.



Goal 2011-2014	By March 31, 2014, the Centre will raise stakeholder awareness of its role in improving population health through the provision of quality health information.
Measure 2011-2014	Increased stakeholder awareness as a provider of quality health information.
Indicators 2011-2014	<ul style="list-style-type: none"> • Increased stakeholder understanding of the role of the Centre. • Fostered collaborative approach with stakeholders for development, integration, and ongoing operation of provincial EHR and other health information systems.

Year One Objective

By March 2012, the Centre will have developed an approach to increase awareness of the role of the Centre.

Measure 2011-2012

Developed an approach.

Planned for 2011-2012	Actual for 2011-2012
<p>Conducted stakeholder surveys.</p>	<p>Assessments with pharmacists and PACS stakeholder groups were conducted, as per intentions for the 2011-2012 year. Specifically:</p> <ul style="list-style-type: none"> • Conducted pharmacists' survey as part of the benefits evaluation of the Pharmacy Network. • Conducted stakeholder key informant interviews as part of the Picture Archiving and Communications System (PACS) unreadable images evaluation.
<p>Developed strategies to increase stakeholder engagement.</p>	<p>The following activities were part of the Centre's stakeholder engagement strategies:</p> <ul style="list-style-type: none"> • Developed terms of reference and conducted orientation sessions for external members to strengthen Project Steering Committees. • Developed a plan to revise Terms of Reference for all EHR Advisory Committees and eHealth Executive Committee. • Developed key stakeholder maps and communications tactical strategies for Pharmacy Network.

Planned for 2011-2012

Engaged in proactive communications.

Actual for 2011-2012

The Centre engaged in the following communications initiatives to proactively ensure that stakeholders were aware of and/or engaged in the Centre's activities:

- Chaired and led various provincial committees.
- Participated in and presented at numerous provincial, national, and international conferences. Some examples include: Canadian EHR Governance Network, Canadian Change Management Network, and Pharmacy Association of Newfoundland and Labrador (PANL).
- Held EHR sessions at annual Nursing Practitioner Conference, PANL annual general meeting, School of Medicine's Health Systems course, School of Pharmacy, and Eastern Health's grand rounds.
- Eleven abstracts accepted and presented by Centre staff at the national eHealth Conference in Toronto.
- The Centre partnered with Canada Health Infoway on a national EHR public awareness campaign to increase awareness of and support for EHRs.
- Issued four copies of Centre newsletter, eBackbone highlighting Centre activities, and submitted articles in external stakeholder newsletters, such as PANL.
- Updated content and developed new platform to improve website navigation.
- Developed draft brochure about the Centre, as well as a draft brochure and poster for Telehealth services.

Discussion of Results

The success of the Centre is greatly contingent on solid relationships and partnerships with its key stakeholders. Throughout 2011-2012, the Centre worked diligently to proactively engage its stakeholders in its activities and to raise awareness about the value of its work. The Centre developed a new corporate website platform to provide improved navigation and updated content for those who require it; the site is scheduled to launch in May 2012. The Centre also continued its efforts to engage stakeholders at all levels and at all stages of its work, from project planning and initiation with steering committees through to project implementation with ongoing end user education and adoption support. These types of strategies increase stakeholder engagement by ensuring clear understanding of roles and responsibilities, outlining expectations of committees and participating members. Furthermore, developing stakeholder maps supports targeted and proactive engagement on the part of the Centre.

The Centre leveraged opportunities such as the Canada Health Infoway public awareness campaign to bring awareness to the broader population in a cost efficient and appropriate manner. Finally, the Centre also ensured it had a presence at various provincial, national, and international conferences demonstrating the province's leadership in the eHealth arena. The Centre has established solid working relationships with many key partners and will continue to build on those as it works toward achieving its mission.



Year Two Objective	Measure	Indicators
<p>By March 2013, the Centre will have implemented strategies that collaboratively engage stakeholders and raise understanding of the Centre.</p>	<p>Implemented strategies that collaboratively engage stakeholders and raise understanding of the Centre.</p>	<ul style="list-style-type: none"> • Delivered provincial eHealth conference. • Conducted a public awareness campaign for PN. • Continued to co-chair the Evidence-to-Policy Liaison Committee between DHCS and the Centre. • Continued to manage provincial stakeholder committees. • Continued to communicate the Centre's leadership role in provincial eHealth governance.

Year Three Objective

By March 2014, the Centre will have demonstrated effectiveness of strategies to raise stakeholder understanding of and collaboration with the Centre.



Opportunities and Challenges

Like most organizations, the Centre will continually experience opportunities and challenges as it works to fulfill its mission and achieve its vision. Some of the opportunities and challenges the Centre anticipates as it continues to provide quality information to key stakeholders include:

Opportunities

- The Centre remains on the forefront of EHR development and implementation in Canada and holds a reputation as a national leader in this area.
- Continued implementation of the Pharmacy Network is increasing the availability of information to authorized health providers, thereby enhancing the provision of patient care.
- Advancements in EHR implementation, such as the iEHR/Labs development, are continuing to generate benefits in the delivery and availability of health care for both professionals and patients. The Centre will leverage this as it moves forward with EHR development.
- The Centre will continue to leverage external funding in support of research that contributes to improved population health, in turn supporting the provincial government in that strategic direction.

Challenges

- The complexity of EHR development, including its extremely technical nature, continues to challenge the Centre. Resource requirements, stakeholder expectations, and external and internal partnerships must be regularly assessed and prioritized to ensure the Centre can fulfill its mandate.
- Successful development of the EHR and achievement of the Centre's mandate is also dependent upon the support and availability of business partners, vendors, and the provincial health care system. The Centre is regularly focused on developing collaborative partnerships and positive relationships with its stakeholders.
- The Centre continually faces challenges in organizational capacity, growth, and securing and maintaining the right skill sets to manage and succeed with the numerous initiatives it is tasked with.
- As a trusted and secure third-party holder of personal information, data management, and linkage of information with its stakeholders, the Centre strives to meet and exceed all requirements it has related to information protection and security.



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Financial Statements

Newfoundland and Labrador Centre for Health Information

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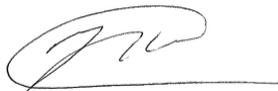
Statement of Responsibility

The accompanying financial statements are the responsibility of the management of the Newfoundland and Labrador Centre for Health Information (the "Centre") and have been prepared in compliance with legislation, and in accordance with generally accepted accounting principles established by the Public Sector Accounting Board of The Canadian Institute of Chartered Accountants.

In carrying out its responsibilities, management maintains appropriate systems of internal and administrative controls designed to provide reasonable assurance that transactions are executed in accordance with proper authorization, that assets are properly accounted for and safeguarded, and that financial information produced is relevant and reliable.

The Board met with management and its external auditors to review a draft of the financial statements and to discuss any significant financial reporting or internal control matters prior to their approval of the finalized financial statements.

Grant Thornton LLP as the Centre's appointed external auditors, have audited the financial statements. The auditor's report is addressed to the Directors of the Centre and appears on the following page. Their opinion is based upon an examination conducted in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as they consider necessary to obtain reasonable assurance that the financial statements are free of material misstatement and present fairly the financial position and results of the Centre in accordance with Canadian public sector accounting standards.



Jerry Vink
Board Chair (*Acting*)



Jim Janes
Director

Independent Auditors' Report

To the Directors of Newfoundland and Labrador Centre for Health Information

We have audited the accompanying financial statements of Newfoundland and Labrador Centre for Health Information, which comprise the statement of financial position as at March 31, 2012, March 31, 2011 and April 1, 2010 and the statement of operations, statement of net debt and changes in cash flows for the years ended March 31, 2012 and March 31, 2011 and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

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 comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Centre's preparation and fair

presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Centre's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Newfoundland and Labrador Centre for Health Information as at March 31, 2012, March 31, 2011 and April 1, 2010 and its financial performance, net debt and its cash flows for the years ended March 31, 2012 and March 31, 2011 in accordance with Canadian public sector accounting standards.

St. John's, Newfoundland and Labrador

June 20, 2012

Grant Thornton LLP

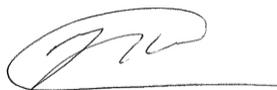
Chartered Accountants

Statement of Financial Position

March 31	2012	(Note 3) 2011	(Note 3) April 1 2010
Financial assets			
Cash and cash equivalents	\$ 5,535,147	\$ 3,148,014	\$ 816,556
Temporary investment	5,000,000	-	-
Receivables (Note 4)	5,520,376	8,395,654	7,406,445
	<u>16,055,523</u>	<u>11,543,668</u>	<u>8,223,001</u>
Liabilities			
Payables and accruals (Note 5)	7,256,470	5,182,788	5,505,319
Deferred revenue	12,492,096	7,644,248	9,675,165
Deferred capital contributions (Note 6)	13,125,510	13,645,727	8,662,078
Accrued severance pay	1,239,126	1,152,711	864,005
	<u>34,113,202</u>	<u>27,625,474</u>	<u>24,706,567</u>
Net debt	(18,057,679)	(16,081,806)	(16,483,566)
Non-financial assets			
Tangible capital assets (Page 65)	19,236,131	18,206,368	17,168,205
Prepays	1,461,836	1,097,143	1,132,323
	<u>20,697,967</u>	<u>19,303,511</u>	<u>18,300,528</u>
Accumulated surplus	\$ 2,640,288	\$ 3,221,705	\$ 1,816,962

Commitments (Note 7)

On behalf of the Centre



Jerry Vink
Board Chair (Acting)



Jim Janes
Chair, Finance & Audit Committee

See accompanying notes to the financial statements.

Statement of Operations and Changes in Accumulated Surplus

Year Ended March 31	Actual 2012	(Note 8) Budget 2012	(Note 3) Actual 2011
Revenue			
Grants			
Canada Health Infoway	\$ 2,123,342	\$ 2,507,215	\$ 4,678,691
Government of Newfoundland and Labrador	19,832,845	23,136,491	18,697,473
Amortization of deferred capital	1,668,795	2,830,000	960,498
Research	678,032	665,020	655,743
Interest	117,263	-	30,481
Other	<u>2,014,248</u>	<u>3,106,232</u>	<u>2,593,312</u>
	<u>26,434,525</u>	<u>32,244,958</u>	<u>27,616,198</u>
Expenses (Pages 66 and 67)			
Administration	6,978,402	7,142,289	6,084,306
Clinical Programs	4,048,161	5,155,223	3,576,134
Infrastructure, Information Protection and EHR Operations	10,088,110	12,982,583	9,630,456
Projects	3,874,324	4,732,682	4,727,312
Research and Evaluation	<u>2,026,945</u>	<u>2,232,181</u>	<u>2,193,247</u>
	<u>27,015,942</u>	<u>32,244,958</u>	<u>26,211,455</u>
Annual (deficit) surplus	<u>\$ (581,417)</u>	<u>\$ -</u>	<u>\$ 1,404,743</u>
Accumulated surplus, beginning of year	\$ 3,221,705	\$ 3,221,705	\$ 1,816,962
Annual (deficit) surplus	<u>(581,417)</u>	<u>-</u>	<u>1,404,743</u>
Accumulated surplus, end of year	<u>\$ 2,640,288</u>	<u>\$ 3,221,705</u>	<u>\$ 3,221,705</u>

See accompanying notes to the financial statements.

Statement of Net Debt

Year Ended March 31	Actual 2012	Budget 2012	Actual 2011
Annual (deficit) surplus	\$ (581,417)	\$ -	\$ 1,404,743
Acquisition of tangible capital assets	(4,350,278)	(2,264,056)	(3,744,809)
Amortization of tangible capital assets	3,320,515	2,980,000	2,706,646
Increase in prepaids	<u>(364,693)</u>	<u>(369,337)</u>	<u>35,180</u>
(Increase) decrease in net debt	(1,975,873)	346,607	401,760
Net debt, beginning of year	<u>(16,081,806)</u>	<u>(16,081,806)</u>	<u>(16,483,566)</u>
Net debt, end of year	<u>\$ (18,057,679)</u>	<u>\$ (15,735,199)</u>	<u>\$ (16,081,806)</u>

See accompanying notes to the financial statements.

Statement of Cash Flows

Year Ended March 31	2012	2011
Increase (decrease) in cash and cash equivalents		
Operating		
Annual (deficit) surplus	\$ (581,417)	\$ 1,404,743
Change in non-cash items		
Amortization of capital assets	3,320,515	2,706,646
Amortization of deferred capital contributions	(1,668,795)	(960,498)
Increase in severance pay accrual	86,415	288,706
Change in non-cash operating working capital		
Receivables	2,875,278	(989,209)
Prepaid expenses	(364,693)	35,180
Payables and accruals	2,073,682	(322,531)
Deferred revenue	<u>4,847,848</u>	<u>(2,030,917)</u>
Cash provided by operating transactions	<u>10,588,833</u>	<u>132,120</u>
Capital		
Cash applied to capital transactions	<u>(4,350,278)</u>	<u>(3,744,809)</u>
Financing transactions		
Capital contributions from Government and Infoway	<u>1,148,578</u>	<u>5,944,147</u>
Increase in cash and cash equivalents	7,387,133	2,331,458
Cash and cash equivalents, beginning of year	<u>3,148,014</u>	<u>816,556</u>
Cash and cash equivalents, end of year	<u>\$ 10,535,147</u>	<u>\$ 3,148,014</u>

See accompanying notes to the financial statements.

Notes to the Financial Statements

March 31, 2012 and March 31, 2011

1. Purpose of organization

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). The Newfoundland and Labrador Centre for Health Information Act was proclaimed in April 27, 2007, thereby establishing the Centre as a Corporation without share capital under the Corporations Act. The Centre is a Government Organization and reports to the Legislative Assembly through the Ministry of Health and Community Services. The Centre is exempt from income tax under Section 149 of the Income Tax Act.

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.

2. Summary of significant accounting policies

Basis of presentation

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles as recommended by the Public Sector Accounting Standards Board (PSAB) of the Canadian Institute of Chartered Accountants and reflect the following significant accounting policies.

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

Use of estimates

In preparing the Centre's financial statements in conformity with Canadian public sector accounting standards, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements and the reported amounts of revenues and expenses during the period. Items requiring the use of significant estimates include the useful life of capital assets, estimated accrued severance and sick leave, rates of amortization and impairment of assets.

Estimates are based on the best information available at the time of preparation of the financial statements and are reviewed annually to reflect new information as it becomes available. Measurement uncertainty exists in these financial statements. Actual results could differ from these estimates.

Revenue recognition

Government grants are recognized in the period in which entitlement arises. Revenue from grants is recognized as deferred revenue when amounts have been received but not all eligibility criteria has been met. Other revenue from research and other contracts is recognized as the related expenditures are incurred. Interest income is recognized as it is earned.

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.

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

Non-financial assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives generally extending beyond the current year and are not intended for sale in the ordinary course of operations. The change in non-financial assets during the year, together with the annual deficit, provides the change in net debt for the year.

Tangible capital assets

Tangible capital assets are recorded at cost. Depreciation is provided annually at rates calculated to write off the assets over their estimated useful life as follows:

Computer equipment	20%,	straight line
Office furniture	15%,	straight line
Computer software	33%,	straight line
Leasehold improvements	10%,	straight line
Pharmacy Network	10%,	straight line
Health Information Access Layer	10%,	straight line
iEHR Labs	10%,	straight line

Impairment of long-lived assets

Long lived assets are written down when conditions indicate that they no longer contribute to the Centre's ability to provide goods and services, or when the value of future economic benefits associated with the assets are less than their net book value. The net write downs would be accounted for as expenses in the statement of operations.

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

Capital contributions

The Centre receives funding specifically for the development of major software and systems to be used by the various stakeholders within the Province's health care sector. The Centre also has a responsibility to continue to develop and sustain the software and systems for the stakeholders. Based on the Centre's responsibilities to provide a service to maintain these major projects, the funding received has been included as a liability and recognized as revenue over the project's useful life.

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. Severance pay is payable when the employee ceases employment with the Centre and has achieved the minimum of nine years of continual service.

Financial instruments

The Centre considers any contract creating a financial asset, liability or equity instrument as a financial instrument, except in certain limited circumstances. The Centre accounts for the following as financial instruments:

- cash and cash equivalents;
- temporary investments;
- receivables; and
- payables and accruals.

A financial asset or liability is recognized when the Centre becomes party to contractual provisions of the instrument.

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

The Centre initially measures its financial assets and financial liabilities at fair value adjusted by, in the case of a financial instrument that will not be measured subsequently at fair value, the amount of transaction costs directly attributable to the instrument.

The Centre subsequently measures its financial assets and financial liabilities at cost or amortized cost.

Financial assets measured at fair value include cash and cash equivalents and temporary investments. Financial assets measured at cost include receivables.

Financial liabilities measured at cost include payables and accruals.

The Centre removes financial liabilities, or a portion of, when the obligation is discharged, cancelled or expires.

Financial assets measured at cost are tested for impairment when there are indicators of impairment. Previously recognized impairment losses are reversed to the extent of the improvement provided the asset is not carried at an amount, at the date of the reversal, greater than the amount that would have been the carrying amount had no impairment loss been recognized previously. The amounts of any write-downs or reversals are recognized in net annual surplus.

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

Adoption of new accounting policies

During the year, the Centre transitioned to PSAB standards. As part of this transition, the Centre has also early adopted the new standards included in *PS 3410 Government Transfers* and *PS 3450 Financial Instruments*. The Public Sector Accounting Board encouraged early adoption of these standards in the year of transition.

3. Impact of the change in the basis of accounting

These financial statements are the first financial statements for which the Centre has applied Canadian public sector accounting standards ("PSAB"). The financial statements for the year ended March 31, 2012 were prepared in accordance with PSAB. Comparative period information presented for the year ended March 31, 2012 was prepared in accordance with PSAB and the provisions set out in Section *PS 2125 First-time adoption by government organizations*.

The date of transition to PSAB is April 1, 2010. The Centre's transition from generally accepted accounting principles (previously "GAAP") to PSAB resulted in a restatement of deferred project costs, accrued sick leave, deferred revenues, accrued severance pay, deferred capital contributions, and opening accumulated surplus as at April 1, 2010. The adoption of the standards also resulted in a restatement of the Statement of Operations for the year ended March 31, 2011 as well as the deferred project costs, deferred capital contributions, deferred revenue, accrued severance pay and accumulated surplus as of March 31, 2011. These changes are as follows:

3. Impact of the change in the basis of accounting (cont'd)

(a) Adjustment to the statement of financial position as at April 1, 2010:

	<u>As previously reported</u>	<u>Effect of transition</u>	<u>As restated</u>
Financial assets			
Receivables	\$ 7,049,484	\$ 356,961	\$ 7,406,445
Liabilities			
Payables and accruals	\$ 5,380,319	\$ 125,000	\$ 5,505,319
Deferred revenues	9,833,950	(158,785)	9,675,165
Deferred capital contributions	13,719,541	(5,057,463)	8,662,078
Accrued severance pay	<u>812,360</u>	<u>51,645</u>	<u>864,005</u>
	<u>\$ 29,746,170</u>	<u>\$ (5,039,603)</u>	<u>\$ 24,706,567</u>
Non-financial assets			
Deferred project costs	<u>\$ 4,610,316</u>	<u>\$ (4,610,316)</u>	<u>-</u>
Accumulated surplus			
	<u>\$ 1,030,716</u>	<u>\$ 786,246</u>	<u>\$ 1,816,962</u>

(b) Reconciliation of previously reported excess of revenue over expenses for March 31, 2011 with the annual surplus for March 31, 2011 shown in the financial statements:

	<u>2011</u>
Excess of expenses over revenue, as previously reported at March 31, 2011	\$ (507,917)
Adjustments related to:	
<i>Timing of recognition of deferred project costs</i>	2,039,439
<i>Reversal of deferred capital contributions</i>	133,712
<i>Deferred revenue</i>	(594)
<i>Accrued severance pay not previously recognized</i>	<u>(259,897)</u>
Annual surplus, as adjusted at March 31, 2011	<u>\$ 1,404,743</u>

Upon transition, Canadian public sector accounting standards permits certain exemptions from full retrospective application. The Centre has applied the mandatory exceptions and has not elected to apply any of the available optional exemptions.

4. Receivables	March 31 2012	March 31 2011	April 1 2010
Government of Newfoundland and Labrador	\$ 1,997,911	\$ 2,464,461	\$ 4,919,173
Canada Health Infoway	3,030,730	5,449,280	1,243,517
Harmonized sales tax	183,086	-	520,391
Other	308,649	481,913	723,364
	<u>\$ 5,520,376</u>	<u>\$ 8,395,654</u>	<u>\$ 7,406,445</u>

5. Payables and accruals	March 31 2012	March 31 2011	April 1 2010
Trade	\$ 5,933,945	\$ 3,514,816	\$ 4,415,461
Vacation and compensatory pay	1,322,525	1,206,354	1,089,858
Harmonized sales tax	-	461,618	-
	<u>\$ 7,256,470</u>	<u>\$ 5,182,788</u>	<u>\$ 5,505,319</u>

6. Deferred capital contributions	March 31 2012	March 31 2011
Opening balance	\$ 13,645,727	\$ 8,662,078
Capital contributions from Government	907,769	1,908,491
Capital contributions from Canada Health Infoway	240,809	4,035,656
Amortization of deferred capital contribution	<u>(1,668,795)</u>	<u>(960,498)</u>
	<u>\$ 13,125,510</u>	<u>\$ 13,645,727</u>

7. Commitments

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

2013	\$ 4,709,716
2014	\$ 4,665,245
2015	\$ 3,738,128
2016	\$ 3,641,568
2017	\$ 478,333

8. Budget figures

The 2012 budget figures presented in the statement of operations are provided by management and have not been audited. The budget presented in the financial statements was prepared prior to the transition to PSAB.

9. Financial instruments

The Centre's financial instruments consist of cash and cash equivalents, temporary investments, receivables and payables and accruals. The book value of cash and cash equivalents, temporary investments, receivables and payables and accruals approximate fair value due to their short term maturity date.

Risks and concentrations

The Centre is exposed to various risks through its financial instruments. The following analysis provides a measure of the Centre's risk exposure and concentrations at March 31, 2012.

Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Centre is exposed to this risk mainly in respect of its payables and accruals. The Centre reduces its exposure to liquidity risk by monitoring its cash flows and ensuring that it has sufficient cash available to meet its obligations and liabilities. In the opinion of management the liquidity risk exposure to the Centre is low and not material.

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.

Schedule of Tangible Capital Assets

Year Ended March 31, 2012	Computer equipment	Office furniture	Computer software	Leasehold improvements	Pharmacy Network	Electronic Health Records-Labs (iEHR Labs)	Health Information Access Layer (HIAL)	2012	2011
Cost									
Cost, beginning of year	\$ 7,928,466	\$ 342,845	\$ 3,007,835	\$ 223,821	\$ 9,264,629	\$ -	\$ 4,012,000	\$ 24,779,596	\$ 21,034,785
Additions during the year	1,154,883	1,810	491,553	-	321,060	1,789,568	597,000	4,355,874	3,747,892
Disposals during the year	(105,578)	-	-	-	-	-	-	(105,578)	(3,081)
Cost, end of year	\$ 8,977,771	\$ 344,655	\$ 3,499,388	\$ 223,821	\$ 9,585,689	\$ 1,789,568	\$ 4,609,000	\$ 29,029,892	\$ 24,779,596
Accumulated Amortization									
Accumulated amortization, beginning of year	\$ 2,427,432	\$ 152,104	\$ 2,133,245	\$ 40,203	\$ 1,251,875	\$ -	\$ 568,367	\$ 6,573,226	\$ 3,866,580
Amortization	1,378,123	40,997	490,680	22,863	986,651	-	401,200	3,320,514	2,706,903
Reversal of accumulated amortization relating to disposals	(99,979)	-	-	-	-	-	-	(99,979)	(257)
Accumulated amortization, end of year	\$ 3,705,576	\$ 193,101	\$ 2,623,925	\$ 63,066	\$ 2,238,526	\$ -	\$ 969,567	\$ 9,793,761	\$ 6,573,226
Net book value of tangible capital assets	\$ 5,272,195	\$ 151,554	\$ 875,463	\$ 160,755	\$ 7,347,163	\$ 1,789,568	\$ 3,639,433	\$ 19,236,131	\$ 18,206,368

Schedule of Expenses

March 31	2012	2011
Administration		
Consulting fees	\$ 194,734	\$ 115,162
Salaries and benefits	2,119,408	1,977,830
Depreciation	3,320,515	2,706,646
License fees	534	351
Minor equipment	9,854	4,337
Software maintenance	10,647	11,508
Rent	899,410	899,708
Other	423,300	368,764
	<u>\$ 6,978,402</u>	<u>\$ 6,084,306</u>
Clinical Programs		
Consulting fees	\$ 596,612	\$ 488,201
Salaries and benefits	2,665,245	2,297,543
License fees	66,946	6,656
Minor equipment	6,966	5,604
Software maintenance	267,607	235,532
Other	444,785	542,598
	<u>\$ 4,048,161</u>	<u>\$ 3,576,134</u>
Infrastructure, Information Protection and EHR Operations		
Consulting fees	\$ 1,556,079	\$ 2,059,271
Salaries and benefits	4,041,429	3,495,838
Data communication charges	892,602	867,415
License fees	275,642	204,148
Minor equipment	27,596	29,167
Software maintenance	2,904,887	2,599,947
Rent	33,900	80,389
Other	355,975	294,281
	<u>\$ 10,088,110</u>	<u>\$ 9,630,456</u>

Schedule of Expenses (cont'd)

March 31	2012	2011
Projects		
Consulting fees	\$ 2,368,499	\$ 3,182,668
Salaries and benefits	1,033,275	1,081,128
License fees	191,035	60,867
Minor equipment	61,040	59,405
Other	220,475	343,244
	<u>\$ 3,874,324</u>	<u>\$ 4,727,312</u>
Research and Evaluation		
Consulting fees	\$ 66,890	\$ 106,254
Salaries and benefits	1,894,307	2,001,201
License fees	7,883	7,959
Minor equipment	4,066	610
Other	53,799	77,223
	<u>\$ 2,026,945</u>	<u>\$ 2,193,247</u>
Total expenses	<u>\$ 27,015,942</u>	<u>\$ 26,211,455</u>

Appendix A: List of Data Holdings (as of March 31, 2012)

Newfoundland and Labrador Electronic Health Record

1. Client Registry
2. Provider Registry
3. Drug Information System (Pharmacy Network)

Administrative Data

4. Clinical Database Management System (CDMS)
5. Provider Listing (part of the Clinical Database Management System)
6. Community Table (part of the Clinical Database Management System)
7. Out-of-Province Hospital Data
8. NLCHI Live Birth System
9. NLCHI Stillbirth System
10. NLCHI Mortality System
11. Statistics Canada Annual Mortality Data Files
12. Statistics Canada Annual Stillbirth Data Files
13. Provincial Rehabilitation System
14. Telehealth Utilization Data

National Surveys

15. National Population Health Survey (NPHS)
16. Canadian Community Health Survey (CCHS)
17. National Longitudinal Survey of Children and Youth
18. Canadian Tobacco Use Monitoring Survey
19. Youth Smoking Survey

Population Data

20. Census
21. Population Estimates

Research Data

22. Newfoundland and Labrador Chronic Disease Surveillance System (NCDSS)
23. Cervical Cancer Surveillance System
24. Suicide Database
25. Longitudinal Paediatric Research Database
26. Cancer and Chronic Disease Research Database
27. Longitudinal in-patient ADE database
28. NAHS Database
29. Psoriasis Research Database
30. EMR Database

MCP Data

31. MCP Provider Registry
32. MCP Beneficiary Registration Database
33. MCP Fee-For-Service Physician Claims Database

Research Studies or Special Projects

34. First Nation Administrative Health Database (FNAHD)
35. ER/PR Patient Listing and Communications Database

36. Total Joint Replacement Wait List Dataset
37. Childhood Leukemia Dataset
38. Illegal Drug Use Study Pharmacist Survey Dataset
39. Adverse Drug Events (ADEs) in Paediatric Patients Dataset
40. Adverse Drug Events (ADEs) in Adult Patients Dataset
41. Seniors Medication Use Dataset
42. Newfoundland and Labrador Prescription Drug Program (NLPDP) Dataset
43. Childhood Injury Research Dataset
44. Continuity of Care Research Dataset
45. Administrative Dataset for Surveillance of Depressive Disorders in Newfoundland and Labrador
46. Miawpukek Diabetes Study Dataset
47. Emergency Room Triage Dataset
48. Adolescent Health Survey
49. Impact of Out-of-Pocket Prescription Costs Survey Dataset.
50. Type 1 Diabetes Mellitus Dataset
51. Baie Verte Miners' Registry
52. Cardiac Events Dataset
53. Diabetes Outcomes Dataset
54. Breast Cancer and Diabetes Dataset
55. Colorectal Cancer and Diabetes Dataset
56. HealthLine Call Dataset
57. Size at birth weight HSU Dataset
58. C-section Impact Dataset
59. C-section Stillbirth Dataset
60. Childhood Burn Injury Dataset
61. Early vs. Late Diagnosis of Diabetes Dataset
62. Factors Associated with Breast Screening Dataset
63. Pharmacy Network POC Dataset
64. EMR Diabetes Risk POC Dataset
65. EMR Obesity Chronic Conditions Dataset
66. PACS Information Management Dataset
67. Vitamin D Dataset





Appendix B: The Centre's Mandate

The mandate of the Centre is stated in its enabling legislation and a Memorandum of Understanding with the Department of Health and Community Services.

In accordance with the *Centre for Health Information Act*, Section 4, Subsection 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:

- Protects the confidentiality and security of personal information that is collected, used, disclosed, stored or disposed of by the Centre;
- Provides accurate and current information to users of the health and community services system;
- Integrates data from all components of the health and community services system;
- Is efficient and cost-effective; and
- Is flexible and responsive to the changing requirements of users of the system.

The complete Centre for Health Information Act is available online at:
www.assembly.nl.ca/legislation/sr/statutes/c05-1.htm

The Centre is enabled to meet its mandate through the Memorandum of Understanding set out in June 2002. *The 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* states that:

- 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 Principles and Guidelines for the Health Information Network, federal and provincial legislation, policy and standards will govern all data access, use and release from these databases.
- Public and private 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.

Appendix C: Government's Strategic Directions

These strategic directions have been set out by the Government of Newfoundland and Labrador and will be considered by the Department of Health and Community Services and other government entities that report to provincial government. While the work of the Centre will contribute to each direction in some way the Centre's 2011-2014 Business Plan and, thereby, this 2011-2012 Annual Business Report, focuses on its contributions in the area of accountability and stability of health and community services.

Government's Strategic Direction	Focus Areas of Strategic Direction 2011-2014	This direction is/was addressed in the:		
		Business Plan	Operational Plan	Branch/division Work Plan
Accountability and Stability of Health and Community Services	Clinical/Administrative Guidelines/Program Standards	X		
	Evaluation of Legislation, Programs and Services	X		
	Health Research	X		
	Information Management and Technology	X		
	Performance Measurement/Monitoring	X		
	Provincial Health Human Resources	X		
	Quality and Safety	X		

Government's Strategic Direction	Focus Areas of Strategic Direction 2011-2014	This direction is/was addressed in the:		
		Business Plan	Operational Plan	Branch/division Work Plan
Population Health	Aboriginal Health		X	
	Cancer Care		X	
	Chronic Disease Management		X	
	Healthy Aging		X	
	Injury Prevention		X	
	Maternal/Newborn Health		X	
	Smoking Rates and Protection from Environmental Smoke		X	

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