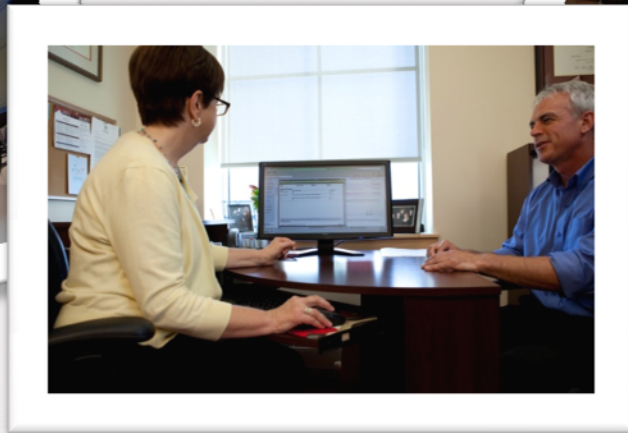
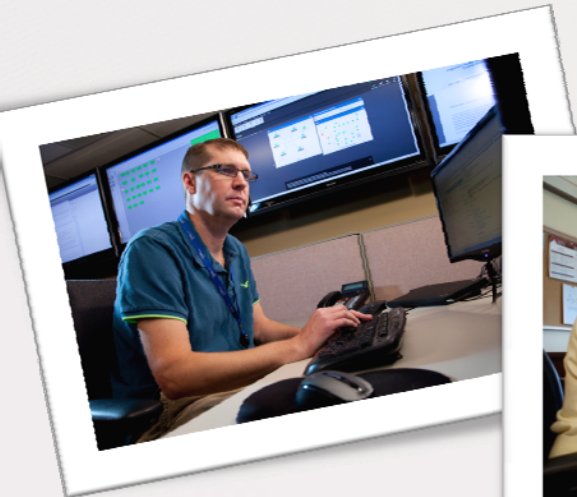


BUSINESS PLAN 2014-2017



Message from the Board Chair



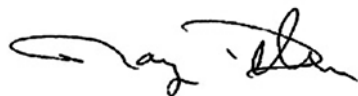
On behalf of the Newfoundland and Labrador Centre for Health Information's Board of Directors, I present the Centre's 2014-2017 business plan in accordance with the requirements set out by the *Transparency and Accountability Act*.

The Newfoundland and Labrador Centre for Health Information (the Centre) strives to improve the health of Newfoundlanders and Labradorians by providing quality health information to those who need it, when and where they need it. Building on the organization's past success, this business plan outlines our goals and objectives for the next three years. It reaffirms the Centre's commitment to its vision of *improved health through quality health information* and serves to support the Provincial Government's strategic directions.

Having considered the input of our valued stakeholders, the Centre established its 2014-2017 priorities detailed in three primary areas, or strategic issues, including provincial health information systems, quality health information, and stakeholder engagement. Through targeted objectives and initiatives in these areas, the Centre expects to, in collaboration with our health system partners, advance the provincial eHealth agenda and contribute to improvements in provincial health care.

As a Category 2 entity under the *Transparency and Accountability Act*, the Centre's Board of Directors acknowledges accountability in preparing this plan and achieving the specific goals and objectives outlined within. The Board looks forward to reporting to you annually on its success.

Sincerely,



Ray Dillon
Chair, Board of Directors



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Overview

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, evaluations, and analytics. 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 provincial health information systems.

Under the Centre's guidance in partnership with its key stakeholders, including the Department of Health and Community Services, Regional Health Authorities (RHAs), and Canada Health Infoway, Newfoundland and Labrador remains on the national forefront of EHR development. Included among the Centre's numerous achievements in developing health information management systems are:

- Implementing the first Client Registry in Canada, a foundational block of an interoperable EHR that provides a province-wide patient index. The provincial Client Registry is recognized as a national model.
- Leading Newfoundland and Labrador as one of only two provinces who were at the forefront of implementing a province-wide Picture Archiving and Communications Systems (PACS). Currently, more than 99 per cent of images created in the province are digital.
- Evolving Telehealth from its foundation as a research interest at Memorial University to currently serving as fundamental part of provincial health care delivery. In 2013, more than 13,000 patient visits occurred via Telehealth, increasing and improving access to health care.
- Continuing to deploy the provincial drug information system, the Pharmacy Network, in community and hospital pharmacies province-wide. As of early 2014, more than 50 per cent of Newfoundlanders and Labradorians have a more complete medication profile on the Pharmacy Network.



- Launching the HEALTHe NL Viewer, part of the iEHR Labs project, and bringing the medication profiles in the Pharmacy Network to more health care professionals, providing them with important patient information when and where they need it.
- Continuing to position the province to be among the first provinces in Canada to achieve the goal of establishing an interoperable EHR.

In addition to the ongoing development of eHealth systems and technologies, the Centre continually supports the health information needs of its stakeholders, providing health research, evaluation and analytics services to the Provincial Government, RHAs, researchers, and the public. The Centre also manages numerous health information assets on behalf of the province, as well as provides leadership in data quality and standards, which is paramount in the field of health information management.

For the fiscal year 2014-2015, the Centre's annual budget is \$28.5 million, of which 87.8 per cent is a provincial operating grant and the remaining 12.2 per cent is from external research funding and capital funding for EHR development from the Government of Newfoundland and Labrador and Canada Health Infoway.

Established in 1996 following the recommendation of the Health System Information Task Force (1995), the Centre became a Crown agency under the *Centre for Health Information Act* in 2007. The Centre is governed by a Board of Directors (Appendix B) reporting to the Minister of Health and Community Services and is managed by a President/Chief Executive Officer. The Centre is structured into four departments: Health Information Network; Research & Evaluation; Clinical Information Programs and Quality; Corporate Services and Finance. The Centre currently employs 158 employees; 64 males and 94 females. Most employees are based in the Centre's head office at 70 O'Leary Avenue in St. John's and the remainder at its Registry Integrity Unit in Bay Roberts. Additional information about the organization and its activities can be found on the Centre's website www.nlchi.nl.ca.

Mandate

The Centre's mandate is stated in its enabling legislation, the *Centre for Health Information Act*, in which Section 4, Subsection 1 states that 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 complete *Centre for Health Information Act* is available online at:
www.assembly.nl.ca/legislation/sr/statutes/c05-1.htm



The Centre's efforts to achieve its mandate and realize its vision of *improved health through quality health information* are focused around three core lines of business:

1. Provincial Health Information Systems
2. Quality Information
3. Research, Evaluation and Analytics

Provincial Health Information Systems

One of the Centre's primary responsibilities is providing a comprehensive province-wide information system for the health sector. Activities to develop 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 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, design and implementation of specific provincial health information systems.

Quality Information

Since 1996, the Centre has worked with the provincial health system and other stakeholders to provide quality health information to support informed health system management.

Quality health information is produced from quality data, which is data that is accurate, timely, useable, relevant and comparable. 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 addresses this need in its role as custodian of many information systems, including the provincial EHR, by being a leader in standards development and implementation, and by actively pursuing optimal quality of the data contained in the systems for which the Centre is responsible. The Centre also works to protect the information in its custody, ensuring it is collected, used, and disclosed according to privacy principles and legislation.



Various initiatives are undertaken throughout the Centre to achieve quality data and information, including:

- Creating and using datasets from various sources.
- Collaboration with partners to develop, implement and adopt provincial standards, such as participating on committees, delivering education, and providing consultative services.
- Regular quality assurance activities driven by the corporate data quality framework “*Quality by Design*” including conducting audits and delivering education and training.
- Providing a secure environment to house health information systems and use data with the highest regard for privacy.
- Responding to stakeholder requests for information and ensuring the appropriate use and disclosure of information.

Research, Evaluation and Analytics

The Centre supports the provincial Department of Health and Community Services and Regional Health Authorities by providing research, evaluation and analytic services that support the delivery of health programs and inform provincial health policy. The Centre also supports and collaborates with researchers within the academic sector. The Centre’s applied health research efforts are focused on investigations into the health of populations to identify health outcomes and risk factors for disease, as well as examining areas related to access, use, cost, safety, quality, delivery and organization of health systems. Evaluation efforts include evaluations of electronic information systems as well as government policies, programs, legislation and services. Analytic services include, but are not limited to, data extractions, linkage and analysis; database management; and health indicator development.



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.

Primary Clients/Stakeholders

The Centre partners with and serves numerous primary clients, or stakeholders. Building and maintaining working relationships with these stakeholders has enabled the Centre to advance its mandate and successfully contribute to government's strategic directions.

There are several stakeholders with whom the Centre maintains very involved and direct relationships, including the Department of Health and Community Services and the four Regional Health Authorities (RHAs). The Centre works with these stakeholders to develop, implement, and manage provincial health information systems, such as the provincial EHR. The Centre also regularly provides quality health information to support them in meeting their respective mandates, goals and objectives and deliver required services to Newfoundlanders and Labradorians.

Other stakeholder groups that have a vested interest in the Centre's products, services and outcomes include Canada Health Infoway, the Canadian Institute for Health Information, Canada's Health Informatics Association (COACH), regulated health professions, and other provincial bodies, such as the Office of the Chief Information Officer, Vital Statistics Division of Service NL, and Office of the Information and Privacy Commissioner.

The Centre also collaborates with additional stakeholders for research related initiatives, including Memorial University, Health Canada, the Public Health Agency of Canada, Statistics Canada, the Patient Research Centre, as well as universities outside the province.

Individuals and specific groups within the public also avail of the Centre's services and will benefit from its outcomes, most importantly *improved health through quality health information*.

In short, partnerships and work with primary clients/stakeholders are essential to the Centre's ability to meet its mandate and achieve its success.

Vision

Improved Health Through Quality Health Information



Mission

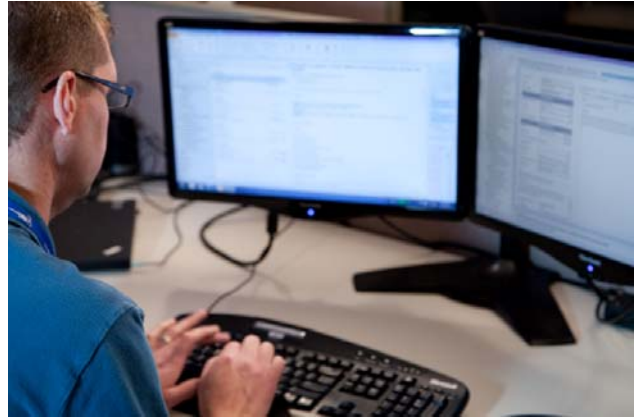
The Centre is responsible for developing a confidential and secure Health Information Network which will serve as the foundation for the provincial EHR. The Centre is also responsible for the appropriate use of quality health information to support informed decision-making across the health system. Developed in 2011 to cover two planning cycles (2011-2014 and 2014-2017), the Centre’s mission reflects the Centre’s commitment to providing quality health information. It also supports the Provincial Government’s strategic directions of *access* and an *accountable, sustainable, quality health and community services system* (Appendix A). The Centre remains committed to its mission and has focused its goals and objectives for the next three years to achieve it.

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.

Measure	Planned and implemented provincial health information systems, including priority elements of the electronic health record.
Indicators	<ul style="list-style-type: none"> • Implemented the provincial Pharmacy Network. • Implemented the funded components of a provincial Laboratory Information System. • Incorporated the necessary functionality in the Health Information Access Layer. • Expanded use of electronic medical records (EMRs) by physicians. • Assessed opportunities for expansion of Telehealth services. • Supported provincial and Regional Health Authority committees. • Promoted the role of the Centre for Health Information. • Continued to apply best practices in information protection and privacy.
Measure	Provided quality health information.
Indicators	<ul style="list-style-type: none"> • Evaluated the quality of health information databases to attain continuous improvement in the quality of data. • Undertook health research projects. • Supported stakeholder information needs through research and evaluation services. • Developed a corporate information management program.

Strategic Issues

The Centre's Board of Directors (Appendix B) has identified three strategic issues that the organization will focus on over the next three years to achieve its mission and to support the strategic directions of the Provincial Government (Appendix A). Within these strategic issues, corresponding goals and objectives have been established to guide the direction and define outcomes for the Centre. The indicators associated with these goals and objectives allow the Centre to regularly ensure it is progressing forward and will be reported on in the Centre's annual reports.



Issue 1: Provincial Health Information Systems

Provincial health information systems are essential tools for supporting and improving accountability in the health system. These information systems make quality health information available to organizations and professionals delivering health care, developing programs, administering the system and conducting health research. The Centre's continued focus on eHealth initiatives, including the EHR, supports government's strategic directions of *access and an accountable, sustainable, quality health and community services system*. Upon implementation, the EHR will improve patient safety, help identify and monitor outcomes for select programs, enable evidence-based research and decision-making, support alignment of regional services, continue to sustain access to care province-wide, including rural areas, as well as improve efficiency and effectiveness of the health system.

Goal 2014-2017	By March 31, 2017, the Centre will have implemented priority components of provincial health information systems.
Measure 2014-2017	Implemented priority components of provincial health information systems.
Indicators 2014-2017	<ul style="list-style-type: none"> • Identified and supported approval of eHealth solutions aligned with health system needs. • Planned, implemented and sustained approved provincial health information systems, including provincial EHR.

Year One Objective	Year One Measure	Year One Indicators
By March 31, 2015, the Centre will have continued implementation of current approved health information systems.	<ul style="list-style-type: none"> • Continued implementation of current approved health information systems. 	<ul style="list-style-type: none"> • Continued implementation of the Pharmacy Network. • Delivered and initiated testing of Release 2 of the iEHR/Labs project. • Continued deployment of the HEALTHe NL viewer (as part of the iEHR/Labs project), with a total of 400 users connected province-wide. • Assessed and addressed priority information protection and privacy requirements. • Deployed all current components of the EHR in a “high availability” environment. • Completed disaster recovery technical environments for identified EHR components. • Completed implementation of local telepathology system.
Year Two Objective	Year Three Objective	
By March 31, 2016, the Centre will have identified strategies to continue building and sustaining approved health information systems.	By March 31, 2017, the Centre will have continued implementation of approved health information systems and assessed future direction.	

Issue 2: Quality Health Information

Providing quality health information is at the core of the Centre's existence. From the numerous data holdings in the Centre's custody to its array of research, evaluation and health analytics services, the Centre is focused on providing valuable information to support evidence-based, informed decision-making across the health care system. In doing so, the Centre integrates continuous quality improvement processes into its day-to-day information management and continually defines, measures and improves the quality of the data contained within the databases managed by the organization.



The Centre has also increased its role in health analytics, research, and evaluation work in recent years and is positioned to continue and expand that role to meet the growing health information needs of its stakeholders. This includes applied health research focused on investigating the health of populations, analytics services, and evaluation efforts, including evaluations of electronic information systems and of government policies, programs, legislation and services.

Furthermore, the opportunities for undertaking innovative 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 translational and personalized medicine, and as the priority components of the provincial EHR are implemented. The Centre has the capacity, expertise and partnerships in place to leverage these opportunities for optimal benefits for Newfoundland and Labrador.

The Centre's focus on providing health professionals, program planners and policy-makers with quality health information and evaluation services to support informed decision-making and research supports the government's strategic direction of an *accountable, sustainable, quality health and community services system*.

Goal 2014-2017	By March 31, 2017, the Centre will have provided quality information to support health care delivery and health system management.
Measure 2014-2017	Provided quality information to support health care delivery and health system management.
Indicators 2014-2017	<ul style="list-style-type: none"> • Attained and maintained optimal data quality through continued application and evolution of the data quality framework. • Strengthened health information management practices through development of a comprehensive data management framework, which will govern how health information is received, created, managed, stored, used and disclosed by the Centre. • Supported stakeholders health information needs through provision of health information services and products.

Year One Objective	Year One Measure	Year One Indicators
<ul style="list-style-type: none"> • By March 31, 2015, the Centre will have developed an approach to improve its provision of health information products and services. 	<ul style="list-style-type: none"> • Developed an approach to improve its provision of health information products and services. 	<ul style="list-style-type: none"> • Identified engagement models for targeted stakeholders to ensure health information products and services align with stakeholders needs. • Identified key components of the Information Management Framework for the Centre. • Continued to apply the Data Quality Framework, including developed a master methodology document for a research dataset. • Provided health information products and services that supported external stakeholders, including research, evaluation and analytical reports.

Year Two Objective	Year Three Objective
By March 31, 2016, the Centre will have implemented an approach to improve its provision of health information products and services.	By March 31, 2017, the Centre will have monitored and assessed continued improvement in its provision of health information products and services.

Issue 3: Stakeholder Engagement

The Centre provides significant benefits to the provincial health care system and its stakeholders. It is important that those stakeholders understand how the collaborative work of the Centre supports improved health through the provision of quality health information. With this in mind, the Centre works to proactively engage, inform and assess stakeholder awareness of various initiatives and the organization overall. 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 2014-2017	By March 31, 2017, the Centre will have increased stakeholder use, support and adoption of the Centre's services and programs.
Measure 2014-2017	Increased stakeholder use, support and adoption of the Centre's services and programs.
Indicators 2014-2017	<ul style="list-style-type: none"> Increased consultation with stakeholders to ensure the Centre's programs and services are meeting their health information needs. Increased stakeholder awareness of the Centre's programs and services. Demonstrated successful adoption and use of provincial health information systems.

Year One Objective	Year One Measure	Year One Indicators
<ul style="list-style-type: none"> By March 31, 2015, the Centre will have refined its stakeholder engagement strategies to advance stakeholder use, adoption and support of the Centre's services and programs. 	<ul style="list-style-type: none"> Refined stakeholder engagement strategies to advance stakeholder use, adoption and support of the Centre's services and programs. 	<ul style="list-style-type: none"> Conducted stakeholder research to identify opportunities for improved delivery of health information programs, systems and services. Continued implementation of proactive communications activities to promote the Centre's role, programs, systems and services. Developed an adoption framework to increase stakeholder use and adoption of Centre programs and systems. Participated in stakeholder events and activities to facilitate stakeholder support, use and adoption of Centre programs and systems.

Year Two Objective	Year Three Objective
By March 31, 2016, the Centre will have implemented targeted stakeholder engagement strategies to further stakeholder use, adoption and support of Centre services and programs.	By March 31, 2017, the Centre will have demonstrated effectiveness of identified stakeholder engagement initiatives.

Summary

The Centre is eager to advance the provision of quality health information and support the Provincial Government's strategic directions through this 2014-2017 business plan. In identifying three strategic issues, the organization has positioned itself to focus on the programs, products and services that will best serve the health care system and its many partners. Through the initiatives outlined in this plan, the Centre will continue to support informed decision-making, policy development, administration, and delivery of care by providing quality health information when and where it is needed. In conclusion, this business plan confirms the Centre's commitment to its vision of *improved health through quality health information*.

Appendix A: Strategic Directions

These strategic directions have been set out by the Provincial Government and will be considered by the Department of Health and Community Services and other entities that report to government. While the work of the Centre will contribute to each strategic direction in some way, the Centre's 2014-2017 Business Plan focuses on its contributions in the areas of *access* and *an accountable, sustainable, quality health and community services system*.

Strategic Direction I

Title: Population Health

Outcome: Strengthened population health and healthy living

Population health refers not just to the health "status" of the population, but to the ability of people to adapt and respond to various aspects of life. Health is affected by many factors such as social, economic, physical and environmental conditions. A population health approach encompasses a range of services and supports that can help individuals, families and communities experience the best outcomes possible.

Initiatives that focus on social and emotional well-being, the prevention of illness and injury, as well as initiatives to support people in managing and maintaining their own health and lifestyle, form a solid foundation for addressing population health. The following focus areas target the key factors impacting population health in Newfoundland and Labrador.

Government's Strategic Direction	Focus Area of the Strategic Direction 2014-2017	This direction is/was addressed in the:		
		Business Plan	Operational Plan	Work plan of a branch/division
Population Health	Aboriginal Health			X
	Cancer Care			X
	Chronic Disease Management			X
	Healthy Aging			X
	Healthy Living			X

Strategic Direction 2

Title: Access

Outcome: Improved accessibility to programs and services meeting the current and future needs of individuals, families and communities, particularly those most vulnerable.

Making the appropriate services available at the appropriate place and time is the defining feature of accessible health and community services. Striking the right balance between fiscal abilities and planning for equitable access is the key challenge. Together with stakeholders, the Department engages in reviews and consultations to determine how and what services should be delivered to maximize access.

The following focus areas for the health and community services sector address priority needs in the province and also target primary and community services that can reduce the need for more intensive and costly acute care interventions for individuals.

Government's Strategic Direction	Focus Area of the Strategic Direction 2014-2017	This direction is/was addressed in the:		
		Business Plan	Operational Plan	Work plan of a branch/division
Access	E-Health	X		
	Infrastructure			
	Long Term Care and Community Supports			X
	Mental Health and Addictions			X
	Pharmacare Initiatives – NLPDP Plans			
	Rural Health	X		
	Wait Times			X

Strategic Direction 3

Title: An Accountable, Sustainable, Quality Health and Community Services System

Outcome: Improved performance and efficiency in the health and community services system to provide quality services that are affordable and sustainable.

Currently, approximately 40% of the provincial budget is spent on health care. The budget has almost doubled since 2003-04 to its current level of \$3 billion. The growth in health care spending can be attributed to a number of factors including the aging of the province's population, geographical layout of the province, new and more expensive treatments, increased incidence in chronic disease and increased health provider costs. These demands and growth characteristics require the Department, in partnership with the Regional Health Authorities, to work together to address cost containment and sustainability through innovation and the adoption of consistent evidence informed service delivery approaches.

Through a renewed focus on collaboration, innovation and best practices, health and community services will become more efficient. Improved efficiency means sustainable costs over the long term and the delivery of quality services in a more effective manner to better meet the needs of individuals, families and communities.

Government's Strategic Direction	Focus Area of the Strategic Direction 2014-2017	This direction is/was addressed in the:		
		Business Plan	Operational Plan	Work plan of a branch/division
An Accountable, Sustainable, Quality Health and Community Services System	Clinical Efficiency Review			X
	Evaluation of Legislation, Policies, Programs, and Services	X		
	Evidenced Informed Research in Health and Other Related Areas	X		
	Health Emergency Management			
	Health Workforce Planning			
	Operational Improvement Plans		X	
	Quality and Safety	X		

Appendix B: Board of Directors

In keeping with the *Centre for Health Information Act*, the Centre is governed by a Board of Directors. Individuals are appointed to the Board by the Lieutenant-Governor in Council for a three-year term, and can continue to serve as director until reappointed or replaced. The following individuals comprised the Centre's Board of Directors at the outset of the 2014-2017 planning cycle:

Mr. Ray Dillon, <i>Chair</i>	Ms. Ellen MacDonald	Dr. Kris Aubrey-Bassler
Mr. Jerry Vink	Mr. Ted Dawe	Mr. Jim Janes
Mr. Chris Collingwood	Ms. Lynn Power	Ms. Denise Tubrett
Mr. Fred Cahill	Dr. Sharon Peters	

Newfoundland and Labrador Centre for Health Information

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