

# Annual Business Report

---

2015/2016



# Contents

- Message from the Board Chair..... 2**
- About the Centre for Health Information ..... 3**
- Lines of Business ..... 4**
- Shared Commitments.....8**
- Highlights & Accomplishments ..... 11**
- Report on Performance ..... 14**
- Opportunities & Challenges ..... 24**
- Appendix A: The Centre’s Mandate..... 25**
- Appendix B: The Board of Directors ..... 26**
- Appendix C: 2015/2016 Financial Statements ..... 27**
- Appendix D: List of Data Holdings ..... 28**

## Message from the Board Chair

On behalf of the Board of Directors, I am pleased to submit the Newfoundland and Labrador Centre for Health Information's 2015/2016 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 outlined within the document. The Newfoundland and Labrador Centre for Health Information (the Centre) continued to deliver upon its legislated mandate, guided by the shared belief that by providing quality health information, we can improve the health of Newfoundlanders and Labradorians.

Fiscal year 2015/2016 was a formative year for the Centre, and the Board of Directors views the accomplishments of this year as key enablers of success for the Centre now and into the future.

*...the province will have one of the most comprehensive electronic health records in the country within the next two years.*

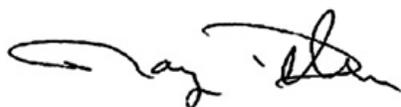
In spring 2015, lab results, clinical documents as well as diagnostic imaging reports and images from Eastern Health were added to HEALTHe NL, the provincial electronic health record. Plans are well underway to add similar information from the remaining Regional Health Authorities. Spring 2015 also brought an announcement from the Newfoundland & Labrador Pharmacy Board that required all pharmacies to connect to HEALTHe NL through the Pharmacy Network by January 2017 as part of the new *Standards of Pharmacy Operation for Community Pharmacies*. In fiscal year 2015/2016, the Centre added 24 pharmacies to the Pharmacy Network to bring the total number of connected pharmacies to 92 (46 per cent) - the most in recent history. Based on the strides forward for HEALTHe NL this fiscal, the Centre anticipates the province will have one of the most comprehensive electronic health records in the country within the next two years.

The Provincial Electronic Medical Record Program was officially established in the fall 2015, with the signing of a Memorandum of Understanding with the Provincial Government, the Newfoundland and Labrador Medical Association, and the Centre. The Provincial EMR preferred vendor (Telus MedAccess) was selected, and work to establish the Provincial EMR Program was well underway at the end of fiscal year 2015/2016.

Interest in and demand for health analytics and information to support more informed decisions about health care continued to grow. This area of the Centre was heavily involved throughout the year in providing evidence to support decision-making within the province's health system.

It is an exciting time for the Centre, as many of its major projects are moving to operations for the benefit of our provincial health system. The Board of Directors was encouraged by the achievements realized this year, and I extend thanks to the members of our Board of Directors, executive team and employees for their commitment and effort.

Sincerely,



Ray Dillon  
Board Chair

## 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 provides data extraction and linkage services to support health research and conducts analytic and evaluation projects.

The Centre's mandate includes the development of HEALTHe NL, a confidential and secure provincial electronic health record (EHR). This work includes the change management required to support adoption by end user clinicians. The Centre is also developing the provincial electronic medical record (EMR), and is involved in the planning, design and implementation of specific provincial health information systems.

### 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.

**Vision**  
*Improved Health Through  
Quality Information*

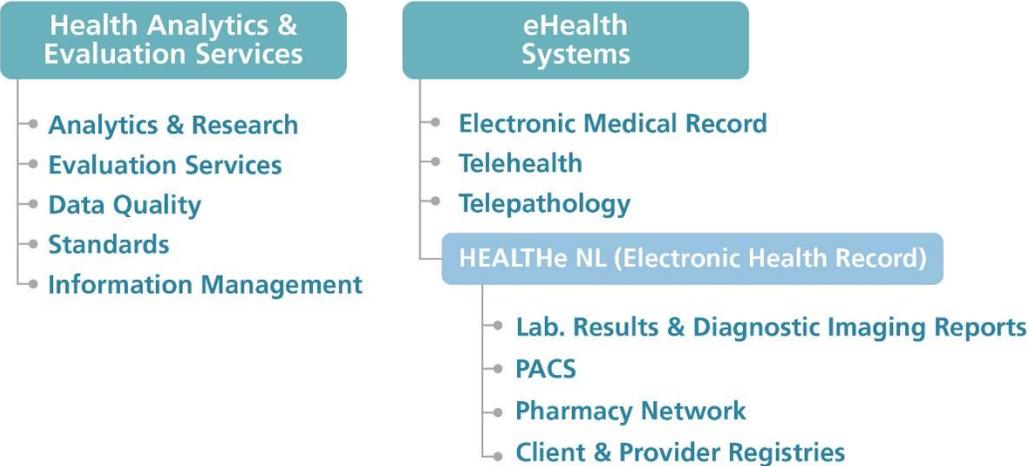
By March 31, 2017, the Centre will have planned and implemented provincial health information systems, including priority elements of the electronic health record, and provided quality health information that contributes to improved population health in Newfoundland and Labrador.

# Lines of Business

The Centre’s mandate (Appendix A) includes supporting informed decision-making in health care by providing a confidential, secure and integrated provincial health information system. Through this work, the Centre supports improvements in the collection of data and use of information for individual and population levels of care, administration, planning, evaluation and research.

The Centre’s services are available to a variety of organizations and entities, with its primary clients including provincial and federal governments and their agencies, Regional Health Authorities, health professionals, researchers, community organizations and the public. The Centre ensures that the 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 Programs and Services



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

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 in collaboration with organizations within the health system. The Centre is responsible for:

- Planning, designing, implementing and maintaining HEALTHe NL, 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.

## 2. 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.

**Quality Data Is**  
 Accurate  
 Timely  
 Useable  
 Relevant  
 Comparable

The Centre addresses this need in its role as custodian of many information systems, including the provincial EHR and EMR, 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.

To achieve quality data and information, the Centre:

- Creates and uses datasets from various sources.
- Collaborates with partners to develop, implement and adopt provincial standards, such as participating on committees, delivering education and providing consultative services.
- Conducts regular quality assurance activities including audits, education and training driven by the corporate data quality framework, *Quality by Design*.
- Provides a secure environment to house health information systems and use data with the highest regard for privacy.
- Responds to stakeholder requests for information and ensures the appropriate use and disclosure of information.

### **3. Health Analytics and Evaluation Services**

The Centre supports the provincial Department of Health and Community Services (HCS) and Regional Health Authorities (RHAs) by providing analytic and evaluation 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.

Health Analytics is the systematic use of data, methods and information technology to create information to support clinical and business decision-making related to the planning, delivery, management and measurement of health care. Evaluation is the systematic collection of information to assess how well something is working and make recommendations for improvement. The Centre contributes to the HCS annual evaluation plan and works with health system stakeholders to develop evaluation frameworks and execute evaluation plans to assess health policy, health system programs, legislation and information systems.

#### **Number of Employees and Physical Location**

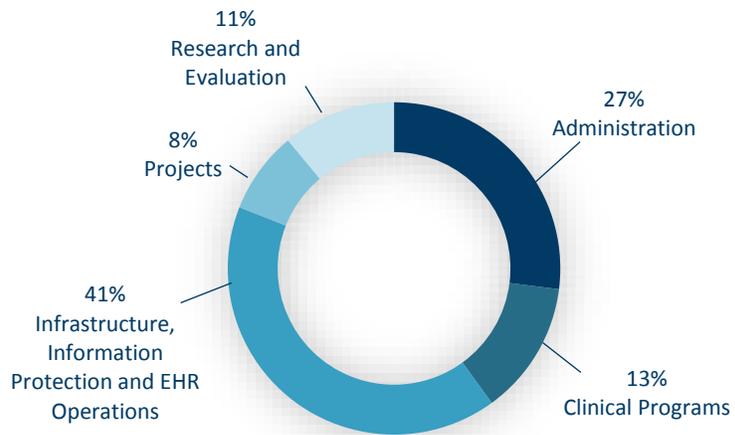
The Centre is governed by a Board of Directors (Appendix B) and is structured into four departments: Health Analytics and Information Services; Clinical Information Programs and Quality; Provincial Health Information Systems, and Corporate Services. As of March 31, 2016, the Centre had 159 employees; 99 females and 60 males. 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.

#### **Financial Statements**

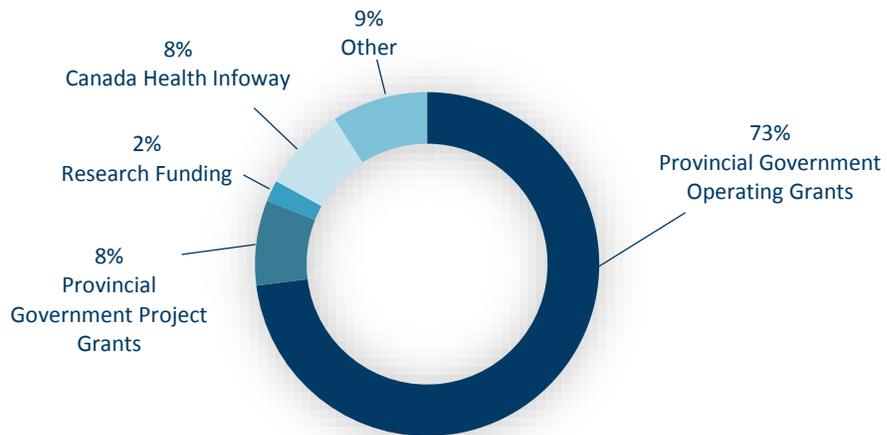
The Centre's revenues and expenses experience annual fluctuations as projects commence and conclude and according to the placement and achievement of funding for project milestones.

In fiscal year 2015/2016, the Centre's total revenue was \$32.70 million of which 73 per cent was a provincial operating grant, with the remaining 27 per cent coming from external research funding and capital funding from the Government of Newfoundland and Labrador and Canada Health Infoway for EHR development. Expenses for the fiscal year totaled \$31.65 million. A copy of the Centre's financial statements is located in Appendix C.

## Expenses by Category



## Revenue by Category



## Shared Commitments

By building and maintaining solid working relationships with stakeholders, the Centre has been able to successfully support *access, population health and an accountable, sustainable, quality health and community services system.*

There are several stakeholders with whom the Centre maintains direct relationships, including the Department of Health and Community Services and the four Regional Health Authorities. The Centre works with these stakeholders to develop, implement and manage health information standards and provincial health information systems such as the provincial EHR and EMR. 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.

There are a number of other stakeholder groups that have a vested interest in the Centre's products, services and outcomes. These include Canada Health Infoway, the Canadian Institute for Health Information, regulated health professions and other provincial bodies, including the Office of the Chief Information Officer, Vital Statistics Division of Service NL and Office of the Information and Privacy Commissioner.

In short, partnerships with stakeholders are essential to the Centre's ability to meet its mandate and achieve its success. The partners the Centre worked with during 2015/2016 include:

### **Department of Health and Community Services (HCS)**

In 2015/2016, the Centre provided analytic and evaluation services to support *access, population health and an accountable, sustainable, quality health and community services system.* Analytic and evaluation services were provided to support the planning and monitoring of primary health care services on the Bonavista Peninsula as well as a review of the medical transportation assistance programs offered through the Department of Health and Community Services and the Department of Advanced Education and Skills.

HCS provided guidance and funding for provincial EHR and EMR projects. In fiscal year 2015/2016, redevelopment of the Clinical Database Management System was completed. The new system, funded by HCS, provided a modern storage and reporting solution for key provincial health datasets such as inpatient, day surgery and rehab information. HCS also supported the Centre in managing quality data and information by participating in the Centre's Board activities, Provincial eHealth Executive Committee, EHR Governance Advisory Committee, Provincial Health Information Management Leadership Committee, NL Health Information Management and Technology Group, and various dataset advisory and standards development groups.

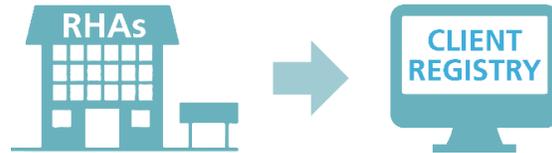
## Regional Health Authorities (RHAs)

RHAs have an integral role in developing and adopting HEALTHe NL, including engaging in the planning, governance, implementation and operation of various HEALTHe NL components. In 2015/2016, the Centre worked with RHAs and the HCS to ensure common approaches to protecting the privacy of personal health information as well as health information management practices. The Centre collaborated with RHAs on health information standards

development and adoption, supporting accurate collection and reporting of demographic, clinical, financial and statistical data to support *access, population health and an accountable, sustainable, quality health and community services system*. The Centre also provided health analytics, consulting and information services to the four RHAs.

# 260,000

Average number of transactions exchanged between the Regional Health Authorities and the Client Registry each month.



## Canada Health Infoway (Infoway)

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 HCS for provincial EHR projects, facilitates knowledge transfer with other jurisdictions and supports project planning. Infoway is a key partner in developing the Provincial Electronic Medical Record Program, which was launched in the fall 2015. In fiscal year 2015/2016, Infoway provided funding for the Telepathology Network that will connect the four Regional Health Authorities with pathology slide scanners and viewing software.

## 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 consultation with health professionals through their professional associations, regulatory bodies and provincial committees on clinical practice, EHR governance and policy development matters.

In partnership with regulatory bodies including the Newfoundland and Labrador Pharmacy

Board, the Newfoundland and Labrador Medical Association and the Association of Registered Nurses of Newfoundland and Labrador, accredited health profession education programs were conducted across the province in 2015/2016. The education programs engaged clinicians on use and integration of HEALTHe NL in practice, including leveraging peer-to-peer clinicians within all education programs.



## **Canadian Institute for Health Information (CIHI)**

The Centre collaborated with CIHI in support of its national health databases and related analytics, standards and data quality initiatives. This national collaboration provides country wide data, as well as provincial comparative data. As part of this partnership, several Centre employees are involved in national advisory committees of CIHI.

In 2015/2016 provincial data collection and submissions to national databases, as well as development and revision of national health information standards in response to provincial information needs were supported. This work supports an evidence-based service delivery approach and *an accountable, sustainable, quality health and community services system*. The Centre also validated provincial data published in CIHI reports and identified national and provincial data quality issues and opportunities.

## **Research Partners**

In 2015/2016 the Centre continued to support and collaborate on research initiatives with various research partners. Data extraction and linkage services were provided to Memorial University researchers for 15 research studies. The Centre also supported the NL Primary Healthcare Research and Integration to Improve Health System Efficiency (PRIIME) Network. The PRIIME Network is a multidisciplinary team including researchers, clinicians and policymakers that conduct and facilitate research to generate evidence that can be used to effect change in the system. The Centre supported the PRIIME Network through the provision of a seconded epidemiology resource. In addition, the Centre worked with Memorial University to develop an agreement to facilitate the provision of analytic services to the Translational and Personalized Medicine Initiative (TPMI). The agreement sets out the terms and conditions under which services can be provided and helps streamline the processing of requests for information. A number of federal organizations also provide funding to the Centre to carry out research for analytic projects, including Health Canada and the Public Health Agency of Canada.

## **COACH: Canada's Health Informatics Association**

COACH provides access to a diverse community of accomplished professionals who work to make a difference in advancing health care through health informatics. The Centre's President and CEO Mike Barron is the President and Board Chair of COACH for the 2014/2016 term. At *eHealth 2015*, Canada's premiere eHealth conference, Centre staff along with Dr. Barry Gallagher presented in the *E-Health Showcase Success Stories* forum. Dr. Gallagher is a pathologist with Central Health and has been a member of the Project Steering Committee since the project began. The presentation highlighted Newfoundland and Labrador's plan and vision for implementing a province-wide Telepathology network. It also focused on change management and delved into the Centre's experience with implementation, highlighting the benefits of strategic change management and early stakeholder engagement for project implementation.

## Highlights & Accomplishments

The Centre remains committed to its vision of *improved health through quality health information*. The progress made in 2015/2016 in partnership with key stakeholders positions Newfoundland and Labrador at the national forefront of EHR development and health information initiatives.

The following accomplishments were achieved through the Centre's business and operational work plans, and support *population health, access and an accountable, sustainable, quality health and community services system*.

### Population Health

#### ***Continued health analytics and evaluation services to support population health.***

In fiscal year 2015/2016, the Centre produced a diabetes report that included measures of disease burden, adherence to clinical practice guidelines, health service utilization and outcomes. Work also continued on an evaluation of the provincial Smoking Cessation Program for individuals with low income.

### Access

#### ***Advanced HEALTHe NL, the province's electronic health record.***

HEALTHe NL gives authorized health care professionals greater access to important patient information in the EHR and supports safer, better quality health care. HEALTHe NL also provides access to the medication information available in the Pharmacy Network.

In 2015/2016, the Centre focused on end user adoption and undertook a number of projects to increase HEALTHe NL use. The Centre continued work to integrate Central Health and Western Health data into HEALTHe NL. Based on end user feedback, a number of enhancements to HEALTHe NL were approved. The Centre provided end users not affiliated with a Regional Health Authority with a private and secure solution for accessing HEALTHe NL. As part of the Pharmacy Network deployment plan, the Centre enabled community pharmacies to access lab results and clinical reports. As well, the Centre started a project to provide access to immunization data stored within CRMS to be available within HEALTHe NL. As of March 31, 2016, over 1,500 health clinicians or authorized providers have created accounts within HEALTHe NL.



### ***Continued to advance the Pharmacy Network.***

The Pharmacy Network is contained within HEALTHe NL. In June 2015, the Newfoundland and Labrador Pharmacy Board's new *Standards of Pharmacy Operation for Community Pharmacies* required all licensed community pharmacies in this province to be connected to the provincial electronic health record through the Pharmacy Network by January 1, 2017. This requirement has meant a significant increase in the number of pharmacies connected. In fiscal year 2015/2016 the Centre connected an additional 24 pharmacies to the Pharmacy Network to bring the total number of connected pharmacies to 92 or 46 per cent. This number will continue to rise in the coming fiscal year as the Centre works to connect all community pharmacies by the date set by the Newfoundland and Labrador Pharmacy Board.

To support pharmacies connecting to the Pharmacy Network, the Centre has already established network connections for 98.5 per cent of pharmacies in the province. The remaining network connections are being coordinated and aligned with deployment scheduling ongoing into fiscal year 2016/2017. As of March 2016, there were more than 9.2 million prescriptions and over 16.4 million dispenses in the Pharmacy Network associated with more than 352,688 Newfoundlanders and Labradorians. There were 131,418 occurrences when medication information was available to health care professionals via the Pharmacy Network.



### ***Signed the Memorandum of Understanding for the Province's Electronic Medical Record System and Announced the Preferred Vendor.***

In October 2015, the Centre in partnership with the Provincial Government and the Newfoundland and Labrador Medical Association signed a Memorandum of Understanding to establish a framework that will govern the implementation and management of a provincial EMR program. At the completion of the Request for Proposals process, TELUS Health Provider Solutions was chosen as the preferred vendor and a contract was awarded for the Provincial Electronic Medical Record System. The EMR Executive and Management Committees were also established in fiscal year 2015/2016.

### ***Advanced the Provincial Telepathology Network.***

Jointly funded by the Government of Newfoundland and Labrador and Canada Health Infoway, the Provincial Telepathology Network gives patients and pathologists across the province greater access to pathology services and support. The Centre developed a province-wide Telepathology Network that connected the four Regional Health Authorities with pathology slide scanners and viewing software. With this technology, pathologists will be able to securely share digitized slides with colleagues and sub-specialists at other sites for a second opinion, potentially increasing diagnostic accuracy and accelerating diagnosis and care decisions for patients in the province.

In fiscal 2015/2016, the majority of the clinical validation process was completed, and training was provided to pathologists and technologists using the technology.

## **An Accountable, Sustainable, Quality Health and Community Services System**

### ***Continued to provide extensive health analytic and evaluation services to inform health service delivery, policy and programs.***

The Health Analytics and Evaluation Services group completed evaluations of the Provincial Cancer Control Policy Framework and the Paid Family Caregiving Option of the Provincial Home Support Program. Work also continued on the evaluation of the Ottawa Hospital Model of Nursing Clinical Practice and an evaluation plan was completed for the Applied Behavioural Analysis Program for children with autism.

Analytic and evaluation services were also provided to support the planning and monitoring of primary health care services on the Bonavista Peninsula. A review of the medical transportation assistance programs offered through the Department of Health and Community Services and Advanced Education and Skills was also completed.

### ***Continued to enhance eHealth privacy and security.***

In 2015/2016, to support attaining and maintaining optimal privacy and security of health information, a formalized EHR auditing process was implemented, including an annual auditing schedule.

# Report on Performance

The following section focuses on 2015/2016 progress on goals and objectives related to the three strategic issues identified in the 2014/2017 Business Plan.

## 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, administrating the system and conducting health research.

The Centre’s continued focus on eHealth initiatives, including the provincial EHR, supports *access*, and more specifically the focus areas of *e-health* and *rural health*. *An accountable, sustainable health and community services system* and the focus areas of *operational improvement plans* and *quality and safety* are also supported by the Centre’s provincial health information systems work. The EHR will make information more accessible and timely, improve patient safety, and ultimately support informed and efficient decision-making.



**960,000**  
Transactions in  
March 2016

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"> <li>Identified and supported approval of eHealth solutions aligned with health system needs.</li> <li>Planned, implemented and sustained approved provincial health information systems, including provincial EHR.</li> </ul>

### Year Two Objective

By March 31, 2016, the Centre will have identified strategies to continue building and sustaining approved health information systems.

### Measure 2015/2016

Identified strategies to continue building and sustaining approved health information systems.

PLANNED FOR 2015/2016	ACTUAL FOR 2015/2016
Continued adoption and use of the information contained within HEALTHe NL.	<ul style="list-style-type: none"> <li>Adoption continued to grow with an increase of over 280 active users in fiscal year 2015/2016, bringing the total number of active HEALTHe NL users to 480.</li> </ul>
Implemented Release 2 of the iEHR/Labs project, which includes lab results and clinical documents for Eastern Health.	<ul style="list-style-type: none"> <li>Release 2 of the iEHR/Labs project was implemented in May 2015. Release 2 involved extensive work in partnership with Eastern Health to migrate the lab results, clinical documents, and diagnostic imaging reports and images to HEALTHe NL. This included building the technical solution, and ensuring clinical business processes aligned with the solution implemented. Eastern Health lab results and clinical documents, as well as diagnostic imaging reports and images are now available to health care professionals within HEALTHe NL.</li> </ul>
Advanced the development of the province's Electronic Medical Record (EMR).	<ul style="list-style-type: none"> <li>A Memorandum of Understanding between the Provincial Government, the NL Medical Association and the Centre for the province's EMR was signed in October 2015.</li> <li>At the completion of the Request for Proposals process, TELUS Health Provider Solutions was chosen as the preferred vendor and a contract was awarded for the Provincial Electronic Medical Record System.</li> <li>Established the EMR Executive and Management Committees.</li> </ul>
Implemented the Provincial Telepathology system.	<ul style="list-style-type: none"> <li>Scanners have been installed in pathologist locations across the province, in addition to the technology that was already in place.</li> <li>Implementation of the Provincial Telepathology system was not completed in fiscal year 2015/2016 due primarily to logistical issues and limited resources to complete clinical validation of the system.</li> <li>Full implementation and clinical validation of the Provincial Telepathology system is expected to be complete during fiscal year 2016/2017.</li> </ul>
Increased the RHA pharmacy points of service connected to the Pharmacy Network within HEALTHe NL.	<ul style="list-style-type: none"> <li>Connected five of eight RHA locations to the Pharmacy Network using a point of service (POS) system in 2015/ 2016. One site connected in 2013.</li> <li>Two RHA sites were delayed to install a POS upgrade and expect to be connected in July 2016.</li> </ul>

PLANNED FOR 2015/2016	ACTUAL FOR 2015/2016
Completed updates to the disaster recovery technical environments and conducted testing.	<ul style="list-style-type: none"> <li>Completed updates to the disaster recovery technical environments.</li> <li>Completed the corporate disaster recovery environment technical build. Testing for corporate data recovery is in progress and scheduled to be completed in 2016/2017.</li> <li>Production hardware and software updates for identified EHR components have been upgraded in the disaster recovery environment with testing successfully completed.</li> </ul>

**Discussion of Results**

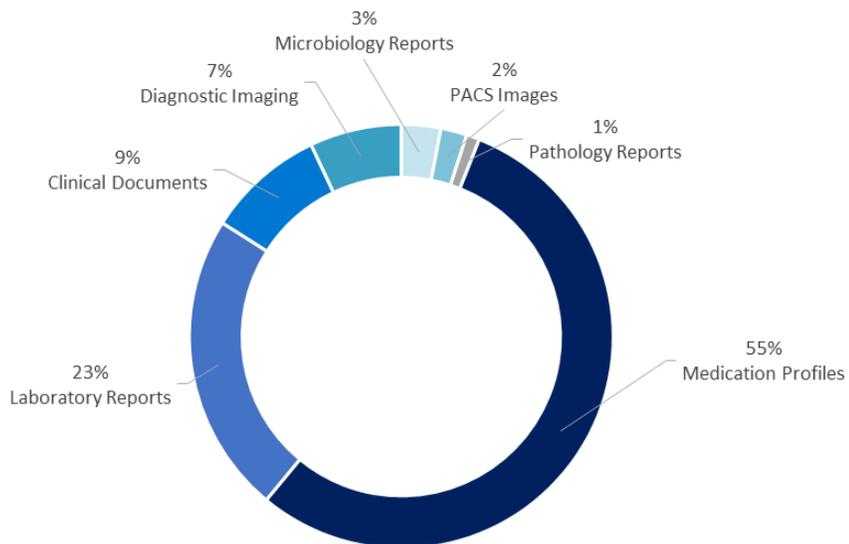
In 2015/2016, both HEALTHe NL and the Provincial EMR Program achieved significant project milestones. The provincial EMR program was officially launched, and program early adopters are anticipated in

**24** pharmacies added to the Pharmacy Network in 2015/2016  
**92** total number of pharmacies connected to the Pharmacy Network

fiscal year 2016/2017. HEALTHe NL added Eastern Health lab results, clinical documents and diagnostic images and reports to its list of data available, and work has begun on integrating similar data from both Central Health and Western Health. In 2015/2016, 24 pharmacies connected to the Pharmacy Network, exponential growth in comparison to recent years. Within the next two years, the Centre anticipates having complete provincial lab results, clinical documents, diagnostic imaging reports, and 100 per cent pharmacy connectivity to the Pharmacy Network. These achievements will make HEALTHe NL one of the most comprehensive electronic health records in the country.

A robust disaster recover environment is critical to the Centre’s ability to perform at the highest level for health care professionals. The updates and technical build completed in 2015/2016 supports the Centre’s ability to provide uninterrupted services to the provincial health care system.

**HEALTHe NL Data Usage**



### **Year Three Objective**

By March 31, 2017, the Centre will have continued implementation of approved health information systems and assessed future direction.

### **Year Three Measure**

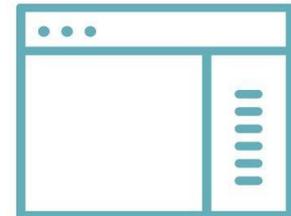
Continued implementation of approved health information systems and assessed future direction.

### **Year Three Indicators**

- Implemented the Pharmacy Network deployment plan to connect all community pharmacies.
- Continued expansion of HEALTHe NL, which includes go-live with Central Health and integration of Western Health lab data.
- Successfully implemented the Provincial EMR Program.
- Successfully implemented the Provincial Telepathology Program.
- Established Provincial Telepathology Program Advisory committee.
- Established priorities to support continued adoption of the Provincial Telehealth Program.
- Increased the adoption of HEALTHe NL by health care professionals across the province.
- Maintained and expanded the current level of HEALTHe NL performance and stability.
- Implemented and tested disaster recovery solution.
- Expanded HEALTHe NL analytic capabilities.
- Reviewed and updated the provincial eHealth strategic plan in order to assess future direction.

## **Issue 2: Quality Health Information**

Providing quality health information is at the core of the Centre's mandate. From the numerous data holdings in the Centre's custody (Appendix D) to its array of health analytics and information 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 works closely with a range of health system partners at the provincial, regional and community levels. The Centre integrates continuous quality improvement processes into its day-to-day information management processes and defines, measures and improves the quality of the data contained within the core databases managed by the Centre. This work is guided by the Centre's Data Quality Framework "*Quality by Design*" which was updated in 2015/2016.



**101**

Number of Data Holdings

Foundational to quality information are health information standards. The Centre continues to provide provincial leadership to the development and adoption of standards within the health system to ensure data is collected, used and interpreted in a consistent and accurate manner. The Centre published updates to several provincial health information standards and reference materials after consultation with, and approval by, relevant stakeholders.

The Centre has increased its support of the provincial health system through its health analytics and evaluation products and services during the past year. These services include:

- Reports such as a new Mental Health and Addiction Programs Performance Indicators Report.
- Various provincial evaluations such as those related to the Cancer Control Policy Framework and Paid Family Caregiving Option.
- Redeveloped the Clinical Database Management System in-house. This system is currently operated by the OCIO on behalf of the HCS and the Centre. It contains hospital inpatient and day surgery information which is heavily used for analysis and reporting. The Centre has redeveloped this system in-house with a 3M Health Data Management System to also contain adult inpatient rehabilitation data. The new system strengthens the Centre’s capacity to manage and use these datasets more efficiently.
- Developed in-house capacity to use the financial and statistical data reported by the Regional Health Authorities to the Provincial Management Information Standards Database in the analytic work of the Centre. The inclusion of this data greatly expands the scope of analytic work for health system performance measurement, monitoring and management.

In December 2015 the Centre initiated a Health Analytics Summit with the Regional Health Authorities, Department of Health and Community Services and the Canadian Institute for Health Information to identify priority areas for analytic work to support health system management. It has also supported the Department of Health and Community Services in its efforts to develop its Data Analytics.

The Centre’s focus on providing policy-makers, health system managers, health professionals and researchers with quality data, health information and evaluation services to support informed decision-making and research supports *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

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 Two Objective*

By March 31, 2016, the Centre will have implemented an approach to improve its provision of health information products and services.

*Measure 2015/2016*

Implemented an approach to improve the Centre’s provision of health information products and services.

PLANNED FOR 2015/2016	ACTUAL FOR 2015/2016
Reviewed and revised the Information Request Management Process.	The Information Request Management Process was reviewed. Opportunities for process improvement were identified and revisions were partially implemented. Full implementation was not completed due to logistical issues; however, opportunities for process improvement were identified. Implementation and process documentation will be completed in 2016/2017.
Reviewed and revised the de-identification process.	The de-identification process was reviewed and an internal consultation process undertaken with staff involved with this process to identify opportunities for process improvement. The workflow procedures were revised for greater efficiency, effectiveness and security. New procedures were drafted which required further internal review and testing prior to being finalized. Completion and full implementation is expected in 2016/2017.
Reviewed and revised the Centre’s Secondary Uses Committee structure and processes.	The Secondary Uses Committee (SUC) reviews stakeholder requests for record level data and makes recommendations to the Centre’s Chief Information Officer regarding approval. SUC related processes were reviewed and opportunities for

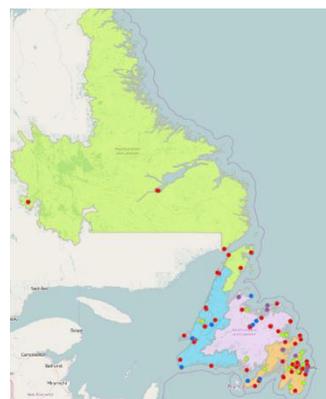
PLANNED FOR 2015/2016	ACTUAL FOR 2015/2016
	improvement identified. Procedures related to the SUC review and approval process were drafted which will be finalized in 2016/2017. The committee structure was reviewed and revisions were discussed. The structure was not revised since a terms of reference review was required. The terms of reference will be updated in 2016/2017 which will include a revised structure.
Completed an organizational integration of the Centre's research and evaluation, data quality and standards and information request functions.	The Department of Health Analytics and Evaluation Services completed an organizational integration of the Centre's research and evaluation, data quality and standards and information request functions in April 2015. Physical co-location of staff occurred in May 2015. Staff roles continue to evolve to support the mandate of the new department. One of the many benefits of the restructuring has been increased utilization of financial data in analytic products, linking financial and clinical data for greater decision-making value.

### Discussion of Results

Creation of the Department of Health Analytics and Evaluation Services (HAES) has increased the capacity of the Centre to produce quality health information needed for decision-making.

The department has undertaken many initiatives to strengthen its health information management processes. Development of a draft HAES Data Management Framework provides a comprehensive framework for identifying the necessary policies, procedures, skills, tools and accountabilities to ensure data is managed and used appropriately, effectively and efficiently. Many procedures have been reviewed and revisions drafted. Gaps in existing policies and procedures have been identified which will be addressed in 2016/2017.

Introduction of Geographic Information Systems (GIS) capability to the Centre and use of visualization techniques such as infographics was instrumental in the production of more user friendly information products. The acquisition of financial data enabled integration with utilization, clinical and outcome data, significantly enhancing the range of analytical products and services provided to decision-makers.



### Year Three Objective

By March 31, 2017, the Centre will have monitored and assessed continued improvement in its provision of health information products and services.

### Year Three Measure

Monitored and assessed continued improvement in its provision of health information products and services.

### Year Three Indicators

- Monitored development and implementation of the HAES Data Management Framework and related Health Information Management procedures/recommendations to ensure completion and adoption.
- Assessed the feasibility of leveraging the Centre's data warehouse to create a linked data repository to support analytics.
- Monitored efficiency review and remediation activities for the Centre's secure analytic environment to ensure completion and improved function.

### 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"><li>• Increased consultation with stakeholders to ensure the Centre's programs and services are meeting their health information needs.</li><li>• Increased stakeholder awareness of the Centre's programs and services.</li><li>• Demonstrated successful adoption and use of provincial health information systems.</li></ul>

### Year Two 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.

### Measure 2015/2016

Implemented targeted stakeholder engagement strategies to advance stakeholder use, adoption and support of the Centre's services and programs.

PLANNED FOR 2015/2016	ACTUAL FOR 2015/2016
<p>Integrated stakeholder relations tactics in project implementation plans</p>	<p>The Centre integrated stakeholder relations tactics in project implementation plans specifically for the Pharmacy Network deployment plan, the Provincial Telepathology project, and the iEHR/labs project. In addition to the tactics outlined below in the indicator: "Implemented EHR partnership educational programs with provincial nursing, physicians and pharmacist professional development groups," the Centre:</p> <ul style="list-style-type: none"> <li>• Provided regular Pharmacy Network deployment updates to the NL Pharmacy Board and HCS;</li> <li>• Provided regular communication with the Provincial Telepathology Clinical Working Group; and</li> <li>• Provided regular updates to RHA leadership on the progress of integrated Central Health and Western Health data into HEALTHe NL.</li> </ul>
<p>Completed development of Centre Adoption Framework for application to projects and programs governed by the Centre.</p>	<p>The development of the Centre Adoption Framework is ongoing. The Adoption Framework was not completed in fiscal year 2015/2016, due to a number of the Centre's major projects transitioning to programs, including the significant increase in the number of pharmacies connecting to the Pharmacy Network, the establishment of the Provincial Telepathology Program, and the addition of Eastern Health lab results, clinical documents, and diagnostic imaging reports and images to HEALTHe NL. A completed framework is expected in fiscal year 2016/2017.</p>
<p>Implemented EHR partnership educational programs with provincial nursing, physicians and pharmacist professional development groups.</p>	<p>Partnered with many health care professional groups to implement EHR educational programs including: six Pharmacy Network and HEALTHe NL accredited continuing education sessions in pharmacy practice with the NL Board of Pharmacy; nursing webinar series with the ARNNL; MUN School of Nursing fourth year professional practice course; HEALTHe NL education sessions with professional practice leads for pharmacy, nursing and social work with the four Regional Health Authorities; and HEALTHe NL awareness session with the NLMA.</p> <p>Lectured fourth year students at MUN School of Pharmacy and Centre for Nursing Studies on HEALTHe NL and Pharmacy Network in nursing and pharmacy practice.</p>

## PLANNED FOR 2015/2016

Participated in stakeholder events and activities to facilitate stakeholder support, use and adoption of Centre programs and systems.

## ACTUAL FOR 2015/2016

Participated in and presented at numerous stakeholder events, activities and conferences that supported the adoption and use of Centre programs and systems including the Pharmacy Association of NL Annual Conference, the Nurse Practitioner Conference, the NL Medical Association Annual General Meeting and the Annual Kids Rock Conference.

### **Discussion of Results**

2015/2016 stakeholder engagement activities focused on tailoring approaches to the Centre's key projects and milestones, specifically the Pharmacy Network, the Provincial Telepathology Project, and the iEHR labs Project. The Centre's educational programs helped create awareness of the Centre's programs, and generated awareness of the benefits of these programs in a clinician's every day practice.

Looking forward to 2016/2017, the Centre will be focusing its stakeholder activities on groups of health care professionals that currently experience a high benefit from the data contained within HEALTHe NL. These groups include health professionals such as pharmacists, clinicians who regularly create patient medication profiles, and professionals practicing in community settings that do not

have access to certain data available in a hospital setting. Stakeholder and adoption planning in anticipation of the inclusion of complete provincial lab data, clinical results, and medication profiles in HEALTHe NL is also a priority.



### **Year Three Objective**

By March 31, 2017, the Centre will have demonstrated effectiveness of identified stakeholder engagement initiatives.

### **Year Three Measure**

Demonstrated effectiveness of identified stakeholder engagement activities.

### **Year Three Indicators**

- Increased awareness of HEALTHe NL and its benefits by health care professionals.
- Increased active use of HEALTHe NL by health care professionals.

## Opportunities & Challenges

As the Centre embarks upon year three of the 2014/2017 business planning cycle, the following opportunities and challenges have been identified. The Centre utilizes this listing as a key component of its annual strategic planning process.

### Opportunities

- Continuing and increasing collaboration with stakeholders to advance development, implementation and use of health information systems and services.
- Maintaining the Centre's reputation as a national leader in EHR development and implementation and ensuring the Centre is ready to continue its work in this area.
- With the introduction of additional information to HEALTHe NL, the opportunity to increase users and adoption is significant. Year over year HEALTHe NL adds more patient information and moves closer to being a complete patient profile in one location.
- Continuing to develop and implement health information systems with a patient-centric view, ensuring the focus is on improving patient safety, quality of care and access to health care services.
- Continuing to facilitate the development and adoption of health information standards to increase consistency, usability and sharing of health data within the province.
- Increasing the data holdings of the Centre to support a broader scope of analytic work, in support of health care and health system management.
- There is growing interest in, and demand for health analytic products and services, and using existing health data to support more informed decisions about health care.

### Challenges

- Achieving timely implementation of the EHR while balancing resource requirements, stakeholder expectations, contractual and partnership obligations and the integrity of existing components continually challenge the Centre.
- Developing, implementing and operating provincial health information systems, including the EHR and EMR, requires active involvement and partnership with various stakeholders, all of whom have individual organizational priorities and finite resources. The Centre must work to maintain positive relationships and identify opportunities for collaboration, particularly on shared provincial priorities.
- As a trusted and independent third party for management and linkage of health information, the Centre must ensure secure and confidential information management processes in an ever-evolving environment.
- The Centre must recruit and retain the right skills sets to achieve its mandate, which it does through focused resource management process. However, the field of health informatics remains highly competitive and continually challenges the Centre's ability to ensure appropriate organizational capacity.

## Appendix A: The Centre's 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](http://www.assembly.nl.ca/legislation/sr/statutes/c05-1.htm)

## Appendix B: The 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 re-appointed or replaced. The following individuals comprised the Centre's Board of Directors as of March 31, 2016:

Mr. Ray Dillon

Mr. Jerry Vink

Mr. Chris Collingwood

Mr. Fred Cahill

Ms. Ellen MacDonald

Mr. Ted Dawe

Ms. Lynn Power

Mr. Tony Wakeham

Dr. Kris Aubrey-Bassler

Mr. Robert Thompson

Ms. Denise Tubrett

**Appendix C: 2015/2016 Financial Statements**



Financial Statements

Newfoundland and Labrador Centre for Health  
Information

March 31, 2016

# Contents

	<b>Page</b>
Statement of Responsibility	1
Independent Auditors' Report	2-3
Statement of Financial Position	4
Statement of Operations and Changes in Accumulated Deficit	5
Statement of Net Debt	6
Statement of Cash Flows	7
Notes to the Financial Statements	8-16
Schedule of Tangible Capital Assets	17
Schedule of Expenses	18-19

# 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 Chartered Professional Accountants of Canada.

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 Finance and Audit Committee 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.



Chair



Director



# Independent auditors' report

Grant Thornton LLP  
Suite 300  
15 International Place  
St. John's, NL  
A1A 0L4  
T + 1 709 788 8800  
F + 1 709 722 7892  
[www.GrantThornton.ca](http://www.GrantThornton.ca)

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, 2016 and the statements of operations, net debt and changes in cash flows for the year then ended 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, 2016 and its financial performance, net debt and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

**Other matters**

On June 15, 2016, we previously reported on the financial statements referred to above. This report was issued prior to the discovery of the matter set forth in Note 12, where in revisions to amounts previously reported as of March 31, 2016 and for the year then ended are described.



St. John's, Canada

August 12, 2016

Chartered Professional Accountants

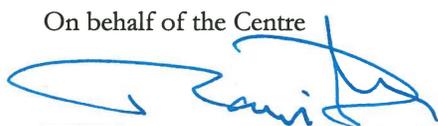
# Newfoundland and Labrador Centre for Health Information

## Statement of Financial Position

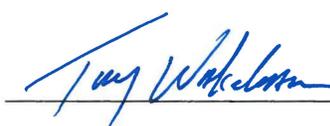
March 31	2016	2015
<b>Financial assets</b>		
Cash and cash equivalents	\$ 16,137,493	\$ 16,862,888
Receivables (Note 3)	<u>1,226,363</u>	<u>3,155,161</u>
	<u>17,363,856</u>	<u>20,018,049</u>
<b>Liabilities</b>		
Payables and accruals (Note 4)	5,656,545	10,756,350
Deferred revenue	17,746,721	18,981,378
Deferred capital contributions (Note 5)	18,491,579	15,258,598
Accrued severance pay (Note 6)	1,517,500	1,359,400
Accrued sick leave pay (Note 7)	<u>612,300</u>	<u>646,000</u>
	<u>44,024,645</u>	<u>47,001,726</u>
<b>Net debt</b>	<u>(26,660,789)</u>	<u>(26,983,677)</u>
<b>Non-financial assets</b>		
Tangible capital assets (Page 16)	21,018,683	20,741,287
Prepays	<u>2,283,391</u>	<u>1,832,715</u>
	<u>23,302,074</u>	<u>22,574,002</u>
<b>Accumulated deficit</b>	<u>\$ (3,358,715)</u>	<u>\$ (4,409,675)</u>

Commitments (Note 9)

On behalf of the Centre



Chair



Director

See accompanying notes to the financial statements.

# Newfoundland and Labrador Centre for Health Information

## Statement of Operations and Changes in Accumulated Deficit

Year Ended March 31	Actual 2016	Budget 2016	(Note 11) Actual 2015
<b>Revenue</b>			
Grants			
Canada Health Infoway	\$ 2,477,535	\$ 2,123,800	\$ 889,188
Government of Newfoundland and Labrador	24,008,260	26,196,700	21,793,993
Amortization of deferred capital	2,965,614	2,622,300	1,759,189
Research	505,237	549,640	509,745
Interest	147,066	60,000	242,431
Other projects	<u>2,598,640</u>	<u>980,900</u>	<u>1,325,528</u>
	<u>32,702,352</u>	<u>32,533,340</u>	<u>26,520,074</u>
<b>Expenses (Pages 18 &amp; 19)</b>			
Administration	8,546,751	8,168,433	8,271,867
Clinical Programs	4,154,235	4,402,722	2,870,396
Infrastructure, Information Protection and EHR Operations	12,855,187	13,845,432	11,465,906
Projects	2,684,177	2,885,575	4,393,547
Health Analytics and Evaluation Services	<u>3,411,042</u>	<u>3,612,238</u>	<u>3,171,904</u>
	<u>31,651,392</u>	<u>32,914,400</u>	<u>30,173,620</u>
Annual surplus (deficit)	<u>\$ 1,050,960</u>	<u>\$ (381,060)</u>	<u>\$ (3,653,546)</u>
<b>Accumulated deficit, beginning of year</b>			
	\$ (4,409,675)	\$ (4,409,675)	\$ (756,129)
Annual surplus (deficit)	<u>1,050,960</u>	<u>(381,060)</u>	<u>(3,653,546)</u>
Accumulated deficit, end of year	<u>\$ (3,358,715)</u>	<u>\$ (4,790,735)</u>	<u>\$ (4,409,675)</u>

See accompanying notes to the financial statements.

# Newfoundland and Labrador Centre for Health Information

## Statement of Net Debt

Year Ended March 31	Actual 2016	Budget 2016	Actual 2015
Annual surplus (deficit)	\$ 1,050,960	\$ (381,060)	\$ (3,653,546)
Acquisition of tangible capital assets	(4,740,039)	(5,050,680)	(3,046,558)
Amortization of tangible capital assets	4,452,493	4,239,800	3,620,168
Loss on disposal of capital assets	10,150	-	8,927
Increase in prepaids	<u>(450,676)</u>	<u>-</u>	<u>(331,860)</u>
Decrease (increase) in net debt	322,888	(1,191,940)	(3,402,869)
Net debt, beginning of year	<u>(26,983,677)</u>	<u>(26,983,677)</u>	<u>(23,580,808)</u>
Net debt, end of year	<u><b>\$(26,660,789)</b></u>	<u><b>\$(28,175,617)</b></u>	<u><b>\$(26,983,677)</b></u>

See accompanying notes to the financial statements.

# Newfoundland and Labrador Centre for Health Information

## Statement of Cash Flows

Year Ended March 31 2016 2015

Increase (decrease) in cash and cash equivalents		
<b>Operating</b>		
Annual surplus (deficit)	\$ 1,050,960	\$ (3,653,546)
Change in non-cash items		
Amortization of capital assets	4,452,493	3,620,168
Amortization of deferred capital contributions	(2,965,614)	(1,759,189)
Loss on disposal of capital assets	10,150	8,927
Increase in severance pay accrual	158,100	144,100
Decrease in sick leave pay accrual	(33,700)	(5,200)
Change in non-cash operating working capital		
Receivables	1,928,798	(1,765,255)
Prepaid expenses	(450,676)	(331,860)
Payables and accruals	(5,099,805)	2,881,474
Deferred revenue	<u>(1,234,657)</u>	<u>3,384,634</u>
Cash (applied to) provided by operating transactions	<u>(2,183,951)</u>	<u>2,524,253</u>
<b>Capital</b>		
Cash applied to capital transactions	<u>(4,740,039)</u>	<u>(3,046,558)</u>
<b>Financing</b>		
Capital contributions from Government of Newfoundland and Labrador and Canada Health Infoway	<u>6,198,595</u>	<u>2,355,676</u>
(Decrease) increase in cash and cash equivalents	(725,395)	1,833,371
Cash and cash equivalents, beginning of year	<u>16,862,888</u>	<u>15,029,517</u>
Cash and cash equivalents, end of year	<u>\$ 16,137,493</u>	<u>\$16,862,888</u>

Cash and cash equivalents consist of the following:

Cash in bank	\$ 16,137,493	\$ 11,837,888
Temporary investments	<u>-</u>	<u>5,025,000</u>
	<u>\$ 16,137,493</u>	<u>\$ 16,862,888</u>

See accompanying notes to the financial statements.

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

---

### 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 Chartered Professional Accountants of Canada and reflect the following significant accounting policies.

#### 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.

---

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

---

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

#### 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.

#### 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.

#### Prepaid expenses

Prepaid expenses include software maintenance, software license fees, insurance, rent and other operating expenses that the Centre has paid but the services have not been provided as of year end.

#### 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.

---

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

---

### 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 calculated using an actuarial estimate 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.

#### Sick leave pay

The Centre provides sick leave benefits to employees with sick leave days to their credit as of December 31, 2003 and employees who transfer from another government department/agency with accumulated sick leave days. No additional sick leave benefits have accumulated since December 31, 2003 or the employee's date of transfer, as the case may be. An actuarially determined accrued liability has been recorded on the statements for sick leave benefits.

#### 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;
- receivables; and
- payables and accruals.

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

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.

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

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

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. 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.

3. Receivables	<u>2016</u>	<u>2015</u>
Canada Health Infoway	\$ 771,690	\$ 1,839,142
Harmonized sales tax	401,502	966,171
Trade	32,270	294,959
Accrued interest	10,888	48,835
Government of Newfoundland and Labrador	-	5,000
Other	<u>10,013</u>	<u>1,054</u>
	<u>\$ 1,226,363</u>	<u>\$ 3,155,161</u>

4. Payables and accruals	<u>2016</u>	<u>2015</u>
Trade	\$ 3,985,709	\$ 9,223,997
Vacation and compensatory pay	<u>1,670,836</u>	<u>1,532,353</u>
	<u>\$ 5,656,545</u>	<u>\$ 10,756,350</u>

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

5. Deferred capital contributions	<u>2016</u>	<u>2015</u>
Opening balance	\$ 15,258,598	\$ 14,662,111
Capital contributions from Government of Newfoundland and Labrador	3,730,845	499,210
Capital contribution from Canada Health Infoway	2,467,750	1,856,466
Amortization of deferred capital contribution	<u>(2,965,614)</u>	<u>(1,759,189)</u>
	<u>\$ 18,491,579</u>	<u>\$ 15,258,598</u>

### 6. Accrued severance pay

Accrued severance obligations have been calculated based on an actuarial valuation completed effective March 31, 2015 and extrapolated to March 31, 2016. The assumptions shown below are based on future events.

	<u>2016</u>	<u>2015</u>
Significant assumptions used:		
Discount rate	2.80%	3.75%
Average remaining service period of active employees	12.8 years	12.8 years
Wage and salary escalation	3.0%	3.0%
Accrued Benefit Obligation:		
Balance beginning of year	\$ 1,359,400	\$ 1,215,300
Current period benefit cost	161,600	137,500
Interest cost	42,200	45,900
Benefits payments	(52,800)	(35,900)
Amortization of actuarial losses (gains)	<u>7,100</u>	<u>(3,400)</u>
Balance, end of year	<u>\$ 1,517,500</u>	<u>\$ 1,359,400</u>
Net benefit expense for the year:		
Current period benefit cost	\$ 161,600	\$ 137,500
Amortization of actuarial gains	7,100	(3,400)
Interest cost	<u>42,200</u>	<u>45,900</u>
Net Benefit Expense	<u>\$ 210,900</u>	<u>\$ 180,000</u>

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

### 7. Accrued sick leave pay

Accrued sick leave obligations have been calculated based on an actuarial valuation completed effective March 31, 2015 and extrapolated to March 31, 2016. The assumptions shown below are based on future events.

	<u>2016</u>	<u>2015</u>
Significant assumptions used:		
Discount rate	2.80%	3.75%
Average remaining service period of active employees	9.70 years	9.70 years
Wage and salary escalation	3.0%	3.0%
Accrued Benefit Obligation:		
Balance beginning of year	\$ 646,000	\$ 651,200
Current period benefit cost	-	-
Interest cost	17,800	23,500
Benefits payments	(53,000)	(27,600)
Amortization of actuarial gains	<u>1,500</u>	<u>(1,100)</u>
Balance, end of year	<u>\$ 612,300</u>	<u>\$ 646,000</u>
Net benefit expense for the year:		
Current period benefit cost	\$ -	\$ -
Amortization of actuarial losses (gains)	1,500	(1,100)
Interest cost	<u>17,800</u>	<u>23,500</u>
Net Benefit Expense	<u>\$ 19,300</u>	<u>\$ 22,400</u>

### 8. Public Service Pension Plan and Government Money-Purchase Pension Plan

The Centre participates in the Government of Newfoundland and Labrador's defined benefit Public Service Pension Plan (PSPP) for full-time employees and the defined contribution Government Money-Purchase Pension Plan (GMPP) for part-time employees. The assets of the plans are held separately from those of the Centre in an independently administered fund. Plan participation is mandatory for all employees.

PSPP members must have at least five years of pensionable service to obtain a pension benefit. Normal retirement age under the plan is 65, however early retirement options are available. The PSPP is integrated with the Canada Pension Plan (CPP).

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

---

### 8. Public Service Pension Plan and Government Money-Purchase Pension Plan (cont'd.)

Members of the Plan are required to make contributions toward the funding of their pension benefits as follows:

- (i) 10.75% of earnings up to the Year's Basic CPP Exemption, the portion of earnings upon which no CPP contributions are required;
- (ii) 8.95% of earnings in excess of the Year's Basic CPP Exemption up to and including the Year's Maximum Pensionable Earnings ("YMPE"); and
- (iii) 11.85% of earnings in excess of the YMPE.

The lifetime PSPP pension benefit is determined as 1.4% of the best five year average salary (up to the three year average YMPE) multiplied by the years of pensionable service, plus 2% of the best five year average salary (in excess of the average YMPE) multiplied by the years of pensionable service.

Members of the GMPP can use the contributions along with interest and/or investment gain/loss to purchase a pension at retirement. Contributions made on or after January 1, 1997 are fully vested and locked-in after the completion of two years of plan participation.

Employer contributions paid and expensed by the Centre during the year for the PSPP and GMPP totaled \$1,115,732 (2015 - \$866,615). Additional information about the plan surplus or deficit is not available.

---

### 9. 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:

2017	\$ 5,455,017
2018	\$ 3,532,386
2019	\$ 3,292,229
2020	\$ 2,176,523
2021	\$ 1,918,098

The Centre has a significant project portfolio as it works towards development of the Electronic Health Record. Currently the portfolio includes Pharmacy, iEHR Labs, Telepathology and Electronic Medical Records (EMR). As these projects are completed and transition to programs the Centre will enter into some significant long-term commitments, particularly for EMR. The Centre does not include future commitments in its disclosure until there is some certainty around the completion of the project, transition to program and measurement.

---

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

---

### 10. 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, 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, 2016.

##### *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 in the amount of \$5,656,545 (2015 - \$10,756,350), which have a maturity of no later than one year. The payment of the accrued severance pay and sick leave pay liabilities will occur later than one year. 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 counterparty's inability to fulfill its payment obligations. The Centre's credit risk is attributable to receivables in the amount of \$824,861 (2015 - \$2,188,990), of which \$Nil (2015 - \$5,000) is receivable from the Government of Newfoundland and Labrador and \$771,690 (2015 - \$1,839,142) is receivable from Canada Health Infoway. Receivables are expected to be collected no later than one year. Management believes that the credit risk concentration with respect to financial instruments included in receivables is remote.

---

### 11. Comparative figures

The comparative figures have been restated to conform with the financial statement presentation adopted for the current year.

---

# Newfoundland and Labrador Centre for Health Information

## Notes to the Financial Statements

March 31, 2016

### 12. Revision to previously released financial statements

These financial statements were previously released on June 15, 2016, and were subsequently recalled and revised to correct an error that was discovered in the timing of the recognition of revenue and capital funding affecting iEHR Labs, Telepathology and Pharmacy projects. The iEHR Labs project was funded in total for \$33.5 million. Canada Health Infoway and the province of Newfoundland and Labrador split the first \$23.5 million of costs on a 75%-25% basis, with the remaining \$10 million to be paid 100% from provincial funding. The first \$23.5 million of costs was cumulatively spent by the first quarter of the 2016 fiscal year, however due to an oversight the costs after this period were still recorded using the 75/25 split funding model and were not switched over to the 100% provincial funding recognition model. Upon further investigation, it was noted that similar errors occurred in the recognition of revenue and capital funding of the Telepathology and Pharmacy projects, which were subject to the same 75/25 split with Canada Health Infoway up to \$26.552 million and \$1.865 million of total costs, respectively.

To correct this error, the following revisions were made to the financial statements previously released:

#### Statement of Operations and Changes in Accumulated Deficit

Revenue – Other Projects	Increased \$1,322,565
Revenue – Grants from Canada Health Infoway	Increased \$365,630
Revenue - Amortization of deferred capital	Increased \$32,396
Expenses	No change
Annual deficit	Decreased \$1,720,591

#### Statement of Financial Position

Deferred revenue	Decreased \$1,793,253
Deferred capital contributions - Canada Health Infoway	Decreased \$365,630
Deferred capital contributions - Government of Newfoundland and Labrador	Increased \$438,292
Accumulated deficit	Decreased \$1,720,591

## Newfoundland and Labrador Centre for Health Information

### Schedule of Tangible Capital Assets

Year Ended March 31, 2016

	Computer equipment	Office furniture	Computer software	Leasehold improvements	Pharmacy Network	Electronic Health Records-Labs (iEHR Labs)	Health Information Access Layer (HIAL)	2016	2015
<b>Cost</b>									
Cost, beginning of year	\$ 9,961,307	\$ 372,863	\$ 4,778,654	\$ 264,421	\$ 9,906,749	\$ 6,030,779	\$ 8,291,887	\$39,606,660	\$ 38,357,776
Additions during the year	1,934,865	16,476	773,310	-	-	2,015,388	-	4,740,039	3,046,558
Disposals during the year	(10,332)	-	-	-	-	-	-	(10,332)	(1,797,674)
Cost, end of year	<u>\$ 11,885,840</u>	<u>\$ 389,339</u>	<u>\$ 5,551,964</u>	<u>\$ 264,421</u>	<u>\$ 9,906,749</u>	<u>\$ 8,046,167</u>	<u>\$ 8,291,887</u>	<u>\$ 44,336,367</u>	<u>\$ 39,606,660</u>
<b>Accumulated Amortization</b>									
Accumulated amortization, beginning of year	\$ 7,162,596	\$ 313,635	\$ 3,929,449	\$ 146,865	\$ 5,139,661	\$ -	\$ 2,173,167	\$ 18,865,373	\$17,033,952
Amortization	1,451,635	33,039	518,542	29,334	990,675	635,745	793,523	4,452,493	3,620,168
Reversal of accumulated amortization relating to disposals	(182)	-	-	-	-	-	-	(182)	(1,788,747)
Accumulated amortization, end of year	<u>\$ 8,614,049</u>	<u>\$ 346,674</u>	<u>\$ 4,447,991</u>	<u>\$ 176,199</u>	<u>\$ 6,130,336</u>	<u>\$ 635,745</u>	<u>\$ 2,966,690</u>	<u>\$ 23,317,684</u>	<u>\$ 18,865,373</u>
Net book value of tangible capital assets	<u>\$ 3,271,791</u>	<u>\$ 42,665</u>	<u>\$ 1,103,973</u>	<u>\$ 88,222</u>	<u>\$ 3,776,413</u>	<u>\$ 7,410,422</u>	<u>\$ 5,325,197</u>	<u>\$ 21,018,683</u>	<u>\$ 20,741,287</u>

Included in tangible capital assets are assets not in use and therefore not depreciated in the current year. These assets, \$896,308 (2015 - \$6,030,779) of which relate to iEHR Labs, \$Nil (2015- \$4,279,886) to HIAL, \$Nil (2015 - \$88,660) to computer hardware, and \$24,723 (2015 - \$44,920) to computer software, are expected to be depreciated in the next fiscal year.

# Newfoundland and Labrador Centre for Health Information

## Schedule of Expenses

(Note 11)

March 31

2016

2015

### Administration

Communication	\$ 29,439	\$ 305,715
Consulting fees	49,791	171,426
Salaries and benefits	2,582,582	2,722,214
Amortization of capital assets	4,452,493	3,620,168
Minor equipment	8,734	7,289
Software maintenance	33,459	21,211
Rent	898,511	898,511
Security services	136,180	125,337
Insurance	104,100	102,505
Other	251,462	297,491
	<u>\$ 8,546,751</u>	<u>\$ 8,271,867</u>

### Clinical Programs

Consulting fees	\$ 890,358	\$ 474,338
Salaries and benefits	2,014,813	1,485,421
License fees	23,587	25,085
Minor equipment	6,774	17,664
DI PACS equipment	-	124,154
Software maintenance	927,605	666,030
Pharmacy incentives	211,750	6,000
Other	79,348	71,704
	<u>\$ 4,154,235</u>	<u>\$ 2,870,396</u>

### Infrastructure, Information Protection and EHR Operations

Consulting fees	\$ 676,905	\$ 280,890
Salaries and benefits	5,381,787	4,487,536
Data communication charges	504,277	941,238
License fees	2,696,778	2,733,756
Minor equipment	5,583	16,292
Software maintenance	3,070,297	2,560,564
Data centre rent	296,298	188,862
Rent	33,900	33,900
Other	189,362	222,868
	<u>\$ 12,855,187</u>	<u>\$ 11,465,906</u>

# Newfoundland and Labrador Centre for Health Information

## Schedule of Expenses

(Note 11)

March 31	2016	2015
<b>Projects</b>		
Consulting fees	\$ 1,111,924	\$ 1,476,785
Salaries and benefits	1,216,450	1,715,177
License fees	1,344	12,708
Telepathology equipment	201,837	1,106,442
Software maintenance	47,831	26,152
Other	<u>104,791</u>	<u>56,283</u>
	<b>\$ 2,684,177</b>	<b>\$ 4,393,547</b>
<b>Health Analytics and Evaluation Services</b>		
Consulting fees	\$ 19,498	\$ 14,922
Salaries and benefits	3,265,511	3,016,651
License fees	43,105	45,187
Minor equipment	6,369	2,444
Other	73,440	92,700
Software maintenance	<u>3,119</u>	<u>-</u>
	<b>\$ 3,411,042</b>	<b>\$ 3,171,904</b>
<b>Total expenses</b>	<b><u>\$ 31,651,392</u></b>	<b><u>\$ 30,173,620</u></b>

## Appendix D: List of Data Holdings

### Newfoundland and Labrador Electronic Health Record

1. Client Registry (CR)
2. Drug Information System (DIS) of the Pharmacy Network
3. Laboratory Information System
4. Provider Registry (PR)
5. Shared Health Record-Clinical Documents/Encounters

### Clinical/Administrative Data

6. Adverse Drug Events (ADEs) in Adult Patients Dataset
7. Adverse Drug Events (ADEs) in Pediatric Patients Dataset
8. Canadian Primary Care Sentinel Surveillance Network (CPCSSN)-Newfoundland and Labrador Component
9. Cancer Patient Navigation Service Evaluation Dataset
10. Drug Treatment Funding Program Evaluation Dataset
11. Emergency Room Triage Dataset
12. HEALTHe NL User Monitoring System
13. HEALTHe NL Viewer Adoption Evaluation Dataset
14. Hospital Inpatient/Day Surgery Discharge Data
15. Impact of Adopting the Ottawa Hospital Model of Nursing Clinical Practice Evaluation Dataset
16. Laboratory Test Data, Eastern Health
17. Laboratory Test Data, Western Health
18. Longitudinal in-patient ADE Database
19. MCP Beneficiary Registration Database
20. MCP Fee-For-Service Physician Claims Database
21. MCP Provider Registry
22. Meditech ER, Medical Imaging, Laboratory, Long Term Care, OR Data, All RHAs
23. Newfoundland and Labrador Prescription Drug Program (NLPDP) Dataset
24. NL Health Line Clinidata Dataset
25. NL Health Line Fonemed Dataset
26. NL Mental Health Care and Treatment Act Evaluation Dataset
27. NLCHI Live Birth System (LBS)
28. NLCHI Mortality System (MS)
29. NLCHI Stillbirth System (SS)
30. Out of Province Hospital Inpatient/Day Surgery Discharge Data (OOP)
31. PACS Information Management Dataset
32. Physician Claims Administrative Health Data
33. Provider Table
34. Provincial Continuing Care System
35. Provincial Home Care System
36. Provincial Rehabilitation System
37. Researching Nursing Practice in the Community Dataset
38. Statistics Canada Annual Mortality Data Files
39. Statistics Canada Annual Stillbirth Data Files
40. Telehealth Utilization Data
41. Total Joint Replacement Wait List Dataset
42. Turnings' Circles of Support and Accountability for Drug Offenders Evaluation Dataset
43. Type 1 Diabetes Mellitus Dataset

### Surveys

44. Adolescent Health Survey
45. Booster Seat Study Dataset
46. Canadian Community Health Survey (CCHS)
47. Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) Dataset
48. Canadian Tobacco Use Monitoring Survey
49. Factors Influencing Breastfeeding Dataset
50. Healthy Workplace Pilot Project Dataset
51. Illegal Drug Use Study Pharmacist Survey Dataset
52. Impact of Out-of-Pocket Prescription Costs Survey Dataset

53. Intentional Misuse of Prescription Drugs Dataset
54. National Longitudinal Survey of Children and Youth
55. National Population Health Survey (NPHS)
56. NL Adult Health Survey (NAHS) Database
57. Seniors Medication Use Dataset
58. Student Drug Use Survey
59. Youth Smoking Survey

#### **Population/Geographic Data**

60. Census
61. Community Table
62. Population Estimates
63. Postal Code Conversion File

#### **Composite**

64. Administrative Dataset for Surveillance of Depressive Disorders in NL
65. Baie Verte Miners' Registry
66. Breast Cancer and Diabetes Dataset
67. Cancer and Chronic Disease Research Database
68. Cardiac Care Dataset
69. Cardiac Events Dataset
70. Cervical Cancer Surveillance System
71. Childhood Burn Injury Dataset
72. Childhood Injury Research Dataset
73. Childhood Leukemia Dataset
74. Chronic Pain in NL Dataset
75. Colorectal Cancer and Diabetes Dataset
76. Complex Care Cohort Dataset
77. Continuity of Care Research Dataset
78. C-section Impact Dataset
79. C-section Stillbirth Dataset
80. Diabetes Outcomes Dataset
81. Early vs. Late Diabetes Diagnosis Dataset
82. EMR Diabetes Risk POC Dataset
83. EMR Obesity Chronic Conditions Dataset
84. ER/PR Patient Listing and Communications Database
85. Factors Associated with Breast Screening Dataset
86. First Nation Administrative Health Database (FNAHD)

87. Health Service Utilization by Size at Birth Dataset
88. Heart & Stroke Dataset from Canadian Stroke Network
89. HOME Study Dataset
90. Longitudinal Pediatric Research Database
91. Miawpukek Diabetes Study Dataset
92. Newfoundland and Labrador Chronic Disease Surveillance System (NCDSS)
93. NewLab Psoriasis Clinical Dataset
94. Pharmacy Network POC Dataset
95. Suicide Database
96. Vitamin D Composite Dataset

#### **MIS**

97. Provincial Management Information System (MIS) Data

#### **Qualitative**

98. Health Forums 2014-2015 Data
100. Impact of EHR to Facilitate Medication Reconciliation Dataset
101. Premier's Health Summit 2015 Data



---

Newfoundland and Labrador  
Centre for Health Information

**[www.nlchi.nl.ca](http://www.nlchi.nl.ca)**

70 O'Leary Avenue  
St. John's, NL  
A1B 2C7