



Annual Business Report 2016/2017



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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 2016/2017 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.

The Board of Directors was very pleased with the work and achievements of 2016/2017 and anticipates more success in the coming year as the Centre continues to support the Provincial Government's long term vision of having one of the most comprehensive electronic health records in the country.

... connected 195 or 97 per cent of community pharmacies to the Pharmacy Network, giving authorized health care professionals access to important patient medication.

In 2016/2017, Central Health laboratory data and encounters were added to HEALTHe NL, the provincial electronic health record. By end of March 2017, the Centre had connected 195 or 97 per cent of community pharmacies to the Pharmacy Network, giving authorized health care professionals greater access to important patient medication information.

The Centre has been extremely successful in adding more complete health data to its eHealth solutions, thereby increasing its value and adoption within clinical settings throughout the province. The number of health care professionals actively using HEALTHe NL increased by nine per cent in 2016/2017 with over 3,000 clinicians signing up for access.

The Provincial Electronic Medical Record (EMR) Program was formally launched in June 2016 under the brand *eDOCSNL*. As of March 31, 2017, 60 physicians across the province had implemented the *eDOCSNL* EMR solution in their practice.

The interest in, and demand for health analytics and information to support more informed decisions about health care also continued to grow. The Centre has continued to provide quality information and evidence to support the province's health system decision-making throughout the year.

The Board of Directors was very encouraged by the achievements realized in 2016/2017, and I extend thanks to the members of our Board, executive team and employees for their continued commitment and dedication to *improved health through quality health information*.

Sincerely,



Dr. Kris Aubrey-Bassler
Chairperson, Board of Directors

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.

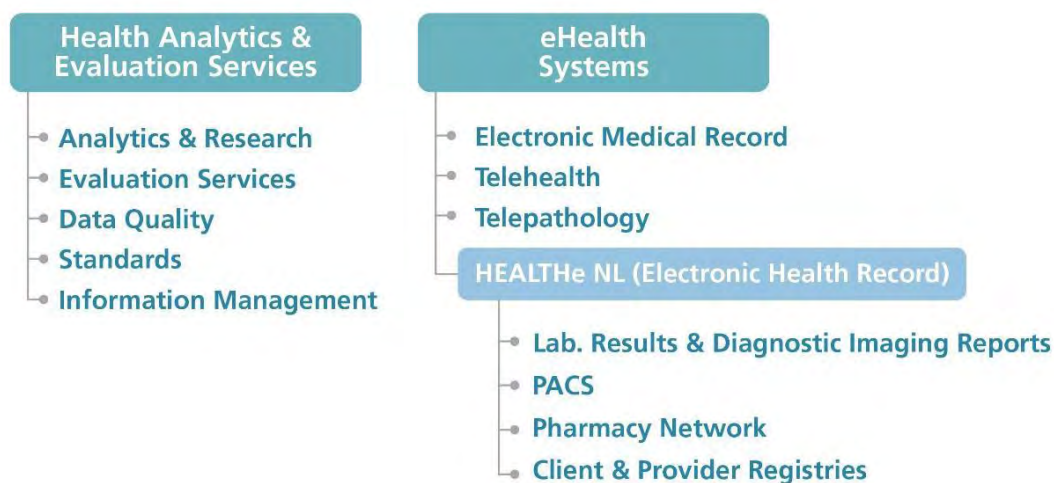
For more information about the Centre's mandate, vision, lines of business and primary clients, go to www.nlchi.nl.ca.

Mission

The Centre is responsible for developing a confidential and secure Health Information Network which will serve as the foundation for the provincial electronic health record (EHR). The Centre is also responsible for the appropriate use of quality health information to support informed decision-making across the health system.

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

Provincial Programs and Services



Number of Employees and Physical Location

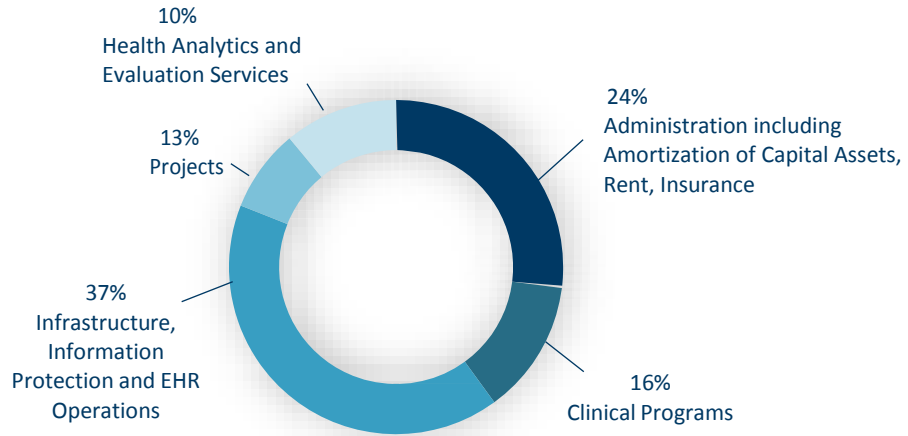
The Centre is governed by a Board of Directors (Appendix A) and is structured into four departments: Health Analytics and Information Services; Clinical Information Programs and Quality; Provincial Health Information Systems, and Corporate Services. As of March 31, 2017, the Centre had 153 employees; 96 females and 57 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

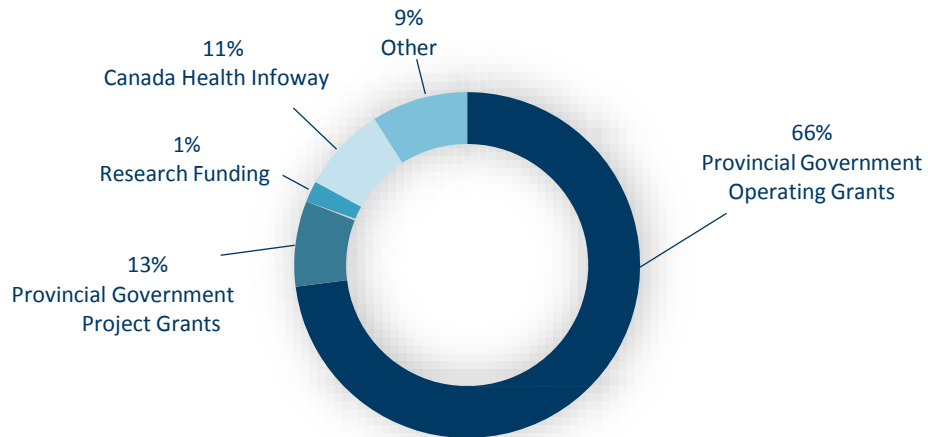
The Centre's revenues and expenses experience annual fluctuations as projects commence and conclude and according to the placement and achievement of funding for project milestones.

In fiscal year 2016/2017, the Centre's total revenue was \$36.33 million of which 66 per cent was a provincial operating grant, with the remaining 34 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 \$33.55 million. A copy of the Centre's financial statements is located in Appendix B.

Expenses by Category



Revenue by Category



Highlights and Partnerships

The Centre remains committed to its vision of *improved health through quality health information*. The progress made in 2016/2017 in partnership with key stakeholders positions Newfoundland and Labrador at the national forefront of EHR development and health information initiatives. The following highlights were achieved through the Centre's business and operational work plans.

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 2016/2017, the Centre continued its focus on end user adoption to increase active use of HEALTHe NL by health care professionals. HEALTHe NL was expanded to include laboratory data and encounters from Central Health. Integration of Western Health laboratory data required further testing and was expected to be added in June 2017. With 195 community pharmacies connected to the Pharmacy Network, authorized health care professionals had access to more comprehensive patient information. As of March 31, 2017, over 3,000 authorized health care providers created accounts within HEALTHe NL, almost double the number of accounts created in 2015/2016.

Continued to advance the Pharmacy Network.

As of March 31, 2017, 195 of 201 community pharmacies were connected. In May 2017, the Centre reached a significant milestone of connecting all 201 community pharmacies to the Pharmacy Network. The Pharmacy Network is contained within the provincial electronic health record, HEALTHe NL. In 2016/2017, the medication profile was the number one piece of information accessed by HEALTHe NL users supporting more informed health care decisions, improved quality and safer patient care.

Over the past year, the number of dispenses captured in the Pharmacy Network increased by over 6.3 million and were associated with more than 480,000 Newfoundlanders and Labradorians.

Advanced the Provincial Electronic Medical Record Program.

In June 2016, the provincial EMR Program was formally launched under the brand *eDOCSNL*. Since that time, the program established an operations framework for product release management and clinician support processes. This included the development of governance processes and policies and clinician communication and training tools. As of March 31, 2017, 60 physicians across the province had implemented the *eDOCSNL* EMR solution in their practices.

As the eDOCSNL program matures, it will provide integration between the EMR and HEALTHe NL, the provincial EHR program.

Advanced the Provincial Telehealth Program.

The Centre continued to support and advance adoption of the Provincial Telehealth Program. A number of pilots were implemented within the Regional Health Authorities (RHAs) to facilitate improved access to care through the use of Telehealth. These pilots included expanding Telehealth access to desktop and mobile devices, long term care and rheumatology.

Continued health analytics and evaluation services to support population health.

Working closely with the Department of Health and Community Services (HCS), in 2016/2017, the Centre supported HCS and continued to plan for the implementation of an Aboriginal Administrative Data Identifier to support service planning, delivery and population health for residents of Newfoundland and Labrador.

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

The Health Analytics and Evaluation Services supported HCS in the development of a provincial health analytics action plan and carried out work towards an enhanced health analytic environment for the province. The Centre also conducted or supported a number of evaluations of provincial programs and initiatives including the Community Rapid Response Team initiative, the Provincial Cancer Control Policy Framework, the *Mental Health Care and Treatment Act*, the *Adult Protection Act* and the provincial medical transportation assistance programs.

Continued to enhance eHealth privacy and security.

In 2016/2017, to support attaining and maintaining optimal privacy and security of health information, the Centre continued to execute the Centre auditing framework, which included the EHR auditing processes, in addition to annual access audits.

There are several stakeholders with whom the Centre maintains direct relationships including the Department of Health and Community Services and the 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.

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 2016/2017 include:

Department of Health and Community Services

During 2016/17, the Centre and HCS worked together to advance the implementation of both the provincial EHR – HEALTHe NL – and EMR – eDOCSNL – programs.

The Centre provided analytic and evaluation services to HCS. The Centre used a variety of health system data to generate information to facilitate evidence-based decision-making as part of the government renewal initiative, provincial budget preparation and primary health care renewal. Work was initiated towards defining a set of indicators in key areas (e.g. opioid overdose) for regular measuring and monitoring in support of a sustainable health system and better health.

The Centre supported the HCS in the development of a provincial health analytics action plan and carried out work towards an enhanced health analytic environment for the province. The Centre also conducted or supported a number of evaluations of provincial programs and initiatives including the Community Rapid Response Team initiative, the Provincial Cancer Control Policy Framework, the *Mental Health Care and Treatment Act*, the *Adult Protection Act* and the Provincial Medical Transportation Assistance Program.

HCS and the Centre continued to plan for the implementation of an Aboriginal Administrative Data Identifier to support service planning, delivery and population health for residents of Newfoundland and Labrador. An advisory group was formed to guide the work and has representatives from Aboriginal communities, HCS, Service NL (Vital Statistics), the Office of Labrador and Aboriginal Affairs, RHAs and the Centre.

Funded by HCS, the health data management system was expanded to provide a modern

storage and reporting solution for the Centre's vital event datasets. This initiative included electronic data exchange with Service NL (Vital Statistics).

Regional Health Authorities

Regional Health Authorities 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 2016/2017, the Centre provided analytic and evaluation support to the RHAs including the development of information used in the planning and monitoring of primary health care renewal initiatives on the Bonavista and Burin Peninsulas. As part of this work, the Centre is supporting the implementation of the provincial EMR program at the Bonavista and Burin primary health care sites. In *The Way Forward*, the Provincial Government has committed to expanding the number of these primary health care teams throughout the province.

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 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 2015.

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.

In partnership with regulatory bodies including the Newfoundland and Labrador Pharmacy Board, the College of Physicians and Surgeons of Newfoundland & Labrador and the Association of Registered Nurses of Newfoundland and Labrador, accredited health profession education programs were conducted across the province in 2016/2017. The education programs engaged clinicians about 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 2016/2017 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. The Centre also validated provincial data published in CIHI reports and identified national and provincial data quality issues and opportunities.

Research Partners

In 2016/2017, the Centre continued to support research within the province. Data extraction, linkage and analytical services were provided to Memorial University researchers for 34 research initiatives. This included researchers affiliated with the Translational and Personalized Medicine Initiative and its Choosing Wisely NL program, the NL Primary Healthcare Research and Integration to Improve Health System Efficiency (PRIIME) Network, as well as other faculties and departments. The Centre further supported the PRIIME Network through the provision of a seconded epidemiology resource. The Centre also provided consultative and analytical services to private sector and out-of-province researchers. The Centre has been working internally as well as in partnership with the Health Research Ethics Authority, HCS, Memorial University and the RHAs to assess current processes and enhance access to data and services for researchers with required approvals.

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. COACH is recognized nationally for its work around technology and systems and its focus on effective use of health information for decision-making.

The association offers a broad range of services for networking, forums, information and sharing best practices, peer awards, national conferences and professional development, including specialized career resources and professional certification. A number of Centre employees are active members of COACH.

Report on Performance

The following section of the annual report focuses on progress on goals and objectives related to the three strategic issues identified in the 2014/2017 Business Plan, including the initiatives and activities undertaken in 2016/2017.

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 has a unique role in supporting health care delivery and enabling access to more and better health information for clinicians and policy and decision-makers. The Centre continued its focus on eHealth initiatives, including the provincial EHR. The EHR will make information more accessible and timely, improve patient safety, and ultimately support informed and efficient decision-making.

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

GOAL PLANNED FOR 2014/2017	GOAL ACTUAL FOR 2014/2017
Identified and supported approval of eHealth solutions aligned with health system needs.	<p>The Centre identified and supported approval of eHealth solutions aligned with health system needs, which included:</p> <ul style="list-style-type: none"> • Established Provincial EMR Program • Led expansion of Telehealth by piloting new technologies. • Worked with the HCS and CPSNL to change licensing requirements for out of province health care providers. • Partnered with HCS to plan the implementation of a provincial prescription monitoring program. • Expanded the Centre's analytic environment to include additional clinical datasets to further enhance analytical capabilities.
Planned, implemented and sustained approved provincial health information systems, including provincial EHR.	<p>The Centre planned, implemented and sustained approved provincial health information systems, which included:</p> <ul style="list-style-type: none"> • Implemented Provincial Telepathology Program. • Completed deployment plan of Pharmacy Network to community pharmacies. • Completed refresh of PACS long and short term archive. • Implemented new PACS licensing model. • Increased adoption and use of HEALTHe NL by clinicians. • Reviewed and updated EHR governance structure. • Completed a major database consolidation initiative to enhance the capacity and performance capabilities of the EHR. • Upgraded each EHR system to align with the growing needs of stakeholders, in addition to contract compliance and on-going sustainment requirements.

Year Three Objective

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

Measure 2016/2017

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

PLANNED FOR 2016/2017	ACTUAL FOR 2016/2017
Implemented the Pharmacy Network deployment plan to connect all community pharmacies.	<ul style="list-style-type: none"> Implemented the Pharmacy Network deployment plan. As of March 31, 2017, 195 of 201 community pharmacies were connected. Five pharmacies were delayed due to the vendor's need to update the pharmacies' software, and a new pharmacy opened. All pharmacies were connected to the Pharmacy Network by May 26, 2017.
Continued expansion of HEALTHe NL, which includes go-live with Central Health and integration of Western Health lab data.	<ul style="list-style-type: none"> Continued expansion of HEALTHe NL which included the addition of Central Health laboratory data and encounters to HEALTHe NL.
Successfully implemented the Provincial EMR Program.	<ul style="list-style-type: none"> Implemented the Provincial EMR Program under the brand <i>eDOCSNL</i>. Established an operations framework for product release management and clinician support processes. As of March 31, 2017, 60 physicians across the province had implemented the eDOCSNL EMR solution in their practices.
Successfully implemented the Provincial Telepathology Program.	<ul style="list-style-type: none"> Implemented the Provincial Telepathology Program. Worked closely with the RHAs to support and adopt Telepathology with a focus on secondary diagnosis, quality assurance, education and training.
Established Provincial Telepathology Program Advisory committee.	<ul style="list-style-type: none"> Established a Provincial Telepathology Program Advisory committee in October 2016 that included laboratory representative and executive sponsors from the RHAs. The committee continues to meet regularly.
Established priorities to support continued adoption of the Provincial Telehealth Program.	<ul style="list-style-type: none"> Established priorities to support adoption and expanded use of the Provincial Telehealth Program including the pilot of new technologies to expand Telehealth access to desktop and mobile devices, long term care and rheumatology.
Increased the adoption of HEALTHe NL by health care professionals across the province.	<ul style="list-style-type: none"> Increased adoption by 745 active users in 2016/2017, bringing the total number of active HEALTHe NL users to 1225.
Maintained and expanded the current level of HEALTHe NL performance and stability.	<ul style="list-style-type: none"> Maintained and expanded performance and stability through establishment of a performance working group. Developed performance reports and error reports. Performance testing completed on any significant system change.
Implemented and tested disaster recovery solution.	<ul style="list-style-type: none"> Implemented and successfully tested disaster recovery solution that included EHR disaster recovery phase 1 and phase 2, and initial planning for EHR phase 3.

PLANNED FOR 2016/2017	ACTUAL FOR 2016/2017
Expanded HEALTHe NL analytic capabilities.	<ul style="list-style-type: none"> Expanded HEALTHe NL analytic capabilities by enabling stored data (e.g., laboratory and clinical encounters) to be transferred to the Centre's secured analytical environment and linked to other EHR clinical data for analytical use.
Reviewed and updated the provincial eHealth strategic plan in order to assess future direction.	<ul style="list-style-type: none"> eHealth executive identified the provincial eHealth strategic plan as a priority. Collaboration with key stakeholders has been ongoing. The plan has not been completed due to competing priorities however the target for completion was set as September 2017.

Discussion of Results

In fiscal 2016/2017, the Provincial EMR Program was implemented and launched under the brand *eDOCSNL*. By end of fiscal, 60 physicians across the province had applied *eDOCSNL* in their practice. Included in the EMR Program operations framework was the development of governance processes and policies, and clinician communication and training tools. HEALTHe NL added Central Health laboratory data and encounters. Further testing was required before Western Health laboratory data could be integrated however Western Health laboratory data was expected to be added in June 2017.

Looking forward, the Centre is uniquely positioned to play a vital role in supporting provincial strategic initiatives, such as broader implementation of the EMR, adding even more data to HEALTHe NL, giving broader HEALTHe NL access to allied health professionals and other clinicians, and expanding health analytics services to support evidence-based decision making and policy development.

Issue 2: Quality Health Information

Delivering quality health information is at the core of the Centre’s mandate and is reflected in our mission statement. In considering the Provincial Government’s strategic directions, the Centre recognizes that quality health information is essential to improving efficiency and effectiveness of health care delivery. As well, commitments in *The Way Forward* provides direction to the Centre to expand and enhance technology solutions to deliver quality health information.

Foundational to quality information are health information standards. The Centre continued 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 Center published updates to several provincial health information standards and reference materials after consultation with, and approval by, relevant stakeholders.

Led by the Department of Health Analytics and Evaluation Services (HAES), the Centre has increased its support of the provincial health system through its capacity to produce quality health analytics and evaluation products and services needed for decision-making. These services include:

- Data extraction, linkage and analytical services provided to Memorial University researchers for 34 research initiatives. It included researchers affiliated with the Translational and Personalized Medicine Initiative and Choosing Wisely NL, the NL Primary Healthcare Research and Integration to Improve Health System Efficiency (PRIIME) Network, as well as other faculties and departments.
- Conducted or supported a number of evaluations of provincial programs and initiatives including the Community Rapid Response Team initiative, the Provincial Cancer Control Policy Framework, the *Mental Health Care and Treatment Act*, the *Adult Protection Act* and the provincial medical transportation assistance programs.
- Expanded the health data management system to provide a modern storage and reporting solution for the Centre’s vital event datasets. This initiative included electronic data exchange with Service NL (Vital Statistics) and enabled the Centre to manage these key datasets in a more efficient and effective manner. It also enhanced the quality of data available for analytic use.
- Provided consultative and analytical services to private sector and out-of-province researchers.

The Centre continued its 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.

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.

GOAL PLANNED FOR 2014/2017	GOAL ACTUAL FOR 2014/2017
Attained and maintained optimal data quality through continued application and evolution of the data quality framework.	<ul style="list-style-type: none"> • The Centre continued to attain and maintain optimal data quality. The Data Quality Framework (DQF) was reviewed and revised in 2016/17. Further development in its application to the EHR data repositories is expected. Due to staffing constraints and major system redevelopments, capacity to conduct database data quality assessments was limited during 2015/16 and 2016/17. A renewed focus on this work is underway.
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.	<ul style="list-style-type: none"> • The Data Management Framework (DMF) was developed and approved in 2016/17 and has been used to organize and guide data management policy and procedure development. The DMF is aligned and complementary to the Centre's DQF.
Supported stakeholders health information needs through provision of health information services and products.	<p>The Centre supported stakeholders health information needs by providing evaluation and analytic services, which included:</p> <ul style="list-style-type: none"> • Publication of the first Mental Health and Addictions Performance Indicators Report and subsequent annual updates. • Support for the Primary Health Care Renewal in the Bonavista area: partnered with Eastern Health and participated in the Steering Committee and Data Working Group; updated the community health profile and helped develop and implement a community survey; developed a model to outline the project activities, outputs and outcomes; and initiated the development of an evaluation framework to assess the impact of the initiative. • Capacity building for data management, measurement and use among Indigenous communities. The Centre collaborated with three communities, HCS and Health Canada. Activities included

	<p>a series of community level indicator reports; support for new tracking and reporting tools; explored and incorporated new data sources into existing reports including cervical screening and CYFS data; developed communications tools (e.g., graphics); initiated data collection for a mental health needs assessment; and facilitated linkages with the larger e-health community.</p> <ul style="list-style-type: none"> • Development of a Provincial Diabetes Database. • Streamlined the Information Request process for greater efficiency and effectiveness. • Responded to approximately 500 requests for information from health system stakeholders. • More than 20 evaluations of health system programs and initiatives.
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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.

Measure 2016/2017

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

PLANNED FOR 2016/2017	ACTUAL FOR 2016/2017
Monitored development and implementation of the Data Management Framework and related Health Information Management procedures/ recommendations to ensure completion and adoption.	<ul style="list-style-type: none"> • Developed the Data Management Framework (DMF) and used it to guide development of new and revised policies and procedures related to data management functions. • Developed draft policies and procedures that focused on data acquisition, secondary use review and approval, appropriate use, disclosure and de-identification. • Development and documentation of further procedures as well as staff training and adoption is planned for 2017/18.
Assessed the feasibility of leveraging the Centre's data warehouse to create a linked data repository to support analytics.	<ul style="list-style-type: none"> • Completed a feasibility project. The project assessed the potential to include administrative datasets within the Centre's existing EHR data warehouse and enabled more efficient linkage of records from multiple datasets. It included a successful proof of concept and confirmed compatibility with commonly used analytic tools. It also identified opportunities to automate complex manual data management processes. • Work will continue in 2017/18 and is part of a larger project that will include a number of components to enhance the health analytic environment.
Monitored efficiency review and remediation activities for the Centre's secure analytic environment to ensure completion and improved function.	<ul style="list-style-type: none"> • Monitored efficiency review and initiated a project to oversee the remediation activities required. Work commenced in January 2017. • Implemented a technical solution to monitor data storage capacity. Technical procedures are under development and progress was made towards improved functioning with the secure data environment. This project will continue in 2017/18.

Discussion of Results

The Department of Health Analytics and Evaluation Services has increased the Centre's capacity to produce quality health information needed for decision-making.

HAES has undertaken many initiatives to strengthen its health information management processes. The health data management system was expanded to provide a modern storage and reporting solution for the Centre's vital event datasets. This initiative included electronic data exchange with Service NL (Vital Statistics) and enabled the Centre to better manage these key datasets in a more efficient and effective manner. It also enhanced the quality of data available for analytic use.

By compiling more complete health data, the Centre's ability to provide meaningful health analytics and evaluation services to health system decision makers significantly grows. This beginning to end approach to health data, analytics and evaluation is a key feature for the Centre, and a differentiating strength in comparison to jurisdictions across the country.

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 varies by stakeholder and is specific to each stakeholder group based on types and levels of interaction with the Centre.

Goal 2014-2017	By March 31, 2017, the Centre will have increased stakeholder use, support and adoption of the Centre's services and programs.
Measure 2014-2017	Increased stakeholder use, support and adoption of the Centre's services and programs.
Indicators 2014-2017	<ul style="list-style-type: none">• Increased consultation with stakeholders to ensure the Centre's programs and services are meeting their health information needs.• Increased stakeholder awareness of the Centre's programs and services.• Demonstrated successful adoption and use of provincial health information systems.

GOAL PLANNED FOR 2014/2017	GOAL ACTUAL FOR 2014/2017
Increased consultation with stakeholders to ensure the Centre's programs and services are meeting their health information needs.	<p>The Centre increased consultation with stakeholders to meet their health information needs, which included:</p> <ul style="list-style-type: none"> • Held a leadership forum that brought together senior leaders from HCS, the RHAs and the Centre in the fall 2014. • Conducted stakeholder research report to guide future stakeholder and communications strategies in March 2015. Received feedback from over 70 stakeholders. • Collaborated with provincial stakeholders to develop an Adoption Framework focused on increasing stakeholder use and adoption of Centre programs and systems. • Stakeholder relations tactics integrated in project implementation plans for the Pharmacy Network deployment plan, the Provincial Telepathology project, and the iEHR/Labs project. • Active leadership, management and participation in EHR and health information management committees comprised of various health care professionals, administrators and regulatory bodies designed to provide insight and guidance into the Centre's planning and actions.
Increased stakeholder awareness of the Centre's programs and services.	<p>The Centre implemented the following initiatives to increase stakeholder awareness of its programs and services by proactively engaging stakeholders, which included:</p> <ul style="list-style-type: none"> • Worked closely with the RHAs, Newfoundland and Labrador Medical Association, Association of Registered Nurses of Newfoundland and Labrador and the Pharmacists' Association of Newfoundland and Labrador to provide numerous information sessions and EHR accredited continuing educational sessions. • Participated and presented at several local, provincial and national conferences including Canada's national conference, <i>eHealth 2014</i> • Released 12 news releases to proactively ensure stakeholders were aware of Centre activities; launched a public awareness campaign to generate interest in the EHR and partnered with Canada Health Infoway to co-brand a national advertising campaign about digital health.
Demonstrated successful adoption and use of provincial health information systems.	<p>The Centre demonstrated successful adoption and use of provincial health information systems, which included:</p> <ul style="list-style-type: none"> • Increased the number of active users of the provincial electronic health record, HEALTHe NL, from 141 in 2014/2015 to 1225 in 2016/2017. • Increased the number of authorized health care professionals signed in to HEALTHe NL from 593 in 2014/2015 to 3053 in 2016/2017.

Year Three Objective

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

Measure 2016/2017

Demonstrated effectiveness of identified stakeholder engagement activities.

PLANNED FOR 2016/2017	ACTUAL FOR 2016/2017
Increased awareness of HEALTHe NL and its benefits by health care professionals.	<p>The Centre implemented the following initiatives to increase stakeholder awareness of its programs and services by proactively engaging stakeholders, which included:</p> <ul style="list-style-type: none"> Presented and participated at numerous health care professionals’ events, activities and conferences that increased awareness and adoption of HEALTHe NL and its benefits by health care professionals. These included NL Medical Association AGM, College of Family Physicians Conference, Nurse Practitioner Conference and Janeway Kids Rock Conference.
Increased active use of HEALTHe NL by health care professionals.	<ul style="list-style-type: none"> Increased active use of HEALTHe NL by health care professionals from 480 in 2015/2016 to 1225 active users by March 31, 2017. Adoption and active use of HEALTHe NL will continue to increase as more clinical data is added.

Discussion of Results

In 2016/2017, the Centre focused its stakeholder activities on health care professionals that experience a high benefit from the data contained within HEALTHe NL. Stakeholder and adoption planning continued to be a priority in anticipation of the inclusion of complete provincial lab data, clinical results, and medication profiles in HEALTHe NL.

The Centre’s ongoing 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. These included presentations and sessions held at the NL Medical Association AGM, College of Family Physicians Conference, Nurse Practitioner Conference and Janeway Kids Rock Conference. Centre staff also conducted a number of informal sessions within the RHAs that supported stakeholder use and adoption of Centre services and programs.

Opportunities and Challenges

As the Centre concluded year three of the 2014/2017 business planning cycle, the following opportunities and challenges have been identified.

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.
- Increasing the adoption of the provincial EMR program eDOCSNL.
- Assisting HCS in the implementation of the prescription monitoring program.
- 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 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.
- Supporting the Provincial Government's initiative to improve cost-effectiveness of health information management across the RHAs and the Centre through a shared service agreement.

Challenges

- Achieving timely implementation of the EHR while balancing resource requirements, stakeholder expectations, contractual and partnership obligations and the integrity of existing components continue to 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 limited 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 skill sets to achieve its mandate, which it does through a 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 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 comprise the Centre's Board of Directors:

Dr. Kris Aubrey- Bassler, Chairperson	Cynthia Holden	Robert Thompson
Jerry Vink, Vice-Chair	Dr. Margaret Mary Steele	Chris Collingwood
Elyse Bruce	Ellen MacDonald	Ted Dawe
Allan Bradley	Karen Oldford	Fred Cahill
Tom Bursey	Lynn Power	Denise Tubrett

The Centre thanks Mr. Mike Barron, former President and CEO, who retired in September 2016, Mr. Ray Dillon, who stepped down as Board Chair December 2016, and Mr. Tony Wakeham whose term ended August 2017. Sincerest appreciation is extended to Mr. Barron, Mr. Dillon and Mr. Wakeham for their dedication and contribution to the Centre and its mandate.

Appendix B : 2016/2017 Financial Statements



Financial Statements

Newfoundland and Labrador Centre for Health
Information

March 31, 2017

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Statement of responsibility

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

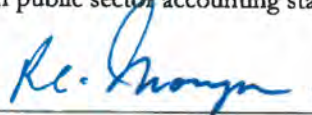
In carrying out its responsibilities, management maintains appropriate systems of internal and administrative controls designed to provide reasonable assurance that transactions are executed in accordance with proper authorization, that assets are properly accounted for and safeguarded, and that financial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

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St. John's, NL
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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, 2017 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, 2017 and its financial performance, net debt and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

St. John's, Canada

June 21, 2017



Chartered Professional Accountants

Newfoundland and Labrador Centre for Health
Information
Statement of Financial Position

March 31 2017 2016

Financial assets

Cash and cash equivalents	\$ 16,413,664	\$ 16,137,493
Receivables (Note 3)	<u>782,907</u>	<u>1,226,363</u>
	<u>17,196,571</u>	<u>17,363,856</u>

Liabilities

Payables and accruals (Note 4)	7,333,541	5,656,545
Deferred revenue	12,216,000	17,746,721
Deferred capital contributions (Note 5)	16,880,296	18,491,579
Accrued severance pay (Note 6)	1,471,900	1,517,500
Accrued sick leave pay (Note 7)	<u>605,500</u>	<u>612,300</u>
	<u>38,507,237</u>	<u>44,024,645</u>

Net debt

(21,310,666) (26,660,789)

Non-financial assets

Tangible capital assets (Page 16)	18,806,746	21,018,683
Prepays	<u>1,933,728</u>	<u>2,283,391</u>
	<u>20,740,474</u>	<u>23,302,074</u>

Accumulated deficit

\$ (570,192) \$ (3,358,715)

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	(Note 11)		
	Actual 2017	Budget 2017	Actual 2016
Revenue			
Grants			
Canada Health Infoway	\$ 3,881,699	\$ 1,293,400	\$ 2,477,535
Government of Newfoundland and Labrador	24,058,603	25,359,700	24,008,260
Amortization of deferred capital contributions	3,042,563	2,955,017	2,965,614
Research	330,099	301,000	505,237
Interest	144,263	50,000	147,066
Other projects	<u>4,876,802</u>	<u>5,273,400</u>	<u>2,598,640</u>
	<u>36,334,029</u>	<u>35,232,517</u>	<u>32,702,352</u>
Expenses (Pages 17 & 18)			
Administration	7,978,518	8,245,191	8,362,882
Clinical Programs	5,373,647	5,740,766	4,585,471
Infrastructure, Information Protection and EHR Operations	12,397,462	12,812,875	12,607,820
Projects	4,329,894	4,810,930	2,684,177
Health Analytics and Evaluation Services	<u>3,465,985</u>	<u>3,484,708</u>	<u>3,411,042</u>
	<u>33,545,506</u>	<u>35,094,470</u>	<u>31,651,392</u>
Annual surplus	<u>\$ 2,788,523</u>	<u>\$ 138,047</u>	<u>\$ 1,050,960</u>
Accumulated deficit, beginning of year	\$ (3,358,715)	\$ (3,358,715)	\$ (4,409,675)
Annual surplus	<u>2,788,523</u>	<u>138,047</u>	<u>1,050,960</u>
Accumulated deficit, end of year	<u>\$ (570,192)</u>	<u>\$ (3,220,668)</u>	<u>\$ (3,358,715)</u>

See accompanying notes to the financial statements.

Newfoundland and Labrador Centre for Health Information

Statement of Net Debt

Year Ended March 31	Actual 2017	Budget 2017	Actual 2016
Annual surplus	\$ 2,788,523	\$ 138,047	\$ 1,050,960
Acquisition of tangible capital assets	(2,195,078)	(1,858,672)	(4,740,039)
Amortization of tangible capital assets	4,407,015	4,487,169	4,452,493
Loss on disposal of capital assets	-	-	10,150
Decrease (increase) in prepaids	<u>349,663</u>	<u>-</u>	<u>(450,676)</u>
Decrease in net debt	5,350,123	2,766,544	322,888
Net debt, beginning of year	<u>(26,660,789)</u>	<u>(26,660,789)</u>	<u>(26,983,677)</u>
Net debt, end of year	<u>\$(21,310,666)</u>	<u>\$(23,894,245)</u>	<u>\$(26,660,789)</u>

See accompanying notes to the financial statements.

Newfoundland and Labrador Centre for Health Information

Statement of Cash Flows

Year Ended March 31	2017	2016
Increase (decrease) in cash and cash equivalents		
Operating		
Annual surplus	\$ 2,788,523	\$ 1,050,960
Change in non-cash items		
Amortization of capital assets	4,407,015	4,452,493
Amortization of deferred capital contributions	(3,042,563)	(2,965,614)
Loss on disposal of capital assets	-	10,150
(Decrease) increase in severance pay accrual	(45,600)	158,100
Decrease in sick leave pay accrual	(6,800)	(33,700)
Change in non-cash operating working capital		
Receivables	443,456	1,928,798
Prepaid expenses	349,663	(450,676)
Payables and accruals	1,676,996	(5,099,805)
Deferred revenue	<u>(5,530,721)</u>	<u>(1,234,657)</u>
Cash provided by (applied to) operating transactions	<u>1,039,969</u>	<u>(2,183,951)</u>
Capital		
Cash applied to capital transactions	<u>(2,195,078)</u>	<u>(4,740,039)</u>
Financing		
Capital contributions from Government of Newfoundland and Labrador and Canada Health Infoway	<u>1,431,280</u>	<u>6,198,595</u>
Increase (decrease) in cash and cash equivalents	276,171	(725,395)
Cash and cash equivalents, beginning of year	<u>16,137,493</u>	<u>16,862,888</u>
Cash and cash equivalents, end of year	<u>\$ 16,413,664</u>	<u>\$16,137,493</u>

See accompanying notes to the financial statements.

Newfoundland and Labrador Centre for Health Information

Notes to the Financial Statements

March 31, 2017

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 contributions 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, 2017

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 surplus, 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, 2017

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, 2017

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>2017</u>	<u>2016</u>
Harmonized sales tax	\$ 526,286	\$ 401,502
Trade	234,407	32,270
Accrued interest	14,389	10,888
Canada Health Infoway	5,745	771,690
Other	<u>2,080</u>	<u>10,013</u>
	<u>\$ 782,907</u>	<u>\$ 1,226,363</u>

4. Payables and accruals	<u>2017</u>	<u>2016</u>
Trade	\$ 5,636,887	\$ 3,985,709
Vacation and compensatory pay	<u>1,696,654</u>	<u>1,670,836</u>
	<u>\$ 7,333,541</u>	<u>\$ 5,656,545</u>

Newfoundland and Labrador Centre for Health Information

Notes to the Financial Statements

March 31, 2017

5. Deferred capital contributions	<u>2017</u>	<u>2016</u>
Opening balance	\$ 18,491,579	\$ 15,258,598
Capital contributions from Government of Newfoundland and Labrador	1,293,682	3,730,845
Capital contributions from Canada Health Infoway	137,598	2,467,750
Amortization of deferred capital contributions	<u>(3,042,563)</u>	<u>(2,965,614)</u>
	<u>\$ 16,880,296</u>	<u>\$ 18,491,579</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, 2017. The assumptions shown below are based on future events.

	<u>2017</u>	<u>2016</u>
Significant assumptions used:		
Discount rate	3.5%	3.4%
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	\$ 1,517,500	\$ 1,359,400
Current period benefit cost	154,400	161,600
Interest cost	49,800	42,200
Benefits payments	(249,600)	(52,800)
Amortization of actuarial (gains) losses	<u>(200)</u>	<u>7,100</u>
Balance, end of year	<u>\$ 1,471,900</u>	<u>\$ 1,517,500</u>
Net benefit expense for the year:		
Current period benefit cost	\$ 154,400	\$ 161,600
Amortization of actuarial (gains) losses	(200)	7,100
Interest cost	<u>49,800</u>	<u>42,200</u>
Net Benefit Expense	<u>\$ 204,000</u>	<u>\$ 210,900</u>

Newfoundland and Labrador Centre for Health Information

Notes to the Financial Statements

March 31, 2017

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, 2017. The assumptions shown below are based on future events.

	<u>2017</u>	<u>2016</u>
Significant assumptions used:		
Discount rate	3.5%	3.4%
Average remaining service period of active employees	9.7 years	9.7 years
Wage and salary escalation	3.0%	3.0%
Accrued Benefit Obligation:		
Balance beginning of year	\$ 612,300	\$ 646,000
Current period benefit cost	-	-
Interest cost	20,400	17,800
Benefits payments	(27,400)	(53,000)
Amortization of actuarial gains	<u>200</u>	<u>1,500</u>
Balance, end of year	<u>\$ 605,500</u>	<u>\$ 612,300</u>
Net benefit expense for the year:		
Current period benefit cost	\$ -	\$ -
Amortization of actuarial losses (gains)	200	1,500
Interest cost	<u>20,400</u>	<u>17,800</u>
Net Benefit Expense	<u>\$ 20,600</u>	<u>\$ 19,300</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 contributions 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, 2017

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 \$1,208,472 (2016 - \$1,115,732). 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:

2018	\$ 4,222,100
2019	\$ 3,991,450
2020	\$ 2,890,041
2021	\$ 2,557,940
2022	\$ 772,639

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, 2017

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, 2017.

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 \$7,333,541 (2016 - \$5,656,545), 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 \$256,621 (2016 - \$824,861), of which \$5,745 (2016 - \$771,690) 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 Schedule of Tangible Capital Assets

Year Ended March 31, 2017

	Computer equipment	Office furniture	Computer software	Leaschold improvements	Pharmacy Network	Electronic Health Records-Labs (EHR/Labs)	Health Information Access Layer (HIAL)	2017		2016	
Cost											
Cost, beginning of year	\$ 11,885,840	\$ 389,339	\$ 5,551,964	\$ 264,421	\$ 9,906,749	\$ 8,046,167	\$ 8,291,887	\$ 44,336,367	\$ 39,606,660		
Additions during the year	575,256	2,223	901,777	-	428,080	287,742	-	2,195,078	4,470,039		
Disposals during the year	(208,948)	-	-	-	-	-	-	(208,948)	(10,332)		
Cost, end of year	\$ 12,252,148	\$ 391,562	\$ 6,453,741	\$ 264,421	\$ 10,334,829	\$ 8,333,909	\$ 8,291,887	\$ 46,322,497	\$ 44,336,367		
Accumulated Amortization											
Accumulated amortization, beginning of year	\$ 8,614,049	\$ 346,674	\$ 4,447,991	\$ 176,199	\$ 6,130,336	\$ 635,745	\$ 2,966,690	\$ 23,317,684	\$ 18,865,373		
Amortization	1,199,134	14,463	579,128	29,333	1,004,944	750,825	829,188	4,407,015	4,452,493		
Reversal of accumulated amortization relating to disposals	(208,948)	-	-	-	-	-	-	(208,948)	(182)		
Accumulated amortization, end of year	\$ 9,604,235	\$ 361,137	\$ 5,027,119	\$ 205,532	\$ 7,135,280	\$ 1,386,570	\$ 3,795,878	\$ 27,515,751	\$ 23,317,684		
Net book value of tangible capital assets	\$ 2,647,913	\$ 30,425	\$ 1,426,622	\$ 58,889	\$ 3,199,549	\$ 6,947,339	\$ 4,496,009	\$ 18,806,746	\$ 21,018,683		

Included in tangible capital assets are assets not in use and therefore not depreciated in the current year. These assets, \$569,659 (2016 - \$896,308) of which relate to iEHR Labs and \$244,552 (2016 - \$24,723) 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	2017	2016
Administration		
Communication	\$ 12,742	\$ 29,439
Consulting fees	26,413	49,791
Salaries and benefits	2,214,346	2,408,460
Amortization of capital assets	4,407,015	4,452,493
Minor equipment	3,506	8,734
Software maintenance	21,988	24,867
Rent	898,511	898,511
Security services	24,572	136,180
Insurance	105,361	104,100
Other	<u>264,064</u>	<u>250,307</u>
	\$ 7,978,518	\$ 8,362,882
Clinical Programs		
Consulting fees	\$ 584,239	\$ 890,358
Salaries and benefits	2,526,456	2,405,799
License fees	187,881	23,587
Minor equipment	3,014	6,774
Software maintenance	1,224,356	927,605
Pharmacy incentives	741,750	211,750
Rent	33,900	33,900
Other	<u>72,051</u>	<u>85,698</u>
	\$ 5,373,647	\$ 4,585,471
Infrastructure, Information Protection and EHR Operations		
Consulting fees	\$ 359,049	\$ 676,905
Salaries and benefits	5,453,998	5,164,923
Data communication charges	485,209	504,277
License fees	2,257,358	2,696,778
Minor equipment	9,323	5,583
Software maintenance	3,396,690	3,078,889
Data centre rent	301,889	296,298
Other	<u>133,946</u>	<u>184,167</u>
	\$ 12,397,462	\$ 12,607,820

Newfoundland and Labrador Centre for Health Information

Schedule of Expenses

(Note 11)

March 31	2017	2016
Projects		
Consulting fees	\$ 2,095,526	\$ 1,111,924
Salaries and benefits	1,605,445	1,216,450
License fees	112,112	1,344
Equipment and RHA reimbursements	299,898	201,837
Software maintenance	22,234	47,831
Other	<u>194,679</u>	<u>104,791</u>
	\$ 4,329,894	\$ 2,684,177
Health Analytics and Evaluation Services		
Consulting fees	\$ 3,476	\$ 19,498
Salaries and benefits	3,339,739	3,265,511
License fees	31,609	43,105
Minor equipment	9,691	6,369
Other	55,302	73,440
Software maintenance	<u>26,168</u>	<u>3,119</u>
	\$ 3,465,985	\$ 3,411,042
Total expenses	<u>\$ 33,545,506</u>	<u>\$ 31,651,392</u>

Appendix C: 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. Adult Protection Act Tracking System Dataset
7. Adverse Drug Events (ADEs) in Adult Patients Dataset
8. Adverse Drug Events (ADEs) in Pediatric Patients Dataset
9. Automated Notification System Administrative Dataset
10. Canadian Primary Care Sentinel Surveillance Network (CPCSSN)- Newfoundland and Labrador Component
11. Cancer Dataset
12. Cancer Patient Navigation Service Evaluation Dataset
13. Community Rapid Response Team Administrative Dataset
14. Community Treatment Order Administrative Dataset
15. Drug Treatment Funding Program Evaluation Dataset
16. Emergency Room Triage Dataset
17. Enhanced Care in Personal Care Homes Pilot Administrative Dataset
18. HEALTHe NL User Monitoring System
19. HEALTHe NL Viewer Adoption Evaluation Dataset
20. HIV Database
21. Laboratory Test Data, Eastern Health
22. Laboratory Test Data, Western Health
23. Longitudinal in-patient ADE Database
24. MCP Beneficiary Registration Database
25. MCP Fee-For-Service Physician Claims Database
26. MCP Provider Registry
27. MCP Purge File
28. Medical Transportation Assistance Program AES Claims Dataset
29. Medical Transportation Assistance Program HCS Claims Dataset
30. Meditech ER, Medical Imaging, Laboratory, Long Term Care, OR Data, All RHAs
31. Newfoundland and Labrador Prescription Drug Program (NLPDP) Dataset
32. NL Health Line Clinidata Dataset
33. NL Health Line Fonemed Dataset
34. NL Mental Health Care and Treatment Act Evaluation Dataset
35. NLCHI Live Birth System (LBS)
36. NLCHI Mortality System (MS)
37. NLCHI Stillbirth System (SS)
38. Out of Province Hospital Inpatient/Day Surgery Discharge Data (OOP)
39. PACS Information Management Dataset
40. Paid Family Caregiving Option Administrative Dataset
41. Physician Claims Administrative Health Data
42. Provider Table
43. Provincial Community Mental Health Reporting System
44. Provincial Continuing Care System
45. Provincial Discharge Abstract Database
46. Provincial Home Care System
47. Provincial Mental Health Reporting System
48. Provincial Rehabilitation System
49. Provincial Smoking Cessation Program Administrative Dataset
50. Public Health Laboratory Data
51. Researching Nursing Practice in the Community Dataset
52. Statistics Canada Annual Mortality Data Files
53. Statistics Canada Annual Stillbirth Data Files
54. Telehealth Utilization Data
55. Total Joint Replacement Wait List Dataset
56. Turnings' Circles of Support and Accountability for Drug Offenders Evaluation Dataset
57. Type 1 Diabetes Mellitus Dataset

Surveys

58. Adolescent Health Survey
59. Adult Protection Act Information/Training Session Evaluation Survey Dataset
60. Automated Notification System Client Experience Survey Dataset
61. Booster Seat Study Dataset
62. Canadian Community Health Survey (CCHS)
63. Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) Dataset
64. Canadian Tobacco Use Monitoring Survey
65. Community Rapid Response Team Client Satisfaction Survey Dataset
66. Community Rapid Response Team Staff Survey Dataset
67. Factors Influencing Breastfeeding Dataset
68. Healthy Workplace Pilot Project Dataset
69. Heart Failure Outreach Program Client Experience Survey Dataset
70. Illegal Drug Use Study Pharmacist Survey Dataset
71. Impact of Out-of-Pocket Prescription Costs Survey Dataset
72. Intentional Misuse of Prescription Drugs Dataset
73. National Longitudinal Survey of Children and Youth
74. National Population Health Survey (NPHS)
75. NL Adult Health Survey (NAHS) Database
76. Non-Suicidal Self-Injury Survey Dataset
77. Paid Family Caregiving Option Client Experience Survey Dataset
78. Primary Health Care Survey Dataset
79. Provincial Smoking Cessation Program Client Telephone Survey Dataset
80. Provincial Smoking Cessation Program Health Professionals Survey Dataset
81. Seniors Medication User Dataset
82. Student Drug Use Survey
83. Youth Smoking Survey

Population/Geographic Data

84. Census
85. Community Table
86. Population Estimates
87. Postal Code Conversion File

Composite

88. Administrative Dataset Surveillance of Depressive Disorders in NL
89. Baie Verte Miners' Registry
90. Breast Cancer and Diabetes Dataset
91. Cancer and Chronic Disease Research Database
92. Cardiac Care Dataset
93. Cardiac Events Dataset
94. Cervical Cancer Surveillance System
95. Childhood Burn Injury Dataset
96. Childhood Injury Research Dataset
97. Childhood Leukemia Dataset
98. Chronic Pain in NL Dataset
99. Colorectal Cancer and Diabetes Dataset
100. Complex Care Cohort Dataset
101. Continuity of Care Research Dataset
102. C-section Impact Dataset
103. C-section Stillbirth Dataset
104. Diabetes Outcomes Dataset
105. Early vs. Late Diabetes Diagnosis Dataset
106. EMR Diabetes Risk POC Dataset
107. EMR Obesity Chronic Conditions Dataset
108. ER/PR Patient Listing and Communications Database
109. Factors Associated with Breast Screening Dataset
110. First Nation Administrative Health Database (FNAHD)
111. Health Service Utilization by Size at Birth Dataset
112. Heart & Stroke Dataset from Canadian Stroke Network
113. HOME Study Dataset
114. Longitudinal Pediatric Research Database
115. Miawpukek Diabetes Study Dataset
116. Newfoundland and Labrador Chronic Disease Surveillance System (NCDSS)
117. NewLab Psoriasis Clinical Dataset
118. Pharmacy Network POC Dataset
119. Provincial Diabetes Database
120. Suicide Database
121. Vitamin D Composite Dataset

MIS

122. Provincial Management Information System (MIS) Data

Qualitative

- 123. Adult Protection Act Focus Group Recordings
- 124. Cancer Control Policy Framework Review Key Informant Interview Dataset
- 125. Community Rapid Response Team Focus Group and Interview Recordings
- 126. Community Treatment Order Focus Group and Interview Recordings
- 127. Health Forums 2014-2015 Data
- 128. Heart Failure Outreach Program Key Informant Interview Transcripts
- 129. Impact of EHR to Facilitate Medication Reconciliation Dataset
- 130. Nurse Absenteeism Focus Group Recordings
- 131. Ottawa Nursing Model Focus Group Recordings
- 132. Paid Family Caregiving Option Focus Group Transcripts
- 133. Premier's Health Summit 2015 Data
- 134. Primary Health Care Focus Group and Key Informant Interview Recordings

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