

Department of Health and Wellness

# Provincial Programs

Cancer Care Nova Scotia  
Cardiovascular Health Nova Scotia  
Diabetes Care Program of Nova Scotia  
Legacy of Life  
Nova Scotia Breast Screening Program  
Nova Scotia Hearing and Speech Centres  
Nova Scotia Provincial Blood Coordinating Program  
Nova Scotia Renal Program  
Reproductive Care Program of Nova Scotia

Department of Health and Wellness

# Provincial Programs

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# Minister's Message

**T**he Nova Scotia Department of Health and Wellness is committed to the ongoing improvement and enhancement of healthcare services across the province. We achieve this through system wide policy planning, legislation, proper allocation of resources, standards development and monitoring and evaluation.

We provide funding to nine provincial programs, each with a focus on a key areas of health care needs for Nova Scotians:

- Cancer Care Nova Scotia (CCNS)
- Cardiovascular Health Nova Scotia (CVHNS)
- Diabetes Care Program of Nova Scotia (DCPNS)
- Legacy of Life (LOL)
- Nova Scotia Breast Screening Program (NSBSP)
- Nova Scotia Hearing and Speech Centres (NSHSC)
- Nova Scotia Renal Program (NSRP)
- Reproductive Care Program of Nova Scotia (RCPNS)

The provincial programs, in their advisory capacity, bring together experts to examine, develop and recommend best practices for our healthcare system, through evidence-based research and decision-making. These programs address issues across the health system and ensure the integrity and accountability of outcomes that support Nova Scotians.

It is with pleasure that I present to you, the 2014 Provincial Programs Highlights, which demonstrate the significant positive impact these programs have on Nova Scotians and the health system. Thank you to our dedicated clinicians, staff, partners and program contributors. I encourage you to read the information provided by our various programs on their activities and impacts and I look forward to their ongoing contributions.



Honourable Leo A. Glavine

# Cancer Care Nova Scotia (CCNS)



## Mission

Cancer Care Nova Scotia (CCNS) works collaboratively to enhance the performance of the provincial health system in order to improve cancer-related outcomes.

## Core Activities

Supporting the achievement of excellence in cancer prevention, early detection, patient navigation, treatment, care, and research by means of:

- Standards development and implementation
- Continuing education of health professionals and patients
- Patient engagement
- Surveillance and evaluation
- Screening programs
- Multi-sector and multi-level collaboration to advance evidence-based cancer prevention and enable healthy lifestyle changes

Over the last year Cancer Care Nova Scotia has continued its work with district health authorities and community partners to improve cancer patient experiences and outcomes.

## 2013-2014 Budget

\$7,300,000

## Program Manager

Chris Collier, Interim Chief Operating Officer

## Clinical Advisor

Dr. Carman Giacomantonio, Chief Medical Director

[www.cancercare.ns.ca](http://www.cancercare.ns.ca)

## Standards, Guidelines, and Policy Development

- developed a consistent process for identifying measures to monitor standards
- invited cancer patients and survivors to provide feedback on the draft standards for rectal cancer and incorporated their feedback into the draft standards
- surveyed patients and families about their experiences with cancer emergencies
- established a working group of health professionals to adapt for Nova Scotia the Alberta guidelines for management of oncologic (cancer) emergencies
- implemented the Canadian Association of Psychosocial Oncology's "Standards for Psychosocial Health Services for Adult Persons with Cancer and their Families"
- established a working group to develop a provincial policy for managing of oral chemotherapy

**Impact:** There have been improvements in standardized treatment and patient-centred care, based on the best available evidence and leading practice, supporting enhanced patient experiences and outcomes.

## Surveillance and Evaluation

- continued development of the new provincial cancer information system, Oncolog, which improves CCNS's ability to collect and analyze data to support decision-making such as: evaluating programs to understand where and how they are making a difference; research to understand how health policy decisions (e.g. smoking, sun safety policies) are changing the number of people diagnosed with cancer, and how well certain treatments are working.

**Impact:** Work in this area has improved the infrastructure, enabling better cancer data collection and analysis, evidence-based evaluation, and decision-making; monitoring, and research, all of which support enhanced patient care.

## Primary Prevention and Screening

- provided program evaluation education to 45 Nova Scotia Primary Health practitioners
- updated Cervical Cancer Screening Guidelines and Patient Screening History formats to make it easier for women to look after their cervical health
- worked with Canadian partners in the areas of cervical and colon cancer screening to measure the impact of organized screening.

**Impact:** There are an increasing number of public health professionals who can evaluate the success of their programs; there is a greater understanding of the value of and support for safe, effective, and appropriate population-based colon and cervical cancer screening for Nova Scotians.

## Education and Patient Engagement

- shared and acted on recommendations from a CCNS report on African Nova Scotians' experience with the cancer system
- hosted two Provincial Cancer Network workshops for health professionals
- launched an online oral chemotherapy toolkit to support nurses
- developed eight new cancer patient educational materials
- evaluated the impact of the Cancer Patient Family Network

**Impact:** There are a greater number of health professionals who have the supports needed to meet standards, provide evidence-informed care and quality patient education; there is a strengthened involvement of patients, families, and communities in improving the cancer system.

# Cardiovascular Health Nova Scotia (CVHNS)



## Mission

Improving the cardiovascular health and care of Nova Scotians.

## Core Activities

Facilitates and supports provincial approaches to cardiovascular and stroke health and care by:

- Developing and implementing evidence-based guidelines, standards and service delivery models
- Monitoring, surveillance, and reporting on AMI, stroke, heart failure, and unstable angina
- Driving quality improvement using provincial and local data
- Knowledge translation through networking, decision support, and inter-professional education

## 2013–2014 Budget

\$1,558,440

## Program Manager

Neala Gill

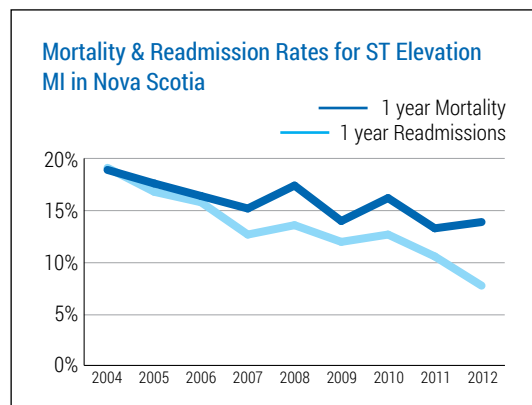
## Clinical Advisors

Dr. Jafna Cox  
Dr. Michael Love  
Dr. Stephen Phillips

[novascotia.ca/health/cvhns](http://novascotia.ca/health/cvhns)

## Improving ST elevation myocardial infarction outcomes through process and system changes

Implementation of CVHNS's Nova Scotia Guidelines for management of acute ST elevation myocardial infarction (STEMI) began in 2007. Through a combination of local and provincial initiatives, multiple strategies have been used to translate the guidelines into practice. These include protocols and documentation tools to guide evidence-based care, as well as system changes targeted at appropriate referral/transfer and access and flow. With ongoing, collaborative efforts of many groups, we are seeing significant reductions in mortality and readmissions for STEMI (see chart below).



## Better Understanding Stroke Reorganization Across the Continuum

Reorganization of stroke service delivery throughout the province started in 2008. The initial focus of reorganization was the creation of seven Stroke Units throughout the province. Acute care and early rehabilitation by interdisciplinary teams at these sites has resulted in more people being discharged home and fewer to longterm care.

Stroke rehabilitation services across settings and transient ischemic stroke (TIA) rapid assessment have been identified as key focuses for provincial reorganization. CVHNS is coordinating a number of initiatives to better understand required reorganization in these areas, including creating inventories of existing services, consulting local stroke teams/providers, interviewing stroke patients following discharge to better understand their needs, and reviewing available data. The collective findings will be used to advise on

additional service delivery reorganization to further improve process and outcomes of care in these areas.

## Cardiac Catheterization in Patients with Renal Impairment

In an audit coordinated by CVHNS, impaired renal status was found to be one of the key reasons that patients are not referred for cardiac catheterization. CVHNS and Nova Scotia Renal Program convened a group to develop a protocol for preparation and follow up of this population for cardiac catheterization. The group included representatives from interventional cardiology, internal medicine, nephrology, and radiology from around the province. The final protocol will be disseminated in the fall of 2014.

## Promoting Practice Change Through Shadowing Experiences at Tertiary Care Sites

CVHNS supported staff from all district health authorities to participate in two shadowing experiences:

1. Thirty-one staff participated in shadowing experiences at the cardiac catheterization lab. These were designed to improve understanding of cardiac catheterization and related care processes, so as to improve preparation at the local site prior to transfer for the procedure.
2. Twenty-seven staff from Restorative Care Units participated in shadowing experiences at the Nova Scotia Rehabilitation Centre. These were designed to support practice change based on learning needs identified by the individual.

## TIA Algorithms

Algorithms have been developed to support rapid assessment and evidence-based management of TIA in Primary Care and the Emergency Department. These will be disseminated in the winter of 2014–15 as part of a larger strategy to improve rapid assessment and management of TIA.

# Diabetes Care Program of Nova Scotia (DCPNS)

20<sup>th</sup> Anniversary  
Partnerships, Quality, and Innovation (since 1991)  
Diabetes Care Program of Nova Scotia

## Mission

To improve, through leadership and partnerships, the health of Nova Scotians living with, affected by, or at risk of developing diabetes.

## Core Activities

Established in 1991, the DCPNS works closely with all Diabetes Centres, other diabetes care providers, leaders in diabetes clinical practice, and those interested in chronic disease prevention and management by:

- Development and maintenance of the DCPNS Registry
- Use of local data in determining provincial focus and local interventions
- Knowledge transfer and translation through networking and educational opportunities
- Development, dissemination, and monitoring of the adoption of guidelines for specific populations
- Work with Cardiovascular Health Nova Scotia and Nova Scotia Renal Program (guided by a joint advisory group) to focus on common risk factor reduction, management, and surveillance

## 2013–14 Budget

\$717,399

## Program Manager

Peggy Dunbar  
peggy.dunbar@  
dcpns.nshealth.ca

## Clinical Advisors

Dr. Lynne Harrigan  
Dr. Beth Cummings

diabetescare.nshealth.ca

## Strategic Plan (2014–2019)

The DCPNS was actively engaged in strategic planning for the latter part of this fiscal year. With a focus on engagement, the DCPNS has used the IAP2 spectrum of participation to ensure a broad reach into a vast array of stakeholder groups.

Focus groups, key informant interviews, and an e-survey have allowed for an unprecedented response to DCPNS strategic directions and key activities.

The DCPNS Strategic Plan report can be found on the DCPNS website.

## Transition Initiatives (focus on preparation for and transfer to adult care)

Early in 2014, the DCPNS released additional transition tools aimed at adolescents and young adults with diabetes moving from pediatric to adult care. The “Moving on . . . with Diabetes: A Youth in Transition Handbook,” along with its accompanying mobile app, are accessible through the DCPNS website.

These resources contain valuable information for all young adults with diabetes, not just those in the transition phase.

We have been working directly with youth to promote awareness and to help evaluate the usefulness of these resources. Focus groups with emerging adults and their parents/supports were held in 3 different parts of the province, and an e-survey was made available to those interested in providing feedback on the usefulness of the resources and the materials they contain.

Plans are underway to fill a term position of transition coordinator to enhance uptake of all the “Moving On . . .” resources and to enhance the transfer experience for emerging adults and their families.

## DCPNS Pregnancy and Diabetes Guidelines: Approaches to Practice (2014)

This resource has been the focus of education sessions offered in various parts of the province, with the assistance and support of the Reproductive Care Program of Nova Scotia. Similar sessions and other opportunities will be

pursued through the coming year to reach into various audiences in efforts to impact practice. By focusing the spotlight on this high-risk population, we will influence the health outcomes of current and future generations through preconception care and planning for women with pre-existing diabetes, as well as through the early screening for identification and appropriate management of gestational diabetes.

## Nova Scotia Insulin Pump Program (NSIPP)

The DCPNS, in partnership with the Acute and Tertiary Care Branch, Department of Health & Wellness (DHW), and the IWK, was instrumental in the successful launch of the Nova Scotia Insulin Pump Program (NSIPP) in September of 2013.

- The DCPNS, working through a committee, established medical eligibility criteria to ensure appropriate pump candidates and safe pumping.
- We also established NSIPP-approved Diabetes Centre Criteria to ensure pump initiation and follow-up through sites with specialized team care, demonstrated diabetes competency, and pump expertise. These sites also had to have the recommended standardized processes and tools embedded into their practice.
- There are currently 9 NSIPP-approved Diabetes Centres across Nova Scotia, with another few that have expressed interest in moving toward approval status.
- The DCPNS sits on the NSIPP Advisory Council and is leading the evaluation of NSIPP.

## DCPNS Registry Rewrite

Over two years of effort have resulted in the completion of the DCPNS Registry, using the CAISIS platform. This has been a tremendous task for all DCPNS staff, resulting in a highly functional registry with enhanced capabilities to provide local, regional, and provincial information. The development of the NSIPP database has also been the responsibility of the DCPNS. In addition to the collection of relevant information to assist administrative operations, it will serve as the platform for program evaluation.

# Legacy of Life (LOL)



## Mission

To encourage and promote organ and tissue donations and optimal care for all potential donors and families throughout Nova Scotia.

## Core Activities

- Plan strategically with stakeholders, including the Critical Care Organ Donation Program, Regional Tissue Bank, Multi-Organ Transplant Program, Medical Examiner Service, Emergency Health Services, and health charities
- Provide professional education
- Conduct chart audits to monitor missed referrals
- Provide support through District Resource Nurses
- Promote public awareness

## 2013–2014 Budget

\$353,000

## Program Manager

Corinne Corning

[www.legacyoflife.ns.ca](http://www.legacyoflife.ns.ca)

## Nova Scotia Living Organ Donor Reimbursement Policy Implemented in Nova Scotia

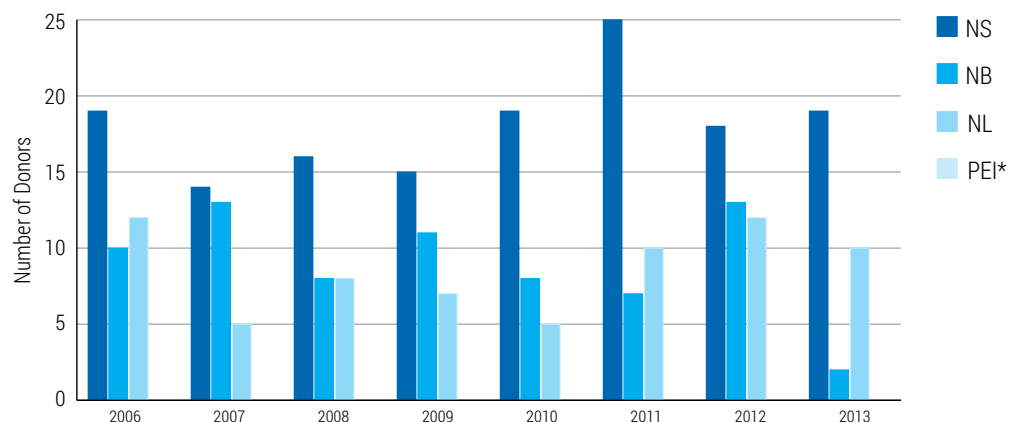
The Canadian Institute of Health Research estimates that over a five-year period the cost savings of a kidney transplant is approximately \$250,000 per patient. Between 2006 and 2011 activities took place that supported the development of a Living Organ Donor Reimbursement Policy (LODRP) in Nova Scotia. These included a Canadian Blood Services (CBS) consensus report on living donation, a Legacy of Life sponsored case for support, and the launch of the national paired exchange program by CBS. As a result of this work it was determined that the NS Department of Health and Wellness would develop a reimbursement policy that aligns with other provinces, with the work being led by Legacy of Life. The LODRP was approved in August 2012.

Between August 2012 and August 2014, 22 people applied for and received reimbursement of eligible expenses. The maximum amount available per living organ donor is \$5,500. The administration of the policy is a joint effort between the Multi-Organ Transplant Program, based at Capital Health, the IWK Health Center and Legacy of Life. Donor Christine Beck stated, "We all worry about our finances, but removing this worry from our minds can make being a donor easier."

## 2013 Chart Audit Report

The Legacy of Life Chart Audit is completed annually by Legacy of Life, the Regional Tissue Bank (RTB), and Critical Care Organ Donation (CCOD) staff to assess compliance with the Human Tissue Gift Act (1991). For 2013, the charts of all ventilated patients who died in an Intensive Care Unit or Emergency Department in Nova Scotia were reviewed to determine whether they met the referral clinical triggers, and whether they were referred for organ donation assessment to CCOD. The audit found that nine patients who met the triggers were not referred. Each case was reviewed to determine whether those patients would likely have proceeded to organ donation. Having this data provides staff with the information needed to help identify gaps, to inform district health authority leadership, and to develop professional education strategies for improvement.

Atlantic Deceased Organ Donors 2006–2013



\*no deceased organ donors from PEI.



# Nova Scotia Breast Screening Program (NSBSP)



## Mission

To provide quality standardized screening mammography access and timely patient navigation and program assessment. This will assure appropriate follow-up for women who have an abnormal mammogram on screening through diagnostic work-ups in accredited work-up centres before consideration of surgical alternatives.

## Core Activities

- Established: 1991
- Screening Sites: 11
- Diagnostic Sites: 9
- Mobile Stops: 30

## 1991–2013

- Women Screened: 197,240
- Number of Screens: 928,343
- Cancers: 4167

## 2013

- Screens: 65,960
- Abnormal Rate: 6.5%
- Cancers: 298

## 2013–2014 Budget

\$1,200,000\*

\*Provides Service Co-ordination

## Program Manager

Ryan Duggan  
Ryan.Duggan@nshealth.ca

## Medical Director

Dr. Judy Caines

[www.breastscreening.nshealth.ca](http://www.breastscreening.nshealth.ca)

## Vision

To reduce the mortality from breast cancer in Nova Scotia women aged 50–69 by 30% within 10 years following the development of a province-wide screening program.

## Highlights

- All breast imaging in Nova Scotia, screening and diagnostic, is achieved collaboratively through guidelines established by NSBSP. This means that Nova Scotia is the only province to have eliminated opportunistic screening (i.e., screening through the diagnostic sector), systematically reducing wait times and making the process cost-effective.
- As of January 2013, all mammography in Nova Scotia is performed using Full Field Digital Mammography (FFDM). FFDM reduces radiation, improves image quality, and allows for an increased screening capacity of up to 60%.
- Nova Scotia has the lowest number of benign: malignant breast surgeries/1000 screens in Canada, thanks to needle core biopsies (a procedure perfected in Nova Scotia in 1991 when the NSBSP was formed).
- With funding from the Canadian Breast Cancer Foundation – Atlantic, the NSBSP completed a pilot project inviting women aged 50-69 who either had never had a screen or had not returned to screening within the previous 5 years. Initial results indicate that women who have been to the program at least once before are more likely to book an appointment than those who were never screened. A full report of the outcomes of this initiative will be compiled once the pilot is completed.

Adequate participation in breast cancer screening is essential for reducing mortality in the target

population. Based on principles of screening and extrapolation from randomized controlled trials, Canadian programs have established 70% as the target participation rate.

## Mobile Mammography

NSBSP completed a full cycle of the restructured mobile breast screening route in 2013. The revised route ensures that each mobile stop complements, not competes with, the fixed sites. The criteria for the mobile stops were 1) to keep a minimum distance of 50km from a fixed site or other mobile site; 2) to target priority populations; and 3) to improve access for hard-to-reach populations. A report pertaining to “lessons learned” and recommendations was completed after year one. Attending to these recommendations, the NSBSP is working with Health Information Technology Services Nova Scotia and the mobile operator to improve service delivery.

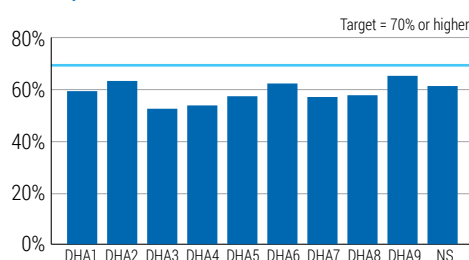
## Reducing Wait Times

The NSBSP continues to report extensively on all aspects of wait times for breast imaging. Nine discrete wait-time indicators are reported to each breast-imaging site on a quarterly basis. Being able to identify bottlenecks in the system has allowed each site to focus on needed improvements. This process was presented in April 2014 to the Canadian Partnership Against Cancer (CPAC), where it was shared with all other breast screening programs in the country.

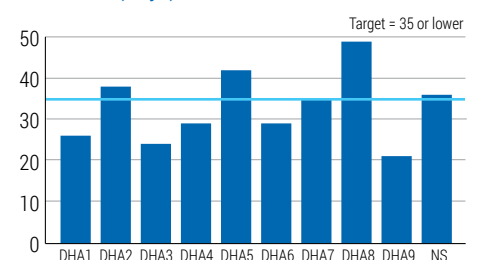
## Cost Effective

A direct result of eliminating opportunistic screening is that the billing of all screens and diagnostic imaging is appropriate and consistent. As a result, in 2013 the NSBSP saved the province \$1.40 million in radiologist billing fees.

Participation Rate



Wait Time (Days)





# Nova Scotia Hearing and Speech Centres (NSHSC)



## Vision

Prevalence and impact of hearing, speech, and language disorders are reduced.

Every person deserves a voice.

Every voice deserves to be heard.

## Mission

Persons with, or at risk for, hearing, speech, and language disorders will achieve an enhanced quality of life.

## Core Activities

- Prevention: screening, caregiver education, public awareness.
- Diagnosis: hearing, speech-language, balance, voice, swallowing, non-verbal communication.
- Intervention: prescription of hearing aids and communication aids, therapy, caregiver training, counseling, interdisciplinary team management, provincial continuum of care.
- Standard Setting: developing, updating and evaluating provincial standards of care for all NSHSC clinical services.

## 2013-2014 Budget

\$12,918,201

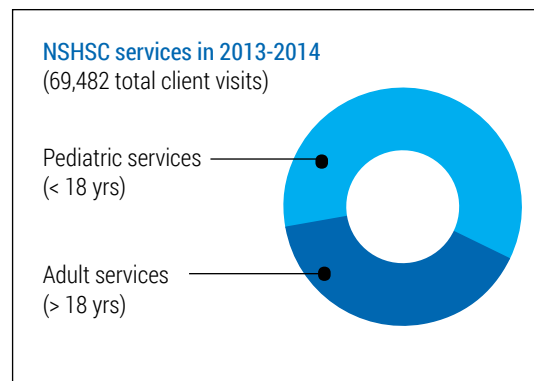
## CEO

Anne Mason-Browne

[www.nshsc.nshealth.ca](http://www.nshsc.nshealth.ca)

## Serving the Province

Nova Scotia Hearing and Speech Centres (NSHSC) celebrated its 50th anniversary this year. Responsible for providing audiology services to Nova Scotians of all ages, and speech-language pathology (SLP) services to preschool children and adults, NSHSC delivers integrated and standardized provincial services across 33 clinic sites, located in 24 communities. Since its inception in 1963, it is estimated that NSHSC have provided services to 400,000 Nova Scotians, recording over 1.5 million clinical visits. Nationally certified Audiologists and Speech-Language Pathologists with support from Communication Disorder Technicians, provide core services (prevention, diagnosis, and treatment) and collaborate with partners to deliver special programs (e.g. Autism, Stroke, Cochlear Implant).



*52% (10,131/19,314) of NSHSC clients received services at sites outside of the HRM area.*

## Prevention and Promotion

**Newborn Hearing Screening:** NSHSC continues to exceed its target for screening hearing of babies born in Nova Scotia hospitals. This year 96% (8,241/8,562) of all newborns were screened resulting in 19 infants receiving appropriate comprehensive intervention services before 3 months of age.

NSHSC staff provided over 35 community-based public awareness/education events, conducted in every region in Nova Scotia. A wide range of strategies were employed (e.g. wellness days, health fairs, information booths, television interviews, newspaper articles, educational sessions to community providers, etc.). Key messages included: importance of early referral,

“open” referral policy, normal speech, language, and hearing developmental milestones, communication after stroke, hearing aid trouble shooting, and how to access services/resources.

## New Diagnostic and Intervention Services

French preschool speech-language services were established as a core provincial service this year. NSHSC exceeded its target, with provincial audits indicating that across all NSHSC sites, over 90% preschool clients/ caregivers who self-identified as French-bilingual, received caregiver training workshops in their language of choice; and 100% of the clients received aspects of SLP assessment and/or treatment in French.

A pilot directed to developing services for children with auditory processing disorders was initiated this year. NSHSC audiologists at 3 sites (Amherst, Halifax, Sydney) completed training in advanced diagnostic protocol, specialized materials were developed, and provincial standards of care were delineated. Evaluation of clinical effectiveness is currently underway.

## Advancing Care – Provincial Standard Setting

NSHSC is establishing provincial use of a nationally standardized clinical functional outcome measurement (FOCUS®) for determining effectiveness of preschool speech-language treatment. All SLP staff providing services to children received formal training on the measure, and a comprehensive review and implementation strategy was completed by the SLP Quality Assurance Committee. Field testing was started at 11 sites (Amherst, Bridgewater, Dartmouth, Evanston, Halifax-Community, IWK, Liverpool, Lower Sackville, Shelburne, Truro, and Yarmouth) and will run for 12 months.

NSHSC is also enhancing its standardized assessment protocol for pediatric cochlear implant candidacy. This year, NSHSC audiology staff on the cochlear implant team completed advanced training on Auditory Evoked Potentials for pediatric cochlear implant candidates; the standardized protocol was developed, and it is currently being trialed with pediatric clients.



# Nova Scotia Provincial Blood Coordinating Program (NSPBCP)

## Mission

Promoting excellence in transfusion medicine.

## Core Activities

Created in 2003, the Nova Scotia Provincial Blood Coordinating Program (NSPBCP) provides the leadership to collaborate with healthcare providers across the province and with Canadian Blood Services to maximize the safe and appropriate management of blood and related products received by patients in Nova Scotia.

## 2013-2014 Budget

\$871,000

## Program Manager

Marina Hamilton

## Clinical Advisor

Dr. David Anderson

[novascotia.ca/health/nspbcpr](http://novascotia.ca/health/nspbcpr)

## Utilization Guidelines for Red Blood Cells in Nova Scotia

Approximately 30,000 red blood cell units are transfused annually in Nova Scotia. The NSPBCP has developed a provincial guideline concerning the indications for red blood cell transfusion. A baseline provincial audit was conducted that demonstrated that approximately 21% of transfusions did not meet the guideline indications for transfusion. The guideline recommends a restrictive threshold (70–80 g/L) for the vast majority of hospitalized asymptomatic stable patients, with single-unit red cell transfusion as the standard for non-bleeding, hospitalized patients. Additional units should only be prescribed after reassessment of the patient, including an assessment of the patient's hemoglobin level. Another audit will be conducted once implementation is complete. A unit of red blood cells costs approximately \$450.00.

## Public Health Inventory

Certain blood products distributed by Canadian Blood Services, such as GamaSTAN, HyperHEP B IG (HBIG) and VariZIG (VZIG) were housed in Public Health offices throughout Nova Scotia. The NSPBCP identified that the supply of these products exceeded the demand, leading to outdating and discard of the products. In 2013, the NSPBCP and Public Health Services collaborated and developed "just in time" processes, resulting in inventory being maintained at Canadian Blood Services and requested only when needed for a specific patient.

## Dosing of Intravenous Immune Globulin (IVIG) by Adjusted Body Weight

The NSPBCP leads the Atlantic Blood Utilization Strategy (ABUS), which optimizes the utilization of blood and blood products in the Atlantic Provinces.

ABUS has recommended the implementation of dosing of IVIG based on an adjusted body weight. Actual body weight (which includes the weight of a patient's adipose tissue) is used for calculating the dose of fat-soluble drugs, as immunoglobulin is not lipid soluble and adjusted body weight is appropriate to use for dosing. In 2013-2014, 458 Atlantic patients received immunoglobulin treatment based on adjusted body weight dosing, resulting in a savings of 25,706 grams of immunoglobulin, or \$1,252,910.

## Supporting Compliance of Health Canada's Blood Regulations

Health Canada released Blood Regulations that officially come into force in October 2014. The regulations govern the processing, labeling, storage, distribution, and importation of blood and its components intended for transfusion. The NSPBCP developed a self-assessment tool for Nova Scotia hospitals, to support compliance with the regulations. Because the NSPBCP provided the tool to its colleagues across Canada, the Canadian Society of Transfusion Medicine sought and received permission to provide the tool to its Canadian membership.

## Inventory Levels

The NSPBCP is applying Lean principles to red blood cell inventory management practices in the district health authorities and IWK. Hospitals in the province of Nova Scotia provided one year worth of information from their Laboratory Information Systems to the NSPBCP. This information was used to calculate the minimum, maximum, and average number of units transfused per day by blood group. During hospital site visits the NSPBCP presented the findings, and hospitals are adjusting their inventory levels to match the utilization by blood group.

# Nova Scotia Renal Program (NSRP)



## Mission

To improve renal health and care for all Nova Scotians.

## Vision

All Nova Scotians achieving optimal renal health.

## Core Activities

- Provincial standards and guidelines development
- Service delivery planning recommendations
- Quality improvement, evaluation, monitoring and surveillance of renal health and care
- Knowledge exchange and transfer through networking, decision support, and education

These activities support the lifecycle of renal health and care from prevention to early detection and management, to end stage renal disease and end-of-life care.

## 2013–2014 Budget

\$765,610

## Program Manager

Susan MacNeil

## Clinical Advisors

Dr. Neil Finkle  
Dr. Tom Hewlett

[www.nsrp.gov.ns.ca](http://www.nsrp.gov.ns.ca)

## Public Awareness

A comprehensive public awareness campaign targeting Nova Scotians at increased risk of developing kidney disease was developed in partnership with the Kidney Foundation of Canada. Public service announcements that highlight common risk factors were created and featured as TV, cinema, and radio advertisements throughout the province and have been adapted for use across Canada. Multiple ads featuring diverse populations were developed and displayed in many venues across the province. These will be supplemented with a brochure on risk factors. Half way through the campaign, the online ads had 108,000 views (above the industry standard). The Kidney Foundation of Canada presented the Nova Scotia Renal Program with a national award for this public awareness campaign.

## Chronic Kidney Disease Prevention and Early Detection

Provincially standardized creatinine and quality monitoring is coordinated by the Nova Scotia Renal Program in collaboration with laboratory services in each district health authority and the IWK. The program continues to collaborate with laboratory and clinical stakeholders across Canada and within Nova Scotia to plan and implement new international guidelines on the evaluation and management of chronic kidney disease. Decision support tools are in development and knowledge translation activities will continue with primary healthcare, laboratory, and other key stakeholders.

## Service Delivery Planning

The Nova Scotia Renal Program supported the ongoing review of the Provincial Dialysis Services Plan and represented the Department of Health and Wellness (DHW) on both the Capital Health and Annapolis Valley new dialysis unit steering committees. The program facilitated the development of a provincial hemodialysis facility standard in collaboration with DHW Infrastructure and other key partners. The standard has been used in the planning of all dialysis infrastructure projects. A review of dialysis services for Hants has been completed.

## Home Dialysis

The Nova Scotia Renal Program continues to

work with key stakeholders to increase utilization of home dialysis in Nova Scotia. Home dialysis targets continue to be monitored, although progress towards achieving those targets is slow. The program continues to develop new strategies to analyze barriers, promote home dialysis, and support patients on home dialysis.

## Peer Support

In collaboration with service delivery providers, a patient representative, and the Kidney Foundation of Canada, a framework was developed to guide activities that would support increased use of peer support programs. Needs assessments were completed for both patients (including families) and staff, reinforcing the benefits of peer support but revealing a lack of awareness of existing programs. Marketing and education, recruitment and training of additional peer mentors, and evaluation activities are planned for 2014–2015.

## Strategic Planning

The 2013–2018 strategic plan was finalized, objectives identified, and a work plan developed. Four strategic directions were identified: Chronic Kidney Disease (CKD) Prevention and Early Detection, CKD Management, End Stage Renal Disease (ESRD) Management, and End-of-Life Care. Long-term outcomes include:

- decreased risk factors for renal disease among the population
- increased numbers of patients with chronic kidney disease detected at an early stage
- improved ability to prevent and slow the progression of chronic kidney disease to end stage renal disease
- improved numbers of patients selecting home dialysis
- reduced burden of illness for patients
- enhanced quality of care at end-of-life for renal patients
- development of comprehensive information management system to support renal health and care
- provision of renal care programs and services that better match patient needs.

# Reproductive Care Program of Nova Scotia (RCP)



## Mission

To promote and advocate for excellence in reproductive, perinatal, and newborn health, as well as in evidence-informed practice. We provide leadership and support through practice guidelines and standards, education, research, and high quality data collection and analysis.

## Core Activities

- Offer RCP-facilitated mortality and morbidity reviews linked to facility quality assurance processes
- Conduct quality assessment reviews exploring topical clinical and system-wide issues
- Develop clinical documentation tools that guide standards of care
- Deliver inter-professional education programs in a variety of formats
- Disseminate key indicator reports for facilities and the province
- Provide data for program planning, evaluation, and for approved research projects

## 2013–2014 Budget

\$1,569,200

## Program Manager

Rebecca Attenborough

## Clinical Advisors

Dr. Heather Scott  
Dr. Dora Stinson (Acting)  
Dr. Krista Jangaard

[rcp.nshealth.ca](http://rcp.nshealth.ca)

## Standards Development

### Newborn (blood spot) Screening for Inherited Conditions:

In collaboration with the IWK Health Centre, the RCP recommended a revised screening panel for Nova Scotia that is evidence-based and reflects provincial needs. Following a government commitment to expansion, screening for priority conditions (cystic fibrosis and hemoglobinopathies, including sickle cell disease) was added in April 2014, with additional screening panel expansion planned over the next 3–4 years.

### Intergovernmental Working Group on Newborn Screening:

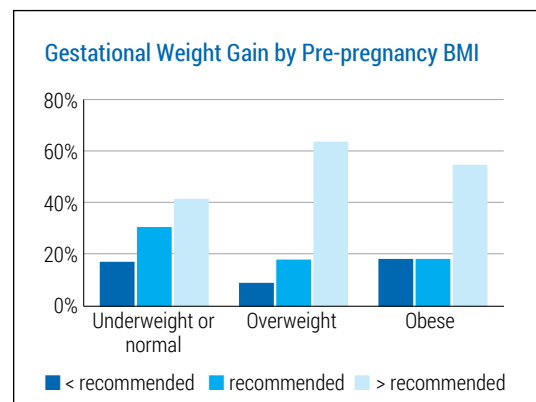
Participating as one of the Nova Scotia representatives to make recommendations for a pan-Canadian screening panel and to explore opportunities for collaboration on quality initiatives, standards, and research.

## Education and Supports

**Maternal Newborn Education Modules:** Added three self-directed online learning modules to the suite of presentations developed to supplement local maternal and newborn education and orientation programs: <https://rcp.nshealth.ca/education/learning-modules>

**Inter-Professional Education:** Offered twenty-six continuing education workshops and programs on topics such as fetal health surveillance, birth in the ER, supportive care in labour, and perinatal loss. Programs included two fully-subscribed Advanced Life Support in Obstetrics (ALSO) courses and one Neonatal Resuscitation Program (NRP) instructor course.

**Newsletter:** Developed a new format for the newsletter focused on topical issues, more frequent distribution, and electronic circulation.



## Service Delivery Models and Program Evaluation

**Midwifery in Nova Scotia:** Undertook several initiatives to support continued integration of midwives into the Nova Scotia healthcare system. Developed and led case-based quality review sessions at two of the three model sites; conducted a review of clinical, socio-demographic and policy approaches to defining priority/vulnerable populations of pregnant women as target populations for midwives; and utilized the Nova Scotia Atlee Perinatal Database to assist Department of Health and Wellness to understand practice patterns and outcomes in the midwifery sites.

## Monitoring, Surveillance, and Quality Initiatives

### Quality Assessment Reviews, Newborn Transition from Hospital to Home:

Completed the sixth and planned the seventh district health authorities (DHAs/IWK) review. All participating DHAs/IWK have received a comprehensive report with quantitative and qualitative findings and a debriefing session for clinical leaders and the senior team.

### Surveillance of Congenital Anomalies in Nova Scotia (SCA-NS):

Completed a Privacy Impact Assessment and assisted with preparation of documents for final approval of a Data Sharing Agreement between the Public Health Agency of Canada and Nova Scotia. Undertook redesign of two clinical databases to facilitate more accurate and comprehensive reporting of birth defects within the province and nationally.

### Population Health and Evidence-Based Care:

Developed five perinatal indicators for Nova Scotia: tobacco smoking quit rates in pregnancy, post-dates induction of labour at < 41 weeks' gestation, elective repeat cesarean section at < 39 weeks' gestation, episiotomy in women with a spontaneous vaginal birth, and exclusive breastfeeding in full-term infants. Reporting will begin in 2014–15.

In 2013–14, over 40% of women gained more weight in pregnancy than recommended, potentially affecting their short- and long-term health. Public awareness, support from healthcare providers, and healthy public policy are all important factors in changing this trend.



# Cross Provincial Program Initiatives and Other Key Partnerships (Highlights 2013–2014)

## **Cancer Care, Cardiovascular Health, and Reproductive Care Programs**

The Tui'kn Partnership Project was led by the five First Nations communities in Cape Breton and included the Department of Health and Wellness (DHW) and three provincial programs (CCNS, CVHNS, and RCPNS). The goal of the project was to utilize provincially managed data to deepen the understanding of health in First Nation communities and contribute to program planning. The project resulted in a unique (to Canada) First Nations Client Registry, signed access agreements with the Nova Scotia government, and disease, population-specific indicator reports for the Tui'kn Partnership. Success of the initial project has led to an expanded project that aims to make the registry permanent, expand it to cover all thirteen Nova Scotia First Nation communities, and complete linkages to as many provincial programs as possible.

Nova Scotia is participating in a coalition led by the Canadian Institutes of Health Research (CIHR) to focus on integrating research into practices and care, in the effort to improve the experience of citizens. There are SPOR units (Strategy for Patient-Oriented Research) being established across the country comprised of patients and caregivers, researchers, health practitioners, policy makers, district health authorities (DHA), academic institutions, charities, and the pharmaceutical sector. DCPNS, Legacy of Life, and RCPNS have representatives on one of the operational committees for the Maritime SPOR Support Unit to serve as a link with provincial programs.

## **Diabetes, Cardiovascular, and Renal Programs**

The Joint Advisory Group (JAG), brought together to advise on the common work of these three programs, was formalized early in 2013. Since that time, the JAG has learned about strategies and initiatives that Provincial Programs could help to promote. It has also helped to prioritize the work of the programs, as it relates to common risk factors, joint surveillance, etc. Hypertension awareness, prevention, and management models (community-based and primary care) in use across Canada have been reviewed with an eye to adaptation to the Nova Scotia context. Joint surveillance work will be enhanced with new data (going back some years) and an exploration of additional data sources to enhance our understanding of multimorbidity and its impact on the health system.

The "Come on Nova Scotia . . . Check it!" Blood Pressure Challenge (rolled out in May of each year) has just completed its third successful year. With over 4,000 individuals screened for hypertension in the various DHAs, the reach of this initiative into different settings and engaging employers continues to increase each year.

The three programs were the recipients of the 2013 Hypertension Canada Certificate of Excellence Award. This award recognizes individuals or organizations in Canada for their outstanding efforts and contributions aimed at public awareness, prevention, or control of hypertension. The programs received the award during national meetings in Montreal this past October.

In early 2014, we prepared our first Hypertension in Nova Scotia newsletter. This newsletter was intended to provide an overview of some of the hypertension initiatives that have taken place in the province. The overview included the lessons learned from successful Blood Pressure Challenges. It also served to profile and share the good work that has resulted from the joint provincial program grants (six in total) that were awarded in 2013.

**Diabetes Care, Breast Screening, Renal, and Blood Coordinating Programs**

These programs continue to share expertise in the rewriting and development of our respective provincial information systems. System “go lives” are expected in 2014 for the various programs. A governance model for the CAISIS environment has been established. This model separates the overall governance and business alignment from the day-to-day IT operations and ensures that the introduction of new IT assets are controlled.

**Legacy of Life**

Legacy of Life works in collaboration with stakeholders and service providers who deliver donation and transplantation care in Nova Scotia. Key stakeholders include the Regional Tissue Bank, the Critical Care Organ Donation Program, the Multi-Organ Transplant Program, the Medical Examiner Service (MES), Emergency Health Services, health charities, and health facilities across Nova Scotia. Legacy of Life is involved in a Canadian Blood Services (CBS) project currently under way with the MES to increase the donor referrals from the MES. In addition, Legacy of Life has partnered with targeted Nova Scotia facilities on a Donation Physician Project to demonstrate the benefits of this role.

**Provincial Blood Coordinating Program**

Nova Scotia leads the Atlantic Blood Utilization Strategy (ABUS) through the NSPBCP. ABUS has led to considerable returns in connection with cost avoidance, appropriateness of use, and efficiency of effort related to the utilization management of Intravenous Immune Globulin (IVIG) and Subcutaneous Immune Globulin (SCIG). In addition, through the NSPBCP, Nova Scotia is an active partner with the Public Health Agency of Canada for the surveillance of adverse events following transfusion and transplantation.

**Reproductive Care Program**

RCPNS serves as a member of the inter-departmental working group developing and implementing strategies to address the Nova Scotia government’s Domestic Violence Action Plan. Several initiatives are nearing completion, including the creation of a training and education website and a provincial DV (health) policy.

RCPNS collaborated with the United African Canadian Women’s Association on a one-day workshop to educate families and care providers about hemoglobinopathy screening, preventing complications associated with sickle cell conditions, and understanding treatment options.



**Hearing and Speech Centres**

Nova Scotia Hearing and Speech Centres (NSHSC) work in partnership with Cardiovascular Health Nova Scotia (CVHNS) to achieve targeted outcomes related to the quality of stroke care. To build capacity for interdisciplinary dysphagia (swallowing) assessment and management throughout Nova Scotia, CVHNS and NSHSC provided three two-day workshops to interested dietitians, occupational therapists, physiotherapists, nurses (RN and LPN), and various allied health students across Nova Scotia.

The Nova Scotia Cochlear Implant Program, currently a collaborative service involving NSHSC, the Capital District Health Authority, the IWK, and the DHW, was initiated by NSHSC in 1998 and expanded to support surgeries in the province beginning in 2001. The program now provides approximately 45 cochlear implants per year to recipients living in Nova Scotia, New Brunswick, and Prince Edward Island, and at year end 2013–2014 it had an active caseload of 575 cochlear implant users.

In 2013–2014 NSHSC collaborated with DHW and the Department of Education and Early Childhood Development (DEECD) to establish a new province-wide speech-language service directed at meeting the needs of children registered in home-school programs. In order to advance effective strategies for providing coordinated early intervention services to preschool children and their families, NSHSC established formal partnerships with the newly formed DEECD Early Years Branch. Additionally, through collaboration with DHW, the IWK, and the DHAs, NSHSC continued to deliver the provincial EIBI (Early Intensive Behaviour Intervention) speech-language services for preschool children with autism.

