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<th>Program</th>
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<td>Cancer Care Nova Scotia</td>
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Minister’s Message

It is my pleasure to introduce the 2012 Provincial Programs Highlights.

The Nova Scotia Department of Health and Wellness is committed to ongoing improvement of Nova Scotia’s health care system through system planning, legislation, resources allocation, policy and standards development, monitoring and evaluation, and information management.

To improve service delivery outcomes, the Department of Health and Wellness funds the activities of nine provincial programs, each with a focus on addressing the key health care needs of 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 Provincial Blood Coordinating Program (NSPBCP)
- Nova Scotia Renal Program (NSRP)
- Reproductive Care Program of Nova Scotia (RCPNS)

Provincial Programs are part of the delivery of safe, high quality care to Nova Scotians. These programs were established based on need in clinically defined areas that required coordinated and consistent provision of care and standardized services across the province. Provincial Programs act in an advisory capacity to the Department of Health and Wellness by bringing together the advice of experts in common areas of clinical practice to establish standards based on best practice, evidence-based research, and stakeholder input. These programs address issues across sectors of the health system and ensure clinical integrity and objectivity, while maintaining a level of accountability. They are an essential link between the providers of health services in Nova Scotia and support the department’s commitment to ongoing improvement of our health system.

These highlights demonstrate the significant positive impact these programs have on Nova Scotians and the health system. Through the dedication of staff, clinicians, and other program contributors, Provincial Programs have earned national recognition and have provided a valuable public service to our province. I encourage you to read the information provided by our various programs on their activities and impacts, and I look forward to their continued contributions into the future.

Honourable David Wilson
Mission
Cancer Care Nova Scotia will help achieve excellence in cancer prevention, treatment, care, and research for all Nova Scotians.

Core Activities
Enhancing and improving cancer system performance through
• standards development
• continuing health professional education
• patient education
• patient engagement in system improvement
• information management
• cancer prevention and screening
• collaboration with DHAs, charities, and other community partners to raise awareness about healthy lifestyle choices in reducing cancer risk

2012–2013 Budget
$7,300,000
(includes cervical and colon screening programs)

Chief Medical Director
Dr. Carman Giacomantonio

A/Chief Operating Officer
Chris Collier

www.cancercare.ns.ca

Standards Development
CCNS, with the help and commitment of its partners, supports consistent, high quality, evidence-based cancer treatment and care, making progress on many fronts under the umbrella of standards development, including
• establishing a model to support standard development, including an oversight committee structure, literature reviews/environmental scans, multidisciplinary working groups, and an ethical decision making framework
• completing draft standards for rectal cancer treatment and initiated feedback from DHAs with an electronic survey
• initial drafting of standards for the diagnosis and referral of patients who are clinically suspicious for colorectal cancer in final phase of development
• developing a process for cancer patient/survivor feedback on all standards
• adopting and incorporating the Canadian Association of Psychosocial Oncology’s Standards for Psychosocial Health Services for Persons with Cancer and their Families as part of all clinical standards
• developing cancer patient education standards for health professionals
• identifying health professional and patient education needs to support implementation of standards
• identifying breast cancer as the next disease site for standard development; started literature review and baseline assessment of current NS care practices

Information Management
Information management is at the foundation of a quality, responsive cancer system. Activities include quality monitoring, data collection, and analysis to assist administrators and planners in understanding current and future needs, as well as evaluating cancer system progress. Recent highlights include the
• introducing OncoLog, a new electronic cancer information system to replace the OPIS database, which supported the provincial cancer registry
• improving CCASPER to enhance the provincial colon screening database, and integration of cervical screening data management into the same platform
• supporting the RFP for acquisition of new Provincial Surgical Synoptic Pathology Reporting system for cancer (to be implemented in early 2013)

Primary Prevention and Screening
Highlights include:
• continuing improvement of the Colon and Cervical Cancer Prevention Programs (CCPP). During 2012, CCNS received permission to include HPV immunization data in the screening database. This will enable reporting on cervical cancer screening activities based on immunization status.
• becoming, in March 2013, the first province to fully implement colon screening, with all Nova Scotians aged 50–74 having been invited at least once for screening. The Colon Cancer Prevention Program achieved its initial target participation of 30%. Since the program was first introduced in 2009, 1,300 Nova Scotians have had pre-cancers or cancers found and removed.
• hosting health professional education to facilitate high quality, standardized colon screening activity. Examples include: Colposcopy Working day, and several “Colonoscopy Master Classes” for colonoscopists participating in the CCPP.
Mission
Improving cardiovascular health and care of Nova Scotians

Core Activities
• Provincial clinical guidelines
• Service delivery models based on evidence and critical mass
• Monitoring, surveillance, and reporting on AMI, stroke, heart failure, and unstable angina
• Provincial and local data driving quality improvement
• Knowledge translation and transfer through networking, decision support, and interprofessional education

2012–2013 Budget
$1,587,848

Program Manager
Neala Gill

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

http://novascotia.ca/health/cvhns

Quality Improvement—Improving Timely Access to Lytics throughout Nova Scotia
In 2010, program data showed that there was a good deal of room for improving the timeliness of lytic administration in Emergency Departments for both ST-elevation myocardial infarction (STEMI) and ischemic stroke.

Since September 2011, CVHNS (and partners) has hosted three stakeholder forums with teams from each DHA and a series of follow up webinars to stimulate improvements and spread change.

As a result, DHAs have developed protocols, made structural changes to improve efficiency, gathered and reported real-time data, and improved communication among relevant departments.

One year following the start of this work, we have seen a 15% improvement in proportion of patients who received lytic within nationally recognized targets for ischemic stroke. While there has been an increase in the number of STEMI patients who had an ECG within the 10 minute benchmark, the percentage who received lytic within 30 minutes has not changed.

Quality Review—Audit of Reasons Why Acute Myocardial Infarction (AMI) Patients Are Not Referred for Catheterization
CVHNS’ Nova Scotia Guidelines for Acute Coronary Syndromes recommend that the majority of AMI patients be considered for early cardiac catheterization.

A chart audit of all AMI patients who were not referred for cardiac catheterization during 2010 was conducted to better understand the reasons for non-referral.

Findings indicate that most non-referrals were appropriate. The top reason for patients not being referred was a high creatinine level, indicating renal impairment.

As a result of this work, CVHNS and NSRP are exploring the development of an algorithm to guide decision making regarding eligibility for catheterization in patients with renal impairment.

Stroke Units
Clustering stroke care on one geographical unit is the cornerstone of stroke care reorganization in Nova Scotia.

Service delivery reorganization included the creation of seven Stroke Units throughout the province with a highly qualified, interdisciplinary stroke team.

Recent data indicate that approximately 70% of stroke patients in the province were treated on a Stroke Unit.

As of December 2012, all DHAs had formal transfer and bypass protocols to facilitate the clustering of care on a Stroke Unit.

Early indications of the impact of reorganization are that more people are being seen by appropriate team members, more are being discharged home, and fewer are being discharged to long term-care.

Stroke Public Awareness Campaign
In 2012, CVHNS and the Heart and Stroke Foundation continued to partner on the Stroke Public Awareness Campaign. The campaign aims to increase awareness of the five signs of stroke and to encourage people to call 911 in the event of a stroke. The campaign consisted of TV ads, bus ads, and public service announcements on local radio stations.

Heart Failure Documentation Standards
As part of the Provincial Clinical Documentation Standards work of Nova Scotia’s Model of Care Initiative, CVHNS is facilitating the development of heart failure clinical documentation standards.

The intent is to ensure consistent documentation of minimum care for heart failure patients across the province and to guide paper and electronic documentation.

A small group has met and developed a draft document that will be reviewed by selected stakeholders across the province.

Surveillance and Monitoring
Reports on key quality indicators for AMI and Heart Failure are distributed annually to all DHAs. The 2011 data were released in April 2012.

Starting with admissions in July 2011, information is being captured on 11 key quality indicators for all stroke and transient ischemic attack admissions throughout the province.

The CVHNS database is being rewritten using a new software platform. The rewriting is expected to be completed by 2014.
Diabetes Care Program of Nova Scotia (DCPNS)

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.

• 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 uptake of guidelines for specific populations
• Work with CVHNS and NSRP (guided by a joint advisory group) to focus on common risk factor reduction/management and surveillance

2012–2013 Budget
$741,292

Program Manager
Peggy Dunbar peggy.dunbar@dcpsns.nshealth.ca

Clinical Advisors
Dr. Lynne Harrigan
Dr. Beth Cummings
http://diabetescare.nshealth.ca

Long-Term Care (LTC) Guidelines
With close to 30% of LTC residents living with diagnosed diabetes, guidelines for this special population are a high priority.

• Early in 2012, an evaluation was conducted of the Phase 1 Diabetes Guidelines for Elderly Residents in LTC Facilities—Targets for Glycemic Control and Hypoglycemia (assessment and management), released in 2010.
• Respondents report less invasive diabetes care and improved quality of life for residents with diabetes, as well as decreased stress, more standardized and consistent nursing care, and improved time management for staff.
• Phase 2 guidelines are in development and scheduled for release early in 2013.

Pump Initiation and Transition Processes and Tools (for the under-19 population)
Supporting youth and their families during transition and when making decisions about appropriate therapy requires focus and targeted resources. Youth and young adults with diabetes are subject to increased risk of significant health problems once lost to the health care system. The transition process should start early in the adolescent years, and self-management should be supported by appropriate self-assessment and facilitative processes.

• In April 2012, the DCPNS launched its transition process with patient and provider tools, branded as Moving on... with Diabetes.
• Children and youth with diabetes access health care in all parts of the province; as such, the need to provide consistent information and materials is essential. In order to choose the most appropriate therapy, patients need to be able to make informed decisions supported by standardized processes.
• In September 2012, the DCPNS launched Insulin Pump Initiation for Children and Youth in Nova Scotia Diabetes Centres: Standardized Process with Patient and Provider Tools.
• The newly developed DCPNS resource materials and tools will help to streamline the insulin pump initiation process and to better manage expectations of both providers and families.

Self-Monitoring of Blood Glucose
With the help of many partners (including the Dalhousie Departments of Medical and Pharmacy Continuing Education), the DCPNS has been working to raise awareness and reduce the amount of unnecessary self-monitoring of blood glucose in persons with well-controlled type 2 diabetes who are not taking insulin. Unnecessary testing (too frequent, at the wrong times, and without interpretation and action) has significant financial costs to those living with diabetes and to the health care system, can result in undue stress and anxiety, and may distract from more important diabetes self-care practices. A provider decision-tool, with supporting videos, has been introduced during inter-professional sessions held across Nova Scotia. These tools are accessible through the DCPNS website.

Registry Enhancements and Reports
The DCPNS Registry now contains more than 85,000 individuals (to March 31, 2012), a reflection of the referral process to DHA-funded Diabetes Centres (DCs) across Nova Scotia.

Cumulative DCPNS Registry Cases as of March 31, 2012 for 3-year Intervals, Nova Scotia

<table>
<thead>
<tr>
<th>Fiscal Year of Patient’s First Diabetes Centre Visit</th>
<th>Existing Case</th>
<th>New Case</th>
<th>Cumulative Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>94–97</td>
<td>N=14,215</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97–00</td>
<td>N=29,118</td>
<td></td>
<td></td>
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<tr>
<td>00–03</td>
<td>N=44,466</td>
<td></td>
<td></td>
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<tr>
<td>03–06</td>
<td>N=60,800</td>
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<tr>
<td>06–09</td>
<td>N=75,806</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09–12</td>
<td>N=88,637</td>
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• Longitudinal data capture allows for provincial and DHA-specific benchmarking, local reporting, and targeted quality improvement initiatives.
• New reports produced in 2012 include the Newly Diagnosed Report (this demonstrates changes in specific measures during the first 8–15 months of care/education at a DC for newly diagnosed cases) and the Under Age 19 Report (Pediatric Report).

Physical Activity and Exercise Guidelines
These guidelines, produced in Nova Scotia through the partnership of the DCPNS and Acadia University’s School of Recreation Management and Kinesiology, have now been adopted for national use through the transfer of copyright to the Canadian Diabetes Association.
Mission
The Organ and Tissue Donation Program will encourage and promote organ and tissue donations, and optimal care for all potential donors and families throughout Nova Scotia.

Core Activities
• Part-time District Resource Nurses in each DHA act as a resource for professional education, monitoring, and policy support in organ and tissue donation.
• Chart audits have been conducted since 2008 to assess compliance with the Human Tissue Gift Act.
• Partnerships and collaboration are key strategies. Partners include Multi-Organ Transplant Program, Critical Care Organ Donation Program, Regional Tissue Bank, Medical Examiner Service, Emergency Health Services, and Health Charities.

Budget
$364,000

Program Manager
Corinne Corning

Clinical Advisor
Dr. Stephen Beed

http://legacyoflife.ns.ca

Legacy of Life (LOL)

2012 Capital Health Gold Quality Award
In 2004, the 3M Award winner Clarica Project paved the way for Legacy of Life. A proposal submitted to the former Department of Health requested that a provincial program be implemented to sustain and support the improvement of organ and tissue donation in Nova Scotia. The Clarica Project demonstrated that improvements were possible through collaboration, professional education, and redesign of the system. The department provided bridge funding for two years and undertook the transition of the project to a provincial program called Legacy of Life Nova Scotia Organ and Tissue Donation Program in 2006.

The redesign of the system included increasing professional education for all health providers, with a special focus on residents and physicians working in intensive care and emergency settings, updating the provincial legislation governing organ and tissue donation, employing district resource nurses across the province, forming an advisory council made up of key stakeholders to advise on strategic directions, and reviewing the charts of deceased patients to help identify the potential for organ and tissue donation in Nova Scotia.

The results have demonstrated continuing and sustainable improvement in the identification and referral of organ and tissue donors. For this work, the Donation Programs, including Legacy of Life, were awarded the Capital Health Gold Quality Award in 2005 and 2012, as well as the national 3M Quality Acute Care Team Award in 2005.

Leaving a Legacy of Life: Meaningful Donation Experiences
To date more than 500 front-line health care providers have attended a workshop entitled Leaving a Legacy of Life: Meaningful Donation Experiences. The workshop educates participants about the donation process and focuses on the conversations held at the end of life and the importance of these conversations to donors and families. Three-month follow-up surveys show the value of the workshop in helping health professionals to feel comfortable with the conversations aimed at encouraging referrals.

Tissue Donation Rates
There were 679 referrals and 192 tissue donors in 2012 in Nova Scotia. In recent years, including 2012, Nova Scotia has had the highest donation rates per million in Canada.
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

1991–2011
- Women Screened: 177,540
- Number of Screens: 718,272
- Cancers: 3212

2011
- Screens: 75,677
- Abnormal Rate: 6.0%
- Cancers: 273

2012–2013 Budget
$1,200,000*
*Provides Service Delivery

Program Manager
Theresa Foley
Theresa.Foley@cdha.nshealth.ca

Medical Director
Dr. Judy Caines

http://breastscreening.nshealth.ca

Vision
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 done under the direction of the 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).

- All sites except Kentville, Truro, and Antigonish report diagnostic breast imaging in the Diagnostic Reporting System (DRS). DRS guarantees that radiologists make clear recommendations on follow-ups and that those recommendations are proactively tracked and booked, ensuring no one is left behind.

Participation (2011)

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 2012 the NSBSP saved the province $1.45 million in radiologist billing fees.
Nova Scotia Hearing and Speech Centres (NSHSC)

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

Vision
Prevalence and impact of hearing, speech, and language disorders is reduced.

Core Activities
• Prevention
• Diagnosis
• Intervention
• Standard setting

2012–2013 Budget
$12,827,855

CEO
Lynn Fraser
www.nshsc.nshealth.ca

A Sound Start
A Sound Start is a provincial initiative on behalf of the Nova Scotia Department of Health and Wellness to address early identification and early intervention of preschool hearing, speech, and language disorders.

Full implementation of Newborn Hearing Screening occurred late in 2008. Our target is to screen 90% of babies born in NS hospitals. By 2010–11, 95% of babies were screened.

Newborn Hearing: Percentage Screened

Below is a summary of the program for 2011–12.

Births...................................................9,115
Inpatient Screen (% of Births) .........7,332 (83%)
Outpatient Screen..........................1,329
Total Screened ..............................1,329 (95%)
Referred for Follow-up to Audiology......25
Permanent Hearing Loss ..................9

Provincial Standards of Care:
Speech-Language Pathology and Audiology Quality Assurance
In 2012, the Speech-Language Pathology (S-LP) Quality Assurance (QA) Committee completed the development or revision of 15 S-LP clinical services and eight clinical procedures. An additional 14 clinical services or procedures are in the process of being developed or reviewed.

Some examples of S-LP Clinical Standards of Care completed this year:
• Pediatric Acquired Brain Injury: preschool S-LP assessment and management
• Enhanced Stroke Program: S-LP assessment
• Cleft Lip/Palate: preschool S-LP assessment and management
• Bilingual Speech-Language Development: 0-36 month checklist
• Laryngectomy: Review of potential risks with trachea-esophageal puncture (TEP)
• Francophone Preschool Speech-Language: new standards in assessment and treatment

This year approximately 600 client charts were randomly selected from all 30 sites across Nova Scotia and audited for compliance of nine targeted S-LP clinical indicators. The Quality Assurance Committee will review audit results and present the Audit Report with observations and recommendations.

NSHSC audiologists adhere to consistent standards of care across all sites, in the effort to ensure that all clients receive the same quality of service no matter where they receive our services in the province.

Four new audiology policies have been initiated:
• Sudden Hearing Loss
• Immittance
• Speech Audiometry
• Hyperacusis

Eleven audiology policies or services have been reviewed:
• Classification of hearing loss
• Earmold impressions
• APD screening (auditory processing disorders)
• Adult diagnostic evaluation
• Pediatric evaluation
• Newborn hearing screening
• Pediatric screening
• Acoustic reflexes
• Ototoxicity
• ABR neurologic assessment
• Adult case history form
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 health care providers across the province and Canadian Blood Services to maximize the safe and appropriate management of blood and related products received by patients in Nova Scotia through utilization, surveillance, quality assurance, and communication and coordination.

Budget
$820,949

Program Manager
Marina Hamilton

Clinical Advisor
Dr. David Anderson

http://novascotia.ca/dhw/nspbcp/

Revision of Utilization Guidelines for Prothrombin Complex Concentrates (PCCs) in Nova Scotia

About 8,000 to 10,000 Nova Scotians are taking warfarin for atrial fibrillation and other conditions. Prothrombin complex concentrates were licensed for use in Canada in 2008 and the NSPBCP established a working group to develop guidelines for PCCs in Nova Scotia. PCCs are indicated for patients taking warfarin or other vitamin K antagonists when there is bleeding or an urgent or emergent intervention is required and the International Normalized Ratio (INR) is greater than or equal to 1.7. Dosing recommendations are based on the data results obtained from PCC use within Nova Scotia.

Atlantic Recommendations for Managing Bleeding in Patients on Dabigatran or Rivaroxaban

The new oral anticoagulants, dabigatran and rivaroxaban, are viewed as more convenient for patients than warfarin, as INR monitoring is not required. As there is limited data on the reversal of these products and no known antidote for them, the NSPBCP was asked to provide recommendations on managing bleeding in patients using them, in the effort to support the appropriate use of blood and blood products. With the advice of an expert working group, the NSPBCP developed Atlantic recommendations for managing bleeding in patients on dabigatran and rivaroxaban.

Atlantic Implementation of 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 adjusted body weight. Actual body weight (which includes the weight of adipose tissue of the patient) is used for calculating the dose of fat soluble drugs. As immunoglobulin is not lipid soluble an adjusted body weight is appropriate to use for dosing.

The pilot implementation of dosing by adjusted body weight in Prince Edward Island, Newfoundland Labrador, and Nova Scotia involved 131 patients and revealed an estimated average saving of 66 grams of IVIG per patient. At a cost of $58.97 per gram, this would mean an annual average saving of $3,892 per patient. An adjusted body weight calculator was developed and made available through the Internet and as a smart phone application.

Red Blood Cell (RBC) Discards

As Nova Scotia ranks fourth in its per capita use of red blood cells in Canada (excluding Quebec), red blood cell discards is an area of focus of the NSPBCP. The NSPBCP congratulates hospitals on achieving the lowest provincial red blood cell discard rate (2.8%) in 12 years.

Redistribution Program for Plasma Protein Products

Successful redistribution programs in other jurisdictions and the reduction of red blood cell outdates in Nova Scotia provided the basis to develop a strategy to prevent the expiry of plasma protein products (PPPs). The DHAs/IWK report the inventory of PPPs that are to expire within 6 months to the NSPBCP, which then facilitates the redistribution of these valuable products.

As a result of the redistribution program, 162 vials of PPPs were redistributed in Nova Scotia in 2012, with a net cost avoidance of $135,000.
Nova Scotia Renal Program
(NSRP)

Mission
To improve renal health and care for all Nova Scotians.

Core Activities
Established in 2007, the NSRP works closely with all renal service delivery programs, District Health Authorities and key stakeholders involved with renal disease and chronic disease prevention and management.

The 2008-2011 strategic plan focused on:
• Developing a 5 year service delivery plan
• Collaborative opportunities
• Heightened awareness & early management
• Developing a provincial renal information management system.

The Program is currently developing their 2013-2018 strategic plan.

Budget
$755,581

Program Manager
Susan MacNeil

Clinical Advisors
Dr. Tom Hewlett
Dr. Neil Finkle

http://nsrp.gov.ns.ca

Service Delivery Plan
The Nova Scotia Renal Program Dialysis Service Delivery Committee reviewed the 2010 Service Delivery Plan and submitted a revised document to the Deputy Minister in June 2012. Capital funding was approved for 2012-2013 to support the start-up of a home hemodialysis program in Cape Breton, to expand the home hemodialysis program in Capital Health, to provide local support for peritoneal dialysis in South West Health in collaboration with Capital Health, and to design a 12-station hemodialysis unit in Capital Health.

In November 2012, capital funding was announced for 2013-2014 to build a 12-station satellite dialysis unit in Kentville and a 12-station hemodialysis unit in Capital Health. All capital funding approvals were based on the priorities identified in the Provincial Service Delivery document.

Home Therapies
The Nova Scotia Renal Program continues to work with key stakeholders to increase utilization of home dialysis in Nova Scotia. Home dialysis targets have been established and monitored. The Home Dialysis Steering Committee has recommended a Home Therapies First Philosophy. Despite many efforts and approval of capital funding, home dialysis growth is slow and targets have not been met. A home dialysis business case was requested and submitted to the Deputy Minister to support key initiatives that should increase the usage of home dialysis in Nova Scotia. Pamphlets to support patient education in English, French, and Arabic and posters promoting the benefits of home dialysis have been developed and distributed. The NSRP hosted a Home Therapies Café and brought together more than sixty stakeholders to explore ways to increase the usage of home dialysis. One-time grants to support the promotion of home dialysis were awarded to renal programs in South West District Health Authority, Cape Breton District Health Authority, and Capital District Health Authority. Standards to support patient assessment and education designed to increase the usage of home dialysis are being developed.

Heightened Awareness and Early Management
The implementation of estimated glomerular filtration rate (eGFR) reporting to aid in early identification, management, and referral of patients with chronic kidney disease was completed in all District Health Authorities in 2012. Provincial standardized creatinine and quality monitoring is coordinated by the NSRP in collaboration with laboratory services in each District Health Authority and the IWK. We will be revising the algorithm “Detection, monitoring and referral of chronic kidney disease” based on new international standards that have just been released. Academic detailing is planned with Dalhousie University to provide education to primary care practitioners on the new international standards and to support heightened awareness and early management of individuals with chronic kidney disease.

Quality Monitoring and the Renal Information Management System
The NSRP received its first set of quality indicator data from renal service delivery programs for 2011–2012. We continue to work with District Health Authorities to finalize the data set and to improve data quality and the data collection process. With improved processes in place we plan to report on the 2012–2013 quality indicator data. The program is developing an interim information system to house the quality indicator data, while awaiting approval of a provincial renal information management system.

Renal population surveillance continues to provide data for service delivery planning, and joint provincial program surveillance provides data on the burden of chronic illness in Nova Scotia. We continue to pursue access to laboratory data in order to assess the true burden of kidney disease in the province.

Improving End-of-Life Care
The program hosted a Renal End-of-Life Stakeholder Forum in May 2012 to provide an opportunity to understand current end-of-life practices in Nova Scotia and to identify gaps and opportunities to improve end-of-life care for renal patients and their families. The identified opportunities were prioritized and will inform the next steps to be taken by the End-of-Life Working Group.
Reproductive Care Program of Nova Scotia (RCP)

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

Core Activities
- RCP-facilitated Mortality and Morbidity Reviews linked to facility QA processes
- Quality Assessment Reviews exploring topical clinical and system-wide issues
- Clinical documentation tools that guide standards of care
- Interprofessional education programs in a variety of formats
- Key indicator reports for facilities and the province
- Data for program planning and evaluation, and for approved research projects

2012–2013 Budget
$1,537,949

Program Manager
Rebecca Attenborough

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

http://rcp.nshealth.ca/

Establish and Monitor Provincial Standards

Model of Care: Created collaborative care guidelines for maternal-child units implementing Nova Scotia’s Model of Care. Developed a set of clinical indicators to assist with monitoring the impact of staffing changes on patient outcomes.

Atlee Perinatal Health (ALPHA) Reports and Perinatal Audit Reports (PAR): Distributed 239 site-specific ALPHA reports and 80 PARs to clinicians and decision support staff.

Education that Supports Required Competencies

Maternal Newborn Nursing Education Modules: Developed seven self-directed online learning modules to supplement local maternal-newborn nursing education and orientation programs:
https://rcp.nshealth.ca/education/learning-modules

Neonatal Resuscitation Program (NRP): Coordinated the national launch of the NRP version 6 for Atlantic Canada. Provided three additional instructor courses to ensure all 60 Nova Scotia instructors have the credentials to teach NRP.

Advanced Life Support in Obstetrics (ALSO): Provided a two-day ALSO (obstetrical emergencies) course and the first successful Canadian ALSO refresher for a total of 60 physicians, midwives, and nurses.

Quality Review

Induction of Labour: Published a provincial report with best practice and system recommendations. A comprehensive evidence review and provincial data were included:

Quality Assessment Reviews Newborn Transition from Hospital to Home: Completed three-day reviews in two DHAs. Provided a comprehensive report with quantitative and qualitative findings to each site.

Cesarean Section Audit: Building on best practice recommendations, worked with a provincial committee to develop an audit process and toolkit. Three DHAs and the IWK are piloting the process, which includes reviews that use an internationally recognized classification system and identify priority areas for action regarding cesarean section practices.

Program Planning and Knowledge Development

Chronic Disease Management (CDM): Contributed data and background evidence about gestational diabetes to the provincial CDM indicator and target setting activity.

Knowledge Exchange: Provided data for 85 data requests and projects to assist with program planning, education, and knowledge development. Nova Scotia data was the basis for six peer-reviewed publications.

Population Health: Incorporated DHA-specific indicators, such as breastfeeding and maternal education (with provincial comparisons), into every RCP-facilitated review.

Breastfeeding initiation has increased from 72.7% to almost 80% since the distribution of Nova Scotia’s Breastfeeding Policy. Studies from the US and Europe have identified improved outcomes and significant cost savings associated with exclusive breastfeeding based on reduced rates of respiratory illness, ear infections, GI illness, necrotizing enterocolitis, and SIDS.
Cross Provincial Program Initiatives and Other Key Partnerships (Highlights 2012)

**Nova Scotia Provincial Blood Coordinating Program (NSPBCP)**
Nova Scotia leads the Atlantic Blood Utilization Strategy (ABUS) through the NSPBCP. ABUS has led to considerable returns related to cost avoidance, appropriateness of use, and efficiency of effort related to the utilization management of Intravenous Immune Globulin (IVIG) and Subcutaneous Immune Globulin (SCIG).

**Legacy of Life (LOL)**
The Legacy of Life Nova Scotia Organ and Tissue Donation Program works with stakeholders and service providers that deliver donation and transplantation care within Nova Scotia. Key stakeholders include the Regional Tissue Bank, Critical Care Organ Donation Program, Multi-Organ Transplant Program, Medical Examiner Service, Emergency Health Services, Health Charities and District Health Authorities. All stakeholders contribute to a provincial strategic plan to improve the organ and tissue donation process in Nova Scotia.

**Nova Scotia Hearing and Speech Centres (NSHSC)**
In collaboration with Health Canada and Société Santé en français, Nova Scotia Hearing and Speech Centres provide speech-language services to preschool children in French throughout Nova Scotia. Nova Scotia Hearing and Speech Centres, in partnership with Cardiovascular Health NS (CVHNS) and DHAs, provide enhanced stroke services in keeping with the NS Integrated Stroke Strategy. Through a formal affiliation agreement with Dalhousie University, Nova Scotia Hearing and Speech Centres provide clinical education to graduate students in audiology and speech-language pathology.

**Cancer Care Nova Scotia (CCNS)**
To meet shared goals and facilitate cancer system improvement, CCNS works closely with national and local organizations. Key partners include: district health authorities, IWK Health Centre and various provincial government departments including Business Intelligence and Analytics Program (BIAP) and Health Information Technology Nova Scotia (HITS-NS), as well as Dalhousie University, the Canadian Association of Provincial Cancer Agencies (CAPCA), the Canadian Partnership Against Cancer (CPAC) and health charities including the Canadian Cancer Society, among others.

CPAC has provided a number of partnership opportunities for CCNS, including system performance reporting, surgical synoptic reporting, adoption of cancer information system best practices, and the implementation of screening for distress as a standard of care across the province.

Cancer Care Nova Scotia’s primary prevention work is facilitated through the coordination of membership alliances, such as the Sun Safe Nova Scotia (SSNS) coalition, Smoke Free Nova Scotia, and the Alliance for Healthy Eating and Physical Activity.
Reproductive Care Program of Nova Scotia (RCP)

The Reproductive Care Program, along with the Department of Health and Wellness' (DHW) Healthy Beginnings Team, co-chairs the Provincial Breastfeeding Steering Committee and four Working Groups to promote, support, and protect breastfeeding in Nova Scotia. Together, these two groups are collaborating to revise the provincial document entitled, ‘Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines’.

The Reproductive Care Program represents the DHW Acute & Tertiary Care Branch on the provincial Well Child System Working Group that is led by the DHW Healthy Development team and has members from the Departments of Education, Community Services and Justice.

The Reproductive Care Program is also collaborating with the Business, Intelligence, Analytics, and Privacy Branch (BIAP) at the DHW and the Understanding Communities Unit within Capital Health to identify groups of childbearing women who would most benefit from midwifery care, should they choose this option.

Nova Scotia Breast Screening Program (NSBSP)

The Nova Scotia Breast Screening Program promotes breast health awareness. Key partnerships have included the Canadian Breast Cancer Foundation (Atlantic), the Public Health Agency of Canada, the Canadian Partnership Against Cancer, and the Canadian Breast Cancer Screening Initiative. The NSBSP also collaborates with Dalhousie University on various research projects involving radiology residents, bachelor of Health Science students, master of Health Informatics students, as well as students from the Centre of Geographic Sciences.

Nova Scotia Breast Screening (NSBSP), Diabetes Care Program of Nova Scotia (DCPNS), Cardiovascular Health Nova Scotia (CVHNS), and Nova Scotia Renal Program (NSRP)

Together, the NSBSP, DCPNS, CVHNS, and NSRP work to gain and share expertise in the rewrite/development of their respective provincial information systems. These programs use the CAISIS platform as the basis for their new information systems.

DCPNS, CVHNS, and NSRP devote resources to a common surveillance initiative that allows for a linkage of the three provincial registries to answer the question “What proportion of individuals in each of the specific disease registries has one, two, or all three of these specific chronic conditions?” This work helps to demonstrate the value of the data bases, the mechanisms and processes required to allow for data linkage, and the need to better understand the true burden of these complex disease entities in NS.

Following the successful launch of the My Blood Pressure Card Initiative in 2011, the DCPNS, CVHNS, and NSRP developed and promoted the My Blood Pressure Challenge in the spring of 2012. More than 40 Challenge Kits were distributed province-wide with screening events held in various DHAs and work places. New materials, wallet cards and/or posters, were also designed and released for specific populations, including French, African Nova Scotian, Mi’kmaq, and new immigrants. In the same year, joint blood pressure/hypertension grants were offered to the DHAs. Six grants have been approved (two at the DHA level in amounts of $10,000 each; and 4 at the community/site level of $3,000 each). These projects will be completed nearer the end of 2013.
DCPNS, CVHNS, and NSRP have been planning for the development of a Joint Advisory Group. This group will advise the programs on the development of strategies for common risk factors, joint surveillance and cross disease initiatives that complement the disease specific approaches of each program.

**With the Public Health Agency of Canada**

The Public Health Agency of Canada (PHAC), through the Canadian Congenital Anomalies Surveillance Network, is collaborating with interested jurisdiction to develop or enhance provincial/territorial congenital anomaly surveillance with a view to contributing to a national database. Nova Scotia is one of the interested jurisdictions and RCP is taking the lead on the Surveillance of Congenital Anomalies in Nova Scotia (SCA-NS) project.

Through the NSPBCP, Nova Scotia is an active partner with the Public Health Agency of Canada for the surveillance of transfusion and transplantation adverse events.

Through the DCPNS, in partnership with BIAP, Nova Scotia contributes diabetes data to the Canadian Chronic Diseases Surveillance System (CCDSS).

Through the NSBSP, Nova Scotia contributes breast screening data to the Canadian Breast Cancer Screening Initiative’s (CBCSI) National database.

**With Colleagues with Similar Mandates in Other Canadian Jurisdictions**

RCP is collaborating with representatives of BORN (Better Outcomes Registry & Network) Ontario and the CHEO (Children’s Hospital of Easter ON) Research Institute, the Newfoundland and Labrador Provincial Perinatal Program, Perinatal Services British Columbia, the Alberta Perinatal Health Program, the Ottawa Hospital Research Institute, and the University of Ottawa Faculty of Medicine to apply Robson’s 10-Group method for cesarean section (CS) audit.

RCP is collaborating with a group from BC’s Centre for Rural Health Research, as well as the Alberta Perinatal Health Program and Perinatal Services BC, on a project to describe the relationship between travel distance to care and perinatal outcomes.

The Department of Health and Wellness, through DCPNS, now has formal agreements in place with both the New Brunswick and Price Edward Island Departments of Health allowing for use of the DCPNS process, protocols, and related materials for certification in insulin dose adjustment.

The NSBSP is currently involved in an interprovincial Project with the breast screening program in Newfoundland and Labrador in developing a breast imaging information system.

CCNS and CAPCA have collaborated with Accreditation Canada to develop a new set of standards for Ambulatory Systemic Cancer Therapy. This new standards module has entered the accreditation process for all organized health care facilities in Canada, incorporating the new safety processes identified through the CAPCA-sponsored research work.

They have also collaborated to implement screening for distress of cancer patients. The evaluation and monitoring of a patient’s emotional distress as part of assessment is now a Canadian Council on Health Services Accreditation Standard in Cancer Care. In addition, CCNS and CPAC have implemented surgical synoptic reporting in various diseases including ovarian, lung, breast and colorectal cancers, with a goal to eventually have surgical synoptic reporting as the standard reporting mechanism for all cancers.