

Welcome to the Cardiovascular Health Nova Scotia (CVHNS) e-mail bulletin, produced 3 times annually. The Bulletin has been created to share information about the program's activities, related cardiovascular health initiatives, and ideas from around the province.

New! Algorithm for Diagnosis of Hypertension in Canada

The [Canadian Hypertension Education Program \(CHEP\)](#) provides annually updated recommendations and clinical practice guidelines to detect, treat and control hypertension – including algorithms to diagnose hypertension. CHEP resources are targeted to primary care provider audiences as hypertension is predominantly diagnosed and managed in the community setting.

Approximately 30% of Nova Scotians over 20 years of age have hypertension (above national rate of 23%) with crude hypertension rates close to 40% in some areas¹. Uncontrolled hypertension is responsible for up to 40% of cases of dementia, doubles the risk of heart disease and stroke, and triples the risk of end stage renal disease. Even modest decreases in hypertension can significantly reduce risk of further debilitating conditions and risk of death.

Even though there has been a five-fold increased rate of control in hypertension across Canada, one-third of the hypertension population remains uncontrolled and 17% remain unaware they have hypertension². Accurate blood pressure (BP) measurement is essential for timely diagnosis of people with hypertension. In 2015, CHEP identified two major deficiencies in the current diagnostic process of hypertension and modified their algorithm. Information on the two deficiencies include:

- 1. Accuracy limitations of auscultatory measurements.** Despite great efforts to educate health care professionals on proper auscultatory measurement of BP, there is overwhelming evidence that truly standardized office BP measurement is not usually performed in routine clinical practice. CHEP encourages the use of [validated electronic digital oscillometric devices](#) using an office BP measurement protocol as a better alternative. Also, ambulatory or home BP measurements (using validated electronic devices when resources allow) is recommended to expedite diagnosis after two office visits.
- 2. Early and systemic identification of patients with white coat hypertension (WCH).** Some studies suggest that WCH occurs in up to 30% of subjects with increased office BP readings, many of which will be treated unnecessarily with antihypertensive medications³. A false diagnosis can also have a significant impact on actual or future employability, contribute to absenteeism⁴ as well as unnecessary costs of treatment and potential side effects. The recommendation to diagnose WCH is the use of 24

hour ambulatory BP monitoring (preferred) or a 7-day series of home BP monitoring using validated electronic oscillometric devices.

To learn more about the new algorithm for the diagnosis of hypertension or access tools to support your practice, visit professional resources at: www.hypertension.ca or access the article about the algorithm changes at: www.hypertension.ca/images/CHEP_2015/CHEP2015_Manuscript.pdf.

1. Nova Scotia Department of Health and Wellness, Discharge Abstract and Physician Billing Databases, Hypertension Prevalence for Population Aged 20+ in NS and DHAs 2010/11.
2. Cloutier L, Daskalopoulou SS, Padwal RS, et al. A new algorithm for the diagnosis of hypertension in Canada. *Can J Cardiol*. 2015; 31:620-630.
3. O'Brien E, Parati G, Stergiou G, et al. European Society of Hypertension position paper on ambulatory blood pressure monitoring. *J Hypertens*. 2013; 31:1731-68
4. Franklin SS, Thijls L, Hansen TW, O'Brien TE, Staessen JA. White-coat hypertension: new insights from recent studies. *Hypertension* 2013; 62:982-987.

Learning Opportunities

Family Medicine Forum, November 11–14, 2015.
Toronto, ON. <http://fmf.cfpc.ca/>

Stroke Education Day, November 26, 2015.
Bridgewater, NS. Contact Linda Sears-Doucet,
linda.sears-doucet@nshealth.ca

89th Annual Dalhousie Fall Refresher, November 26-28, 2015. Halifax, NS. Contact Renee Downs,
renee.downs@dal.ca

8th Annual Ottawa Model for Smoking Cessation,
January 22-23, 2016. Ottawa, ON. <http://ottawamodel.ottawaheart.ca/ottawa-conference>

CVHNS News

CVHNS ECG Pilot Project using Nova Scotia ECG System (NSES)

A pilot project using the Nova Scotia ECG System is underway to streamline the ECG review process that CVHNS uses for data collection. The objective behind this project is to minimize or eliminate the need to review paper copies. We are looking forward to learning more about how this can improve efficiency of our data collection processes.

Results are in! 2015 Come on Nova Scotia...Check It! Blood Pressure Challenge

A diverse range of participants from across health care settings, businesses, workplaces, and academic institutions participated in the fourth annual Blood Pressure Challenge. Surpassing last year's results, 4200 blood pressures were screened and over 100 education and awareness events were offered across the province in the month of May. The goal of the challenge is to engage Nova Scotians in screening and promote awareness about healthy blood pressure.

Based on report back forms received, the prize for

Most Blood Pressures Screened in the Community goes to Cumberland County, Northern Zone, who engaged with multiple local groups and organizations to complete 574 screenings in the community plus another 122 more for staff. The prize for Most Blood Pressures Screened in the Workplace goes to Cape Breton, Eastern Zone, with over 1300 screenings across a number of sites including Diabetes Management Centres, Public Health offices, and hospital units. The random prize draw goes to South West Nova Scotia, Western Zone.

Check out the Innovative Ideas section of this newsletter to learn more about the dynamic ideas and approaches used this year at challenge events across the province. A big KUDOS and a thank you to all who participated and we look forward to seeing what you can do in 2016!

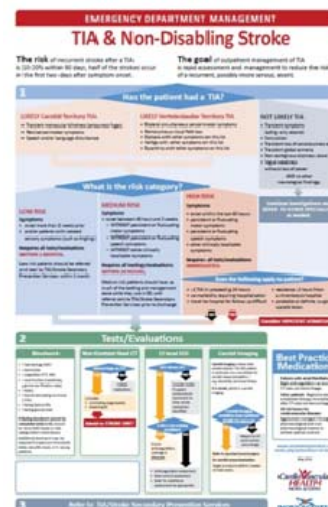
Microsoft SharePoint site set up for Cardiovascular and Stroke Coordinators

CVHNS has set up a Microsoft SharePoint site for the Cardiovascular and Stroke Coordinators associated with CVHNS. This creates a simple and effective way to share information and documents.

Professional Education for Coordinators - Institute for Health Improvement Open School Cardiovascular and Stroke Coordinators across the province have been participating in an online professional education opportunity through the Institute for Health Improvement (IHI). CVHNS purchased a license for IHI Open School, which has a wide range of courses focusing on quality improvement, patient safety, system design, and leadership. CVHNS created a course outline of relevant modules and the coordinators have been engaging in discussion groups and activities with CVHNS staff related to the courses they have completed.

New Tools for Transient Ischemic Attack (TIA) Management in Nova Scotia

Two versions of a TIA algorithm have been developed in Nova Scotia, one for Primary Care and one for Emergency Departments to assist in timely assessment and management. The algorithms are based on Canadian Stroke Best Practice Recommendations, and were developed in consultation with physicians and front-line staff across the province. The algorithms focus on diagnosis, assessment of risk, evaluation/testing, and management of TIAs in these two settings.



The Canadian Stroke Best Practice Recommendations (www.strokebestpractices.ca) indicate that TIA patients should be evaluated:

- immediately if TIA < 48 hours ago
- within 24 hours if TIA was 48 hours–2 weeks ago
- within one month if TIA >2 weeks ago

Stay tuned for dissemination and education plans to come!

Diabetes and Acute Coronary Syndrome (ACS) Working Group

Many people with heart disease have, or are at higher risk of developing diabetes. The Nova Scotia Guidelines for Acute Coronary Syndromes (updated in 2014) include a specific section which addresses care of ACS patients with elevated blood glucose and/or diabetes. To better understand uptake of this section of the ACS guidelines, CVHNS conducted a survey and chart audit across

Regional Hospitals. The following needs were identified.

- Diabetes related continuing education for in-patient staff.
- A standardized approach for patient education, especially for patients with newly diagnosed diabetes.
- Timely access to diabetes expertise and endocrinology for in-patients (in some areas).
- Increased awareness on the role of the local Diabetes Management Centres (DMCs) and how to access services.
- A standardized process to refer ACS patient with diabetes to DMCs throughout the province.

CVHNS and DCPNS have established a working group with representatives from across the province with expertise in diabetes and cardiovascular disease. Early plans include the development of a diabetes 101 program for in-patient staff, a standardized diabetes information kit for newly diagnosed patients and a mechanism to increase awareness of the role of the diabetes management center for in-patients with diabetes and ACS. Stay tuned for further updates. For more information contact: kathy.harrigan@nshealth.ca.

New Cardiac Rehabilitation Program at Colchester East Hants Health Centre

Colchester East Hants Health Centre (CEHHC) has recently launched a comprehensive cardiac program for area residents. Under the medical direction of Program Director, Dr. Masis Perk, the program strives to connect with cardiac patients and families by using plain language, delivering practical, easy to follow messages with the end goal being to help participants better understand and self manage their disease. The program is eight weeks in duration, and is provided by a multi-disciplinary team which includes a specialist physician, nurse, kinesiologist,

dietitian, and a community pharmacist.

The program has three components which include education, physical conditioning and self-management skills. The target population is identified and referred to the program either during their hospital stay or upon their return from the QEII cardiac cath lab. In the case of coronary bypass surgery, participants are referred by their family doctor or cardiac surgeon. Three patient groups were initially targeted:

- first time admissions with acute coronary syndrome or heart failure
- patients who undergo coronary stenting
- patients who undergo coronary bypass surgery

The program is offered two days per week with an expected capacity of 90 patients per year. Patients meet initially with the program director and nurse for an intake assessment and cardiac exam. They then meet with the kinesiologist, nurse and dietitian who review their lifestyle habits, risk profile, orientate them to the components of the program, and tailor some individual program goals. After the program is complete, patients are contacted for in-person follow-up appointments at three, six and twelve months. A walking group is offered to encourage current and past participants to maintain/improve their level of activity, to promote use of community resources, and for ongoing support.

A number of community partners have been involved to support this program including the Rath Eastlink Community Center, Colchester East Hants Health Foundation, Sobeys and the Medicine Shoppe. Staff are very pleased with the progress of program participants and their feedback to date. To learn more, contact Tracy Selway, Cardiac Coordinator, tracy.selway@nshealth.ca.

Helpful Resources

Web-Based Tools

UPDATED Canadian Hypertension Education Program App

This app is designed as a rapid resource for any clinicians who diagnose or treat patients with hypertension. Available for [Android](#) or [iPhone](#).

NEW Health Canada Eat Well Plate Interactive Web Tool

The [Eat Well Plate](#) is an interactive web tool that helps you follow Eating Well with Canada's Food Guide when planning and serving meals.

NEW Health Canada My Food Guide App

The new customizable [My Food Guide App](#) allows Canadians to access healthy eating information anytime, anywhere.

Publications

Heart and Stroke Foundation. [Getting to the Heart of the Matter: Solving Cardiovascular Disease Through Research: 2015 Report on the Health of Canadians](#).

Heart and Stroke Foundation 2015 Stroke Report: [Access to Stroke Care: The Critical First Hours](#).

Casabon, LK, Boulanger, JM, Blancquiere, D, et al. [Canadian stroke best practice recommendations: hyperacute stroke care guidelines, Update 2015](#). *Int J Stroke*. 2015; 10(6):924-940.

Eskes GA, Lactot KL, Herrmann N, et al. [Canadian stroke best practice recommendations: mood, cognition and fatigue following stroke practice guidelines, update 2015](#). *Int J Stroke*. 2015; 10(7):1130-1140. All [supporting materials](#) for this module can be found on the Stroke Best Practices website.

Innovative Ideas

Tell Us Your Story! – Blood Pressure Challenge 2015

A part of the annual Come on Nova Scotia...Check It! Blood Pressure Challenge, is the "Tell Us Your Story!" where participants describe what they did and how they implemented their local challenge. Every year we learn new ways to promote and engage Nova Scotians in learning more about healthy blood pressure and we want to share some of our favorites with you!

Reaching out to African Nova Scotian

Communities. Given that people of African descent are at a higher risk of developing high blood pressure, there was a special focus this year on this population. A number of culturally-specific materials were developed for this purpose including posters and an information sheet. To promote uptake of these materials, Cumberland County area of the NSHA engaged with multiple community partners, one of which was the Cumberland African Nova Scotian Association (CANSAs) to offer on-site blood pressure screening. In return, CANSAs offered up window space for the month of May to display education and awareness materials. In Central Zone, of the NSHA, the Community Health & Wellness Centre (serving North Preston, East Preston, Cherry Brook and Lake Loon) has worked collaboratively over the last number of years with neighboring churches to offer a community wide health fair. This year, they incorporated the challenge materials as part of their health screening booth at the event. Both of these approaches are a great example of how the challenge toolkit can be used to enhance or support preexisting resources in the community!

Reaching out to younger generations. A number of academic institutions were engaged in the challenge,

one being the Nova Scotia Community College, IT Campus. They offered a one-day blood pressure screening and health education booth with a Registered Nurse who offered healthy lifestyle counseling. There were so many eager participants that they had to turn some people away. They plan on expanding their challenge next year to meet the demand. It is exciting to see academic institutions offer this to students and staff!

One of our most unique stories this year is from 18 year-old, Liam Hearn, a senior member of the County Line 4-H Club in Cape Breton. Liam used the materials in the challenge toolkit to do a presentation for his 4-H First Aid Project. During his demonstration to members and parents, he shared the tools provided in the challenge toolkit and messages about the importance of getting your blood pressure checked. He also had an innovative way to share the Heart and Stroke Foundation of Canada F.A.S.T. tools to learn the signs of stroke. Liam says, "I chose to do a skit on F.A.S.T. with the hope that the younger members in our club will know that they need to act quickly and phone 911 if ever they are somewhere and recognize a loved one with a droopy face, slurred words or arms that they can't raise over their head. I think they'll remember the skit!" It is great to see younger generations being engaged through the challenge. Thank you Liam - we applaud your leadership in taking these important messages to your peers!



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