

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

## **Nova Scotia Hearing and Speech Centres: Closing the Gap for Stroke Survivors with Communication and Swallowing Challenges**

Healthcare professionals are increasingly aware that impairments in communication and swallowing are common after stroke and frequently affect the care of stroke survivors. To improve outcomes and management of long-term communication and swallowing difficulties the Nova Scotia Hearing and Speech Centres (NSHSC) developed curricula to enhance health professional and caregiver knowledge. Each curriculum includes an interactive PowerPoint presentation, supportive materials, participant handouts, posters and brochures.

The communication workshop entitled *Improving Communication after a Stroke* encourages participants to interact through questions, comments, role plays, video review, and discussions. Learning objectives for this workshop include improving understanding of common types of communication impairments after stroke, communication strategies, and the referral process for a speech-language consultation through NSHSC.

Participating facilities are provided a Communication Toolbox. The toolbox contains communication aids (e.g., alphabet board, pain scale, various drawings, yes/no cards, markers, clipboard, etc.) for use by healthcare professionals and caregivers. Additionally, two posters to increase awareness are left with the host facility. The brochure *Communication Strategies: Directions for Improving Communication After a Stroke* contain basic information regarding the nature of communication problems, tips for improving communication, and referral information.

The communication workshop was piloted by Nova Scotia Hearing and Speech Centres' speech-language pathologists on March 3rd, 2009 at the Valley Regional Hospital. Subsequent workshops have been conducted at Hants Community Hospital, Fishermen's Memorial Hospital, Queen's General Hospital, and the South Shore Regional Hospital, all with consistently positive feedback.

The NSHSC swallowing workshop is entitled *Stroke-Related Dysphagia Monitoring and Follow-up*. The goal of this 60 minute seminar is to raise awareness among healthcare professionals regarding the need to monitor individuals with ongoing swallowing difficulties. Learning objectives for this dysphagia module include improving understanding of anatomy and physiology of the swallow mechanism, dysphagia symptoms, signs of aspiration, safe feeding/eating guidelines and ways to monitor dysphagia.

Where appropriate, facilities hosting a workshop are provided with a NSHSC Dysphagia Resource Binder. This resource contains dysphagia educational and reference material to help the healthcare professional and the stroke survivor manage dysphagia. Two posters, designed to improve awareness of dysphagia and access to services are also provided. Copies of the brochure *Swallowing Strategies: Suggestions for Safe Eating and Drinking After a Stroke* includes basic information regarding dysphagia signs and symptoms, safe eating guidelines, and NSHSC contact information. The *Physician Pocket Guide: A Post-Stroke Dysphagia Education Tool* was developed in consultation with physicians.

The dysphagia workshop and materials were piloted on March 26th, 2009 via telehealth to the Yarmouth Regional Hospital and the Digby General Hospital. Again, the response was very positive. Statistical analyses of outcome measures before and after the workshops confirm that attendees achieve the learning objectives for both the communication and swallowing workshops.

Facilities may arrange for workshop delivery by contacting their local NSHSC Speech-Language Pathologist, the NSHSC toll free number 1-888-780-3330, or email at [info@nshsc.ns.ca](mailto:info@nshsc.ns.ca).

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### ***Learning Opportunities***

**Waisting Away Atlantic: Weight Management Strategies for Health Professionals**, December 8, 2009, Halifax, NS. [hcnutrition@rogers.com](mailto:hcnutrition@rogers.com).

**Health Information Privacy, Safety and Security**, January 28-29, 2010, Toronto, ON. [www.insightinfo.com](http://www.insightinfo.com)

**International Conference on Early Disease Detection and Prevention**, February 25-28, 2010, Munich, Germany. [www.paragon-conventions.com/eddp2010](http://www.paragon-conventions.com/eddp2010)

**Evidence, Advice, Recommendations: Delivering Value for Money in Health Care for Canadians, 2010 Symposium**, April 18-20, 2010, Halifax, NS. [www.cadth.ca/index.php/en/events/symposium-2010](http://www.cadth.ca/index.php/en/events/symposium-2010)

**Canadian Association of Neuroscience Nurses 41st Annual Meeting & Scientific Sessions**, June 8-11, 2010, Quebec City, QC. [www.cann.ca/conference.PHP](http://www.cann.ca/conference.PHP)

**International Forum on Quality and Safety in Health Care**, April 20-23, 2010, Nice, France. [www.internationalforum.bmj.com/2010-forum](http://www.internationalforum.bmj.com/2010-forum)

## CVHNS News

### CIHI Special Project

Beginning in January 2010 all District Health Authorities will be involved in the CIHI Stroke Special Project. This is a national project that will allow the collection of standardized indicators across the country. Participation is optional, but the Nova Scotia Department of Health has made collection of these indicators mandatory. This is the first provincial initiative for monitoring and evaluation of stroke service enhancements. The key indicators are: stroke symptom onset, CT/MRI within 24 hrs, Stroke Unit admission, administration of tPA and prescription for antithrombotics at discharge.

### Guidelines for Stroke Care

The *Nova Scotia Guidelines for Stroke Care 2008* and the *Canadian Stroke Strategy Guidelines 2008* have been disseminated throughout the province. Follow up general education sessions to introduce the guidelines are now being held at the district level and targeted Emergency Department sessions are under development. These sessions are being coordinated by the district Stroke Coordinators. For more information contact your local stroke coordinator.

### Emergency Department Continuing Education and Point of Care Tools for ACS—Coming Soon

This fall/winter, CVHNS will continue disseminating the *Nova Scotia Guidelines for Acute Coronary Syndromes (ACS)* by targeting emergency departments around the province. CVHNS has recruited local champions to assist in the dissemination process; a slide set has been developed and accreditation granted from the Nova Scotia College of Family Physicians and

Dalhousie Continuing Pharmacy Education. To assist in the implementation of the guidelines, CVHNS has produced two posters (Nova Scotia Algorithm for Emergency Care of ACS, and Time is Muscle—ACT) as well as a variety of point of care tools. Plans are also underway to develop a pocket guide for practitioners which will provide quick access to key information from the guidelines.

### ACS Audit Toolkit—Under Development

A number of DHAs have undertaken audits of specific indicators related to ACS care to get a clearer understanding of gaps identified in their local ACS data as provided by CVHNS. CVHNS has started to collect the tools that have been developed with the goal to create a toolkit that care be shared around the province. If you have an audit tool to share, please let us know. Appropriate credit will be given to the developers of the tool.

### Safer Healthcare Now! Virtual Collaborative to Address Timely Thrombolysis

The Atlantic Node of *Safer Healthcare Now!*, in collaboration with CVHNS and New Brunswick Heart Health Center, is hosting a virtual learning collaborative designed to improve the timely administration of thrombolytic agents in STEMI patients. The collaborative focuses on making improvements on two measures:

1. Electrocardiogram within 10 minutes after hospital arrival, and
2. Fibrinolytic therapy within 30 minutes after hospital arrival.

Collaborative methodology includes learning sessions and action periods. Learning sessions are both workshops and idea/best practice exchange

forums designed for skill and knowledge development in improvement methods. These sessions prepare participants to make changes leading to performance improvements in their workplace during the action periods. All learning sessions are held in the location of the participant's choice using WebEx technology.

Twenty teams from six health districts/authorities in Newfoundland and Nova Scotia have signed on for the collaborative and the first two learning sessions have been completed. Participation has been great thus far and feedback has been extremely positive. For more information, contact Dannie Currie at 902-574-3854.

### ***RESTORE Update***

Current guidelines recommend that patients with acute ST elevation myocardial infarctions should receive prompt reperfusion therapy. Primary angioplasty is the preferred treatment if door-to-balloon time is less than 90 minutes.

Unfortunately, this is unavailable to most patients in the province or across the country due to our vast geography. Early thrombolysis is, therefore, the most common recommended treatment.

Emergency room door-to-needle times of less than 30 minutes have long been the target both within Nova Scotia and internationally for thrombolysis treatment. Recent evidence has shown that this treatment can be administered pre-hospital with coordinated communication between Emergency Health Services (EHS) and emergency department (ED) staff; sharing transmitted ECGs and clinical history allows ED staff to confirm appropriateness of therapy. As well, antiplatelet (ASA, clopidogrel) and antithrombin agents (Enoxaparin) can also be

administered prior to transfer to hospital. Importantly, these agents are dose adjusted based on a patient's age.

For over a year now Cape Breton has been utilizing a strategy to respond to this new evidence. A well trained EHS service has enthusiastically taken on this challenge in cooperation with our emergency room physicians. Part of this strategy includes a standardized checklist to ensure all appropriate steps are taken.

Over the first 10 months of the program 39 patients with myocardial infarction had pre-hospital assessment. A checklist was appropriately completed in 95 percent. Twenty patients received TNK; 11 of these were pre-hospital and 9 were in the emergency department with rapid triage as appropriate.

Specific target guidelines include:

1. First contact to ECG completion in less than 10 minutes. This was met in 9 of the 11 pre-hospital patients.
2. First contact to TNK administration in less than 30 minutes. This was met in 8 of the 11 pre-hospital patients.
3. First contact to arrival in the emergency department in less than 60 minutes. This was met in 9 of the 11 pre-hospital patients.

Problems with ECG transmission and variable cell phone coverage continue to be areas for improvement, but overall this program has been a great success to date. Coordinating and synchronizing care between EHS and the emergency department is another important step forward for rapid, time sensitive, emergency medical care.

Cape Breton would be happy to provide assistance to other regions looking to roll out this positive and beneficial program. Together we can do better. For more information contact Dr. Paul MacDonald, 902-567-8007.

## Helpful Resources

### AHA Recommendations for Exercise Laboratories

Myers J, Arena R, Franklin B. et al.

Recommendations for clinical exercise laboratories:

A scientific statement from the AHA. *Circulation*.

2009;119: 3144-3161.

### CACR 3rd ed. Guidelines for Cardiac Rehabilitation and Cardiovascular Disease Prevention: Translating Knowledge into Action.

This resource is AGREE and GRADE adherent, and peer reviewed. Visit [www.cacr.ca](http://www.cacr.ca).

### 2009 Dyslipidemia Guidelines

Genest J, McPherson R, Frohlich J, et al. Canadian Cardiovascular Society/Canadian guidelines for the diagnosis and treatment of dyslipidemia and prevention of cardiovascular disease in the adult – 2009 recommendations. *Canadian Journal of Cardiology*. 2009;25(10): 567-579.

### Anticoagulation Management CE Course

The Preventive Cardiovascular Nurses Association is offering a web-based continuing education opportunity - "Safe management of oral anticoagulation-the importance of the patient as partner." Visit [www.pcna.net](http://www.pcna.net).

### 2009 Performance Measures for Primary Prevention of Cardiovascular Disease in Adults

Redberg RF, Benjamin EJ, Bittner V, et al. ACCF/AHA 2009 performance measures for primary

prevention of cardiovascular disease in adults: A report of the American College of Cardiology Foundation/American Heart Association Task Force on Performance Measures. *Circulation*. 2009;120:1296–1336.

### Self Care in Persons with Heart Failure

Riegel B, Moser DK, Anker SD, et al.; on behalf of the American Heart Association Council on Cardiovascular Nursing, Council on Clinical Cardiology, Council on Nutrition, Physical Activity, and Metabolism, and Interdisciplinary Council on Quality of Care and Outcomes Research. State of the science: Promoting self-care in persons with heart failure: A scientific statement from the American Heart Association. *Circulation*. 2009;120:1141–1163.

### Stop Smoking Widget

The National Health Service (UK) is offering a stop smoking widget on its website. This desktop application provides a 30-day course of daily messages, information and tips to assist in quitting smoking. Visit <http://www.nhs.uk/tools/pages/stopsmoking.aspx>.

## Innovative Ideas

### Wii Fit Benefits Stroke Patients

In early 2009, South West Health purchased *Nintendo Wii* systems for each of the Rehabilitation Services departments in the Digby, Shelburne, and Yarmouth sites. The *Wii* has been used successfully in stroke patients allowing them to improve areas such as physical strength and endurance, hand-eye coordination, relaxation, stress management, and dynamic standing, among others. As an additional benefit, when the patient requires a physical rest

from therapy, the program can be switched to activities that test cognitive abilities. Innovative use of new technology is making a difference in the recovery of stroke patients in South West Health. For more information, contact Melanie Mooney at 902-742-3542, ext. 456.

### **Stroke Care Pathway for Emergency Departments**

Stroke care pathways for use in Emergency Departments have been developed in South Shore Health. These have been rolled out throughout the DHA to promote consistent care. The care pathways should also assist coders with data collection on 4 of the 5 core indicators for the CIHI Stroke Special Project. For more information, contact Schelene Swinemar at 902-543-4604, ext. 2210.

### **The Canadian Hypertension Education Program Provides a Variety of Resources for Professional Education**

The Canadian Hypertension Education Program (CHEP) produces annual, evidence-based, peer-reviewed hypertension recommendations and best practices. CHEP also makes available a variety of resources/tools to assist with getting these recommendations into practice. Resources targeting health care professionals are available for viewing or download at <http://hypertension.ca/tools>. You can also sign up for an automated electronic dissemination of materials as these are developed.

Resources available for health care professional education include:

- The 2009 recommendations in a variety of formats (full and short versions, key messages, one-page summary, etc.)
- Pocket booklets (full recommendations or annual updates)

**Heart & Stroke Foundation of Nova Scotia has moved.** The Heart & Stroke Foundation of Nova Scotia has moved to Park Lane Mall, Level 3, 5657 Spring Garden Road, PO Box 245, Halifax, NS B3J 3R4.

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