Northwestern Ontario Regional Stroke Network

Fewer Strokes. Better Outcomes

Inside

Vision

Fewer strokes.
Better outcomes.

Mission

To continuously improve stroke prevention, care, recovery and re-integration

NORTHWESTERN ONTARIO
Regional Stroke Network

Regional Stroke Unit Opens April 1, 2015 at TBRHSC

Back Row (L-R): Dr. Andrea MacDougall, Medical Program Director-Cardiovascular and Stroke Program; Caterina Kmill, Regional Director-Northwestern Ontario Regional Stroke Network; Dr. Mark Henderson, Executive Vice President-Patient Services & Regional Vice President, Cancer Care Ontario; Wayne Taylor, Manager-2C Cardiovascular Unit; Dr. Ayman Hassan, Neurologist and Medical Lead-Regional Stroke Network

Front Row: Arlene Thomson, Director-Cardiovascular and Stroke Program

On behalf of the Northwestern Ontario Regional Stroke Network (NWORSN), I would like to wish everyone a safe and healthy new year. 2014 was a very busy year for the NWORSN team and 2015 promises to be equally busy. With our mission "To continuously improve stroke prevention, care, recovery, and reintegration" in the forefront, the team continues to work closely with regional partners towards accomplishing the goals set out in the network's 2014-2015 work plan. Hard work has certainly paid off as many of the goals have been met. The team, in collaboration with our partners at the Regional Stroke Centre (RSC) at Thunder Bay Regional Health Sciences Centre (TBRHSC) as well as the Inpatient Stroke Rehabilitation (ISR) unit at St. Joseph's Care Group (SJCG), has also risen to the challenge of implementing the first phase of the Quality Based Procedures (QBP) for acute care and inpatient rehabilitation.

Stroke unit care, a key QBP performance indicator, has been addressed at both the RSC and ISR. The Ministry of Health and Long Term Care (MOHLTC) supports the best practice recommendation and defines a stroke unit as a "geographically defined unit with co-located beds". The literature indicates that "early access to a stroke unit is an effective, pro-active approach that saves lives and improves outcomes by reducing death and disability in all stroke patients by as much as 30%". As well, the QBP Clinical Handbook expert panel recommends that stroke patients are cared for on a specialized stroke unit at least 80% of their stay. TBRHSC has committed to open a 12 bed dedicated, geographically defined Regional Stroke Unit (RSU) on April 1, 2015 within the footprint of the existing Cardiovascular unit. The interdisciplinary stroke team at SJCG has reorganized their stroke unit to meet the MOHLTC definition and the best practice recommendations.

Regional Stroke Unit Opens April 1, 2015 at TBRHSC

Continued from previous page

Another key performance indicator is of patients who are eligible for tPA that received stroke thrombolysis. Time is brain, and it is recognized that the sooner a stroke is identified and treated, the better the patient's outcomes. "Door to needle time" looks at the amount of time it takes to identify an ischemic stroke patient to the time the clot buster tPA is given. The standard is 60 minutes, known in the stroke world as the "Golden Hour". The RSC and the 4 regional Telestroke sites strive to meet, and possibly exceed the standard each time a stroke patient presents. April to September saw improvements in door to needle times across the region with both the RSC and telestroke sites achieving the standard.

We expect 2015 to be just as exciting and with many more opportunities to partner with health care professionals and stroke survivors and their families throughout our region. Our vision of "Fewer Strokes, Better Outcomes" will become a reality.

Signs of Stroke
The New FAST Campaign

The Heart and Stroke Foundation is launching a new national campaign to help Canadians recognize the signs of stroke and act FAST.

FAST is an easy and memorable way to remember the major signs of stroke. FAST stands for Face – is it drooping? Arms – can you raise them? Speech - is it slurred or jumbled? And Time – to call 9-1-1 right away.

Stroke is a medical emergency. Recognizing the signs of stroke and acting quickly can mean the difference between life and death, or the difference between a full recovery and lasting disability.

Stroke is the third leading cause of death in Canada and a leading cause of disability. There are an estimated 62,000 strokes in Canada each year. That is one stroke every 9 minutes.

Not enough Canadians recognize the signs of stroke and know what to do. FAST is an approach that is being used by many countries around the world with positive outcomes. In French, FAST translates to VITE, which stands for Visage, Incapacité, Trouble de la parole and Extrême urgence.

The Foundation will reach out to Canadians with a national social media campaign, direct communication with donors and stakeholders, and an educational TV spot that will begin by airing in Ontario at the end of December, with the support of the Ministry of Health and Long Term Care.

F ACE is it drooping?
A RMS can you raise both?
S PEECH is it slurred or jumbled?
T IME to call 9-1-1 right away.

ACT **F A S T** BECAUSE THE QUICKER YOU ACT, THE MORE OF THE PERSON YOU SAVE.

V ISAGE Est-il affaissé?
I NCAPACITÉ Pouvez-vous lever les deux bras normalement?
T ROUBLE DE LA PAROLE Trouble de prononciation?
E XTRÊME URGENCE Composez le 9-1-1.

APPRENEZ À RECONNAÎTRE LES SIGNES. PLUS **V I T E** VOUS RÉAGISSEZ, PLUS **V I T E** VOUS SAUVEZ LA PERSONNE.

EXPERIENCING OR OBSERVING STROKE WARNING SIGNS?

Why you should call an ambulance instead of driving yourself or a loved one to the Emergency Department

Call an ambulance if you think you or someone around you is having a stroke. Never drive yourself or the person having a stroke to the hospital.

Take immediate action by calling 9-1-1 or your local emergency number. The paramedics will know the closest hospital that has a specialized program for stroke care and can call ahead so hospital staff are prepared for your arrival.

(Taking Charge of Your Stroke Recovery. A Survivor's Guide To the Canadian Stroke Best Practice Recommendations)

However, 4 of every 10 stroke patients in Ontario do not call 911 when experiencing stroke; this is unchanged since 2010/11.

- Provincially, the proportion of adult stroke or TIA patients transported to hospital by ambulance was unchanged at 57% in the three-year period between 2010/11 and 2012/13. Across the province, the variation in patients using ambulance transport ranged from a high of 62.7% in the Toronto Central LHIN to a low of 46.1% in the North West LHIN.
- Provincially, in 2012/13, regional and district stroke centres continued to have the highest rates of patient arrival by ambulance (67.9% and 66.5%, respectively), compared to non-designated hospitals (47.4%).
- Within the North West LHIN, the proportion of patients transported to the Regional Stroke Center by ambulance was 49.8%, while transport to non-designated hospitals ranged from 37.5%-46.7%.

EMERGENCY MEDICAL SERVICES (EMS) or 9-1-1

"Hyperacute stroke is a medical emergency and optimizing out-of-hospital care improves patient outcomes. Emergency medical services play a critical role in out-of-hospital (pre-hospital) assessment and management of suspected stroke patients. Acute interventions such as thrombolytic therapy are time-sensitive and therefore strategies such as re-directing ambulances to stroke centres facilitate earlier assessment, diagnosis, and treatment, and may result in better outcomes.

Patients arriving to hospital by EMS (emergency medical services) experience fewer delays in receiving appropriate diagnostic tests (e.g. brain imaging) and are more likely to receive tPA if eligible. Delays may also be reduced by identifying urgent cases through the use of an EMS dispatch process."

(Best Practice Recommendation 3.2 Emergency Medical Services Management of Acute Stroke Patients)

The benefits of calling 9-1-1 for ambulance service instead of going to hospital by yourself or taking someone by car.

1. Depending on the nature of the injury, stroke for example, it may not be safe to move someone. If a patient is weakened or unable to ambulate on their own, to move them may cause more damage to the patient and of course could cause injury to the person doing the moving.

2. Calling 9-1-1 allows for immediate instruction to be given and can help a caller to maintain life or provide valuable information until the arrival of EMS (i.e. CPR, time last seen normal, date of birth, etc)

3. If the patient is a distance away and the caller wants to save time and transport, a relay with the ambulance can be arranged.

4. Calls that require more assistance such as stroke, an immediate response is initiated by the Central Ambulance Communication Centre (CACC)

5. EMS will start monitoring and assessing, relaying information to receiving stroke centre hospital.

6. CACC will coordinate the response of the receiving stroke centre hospital to initiate the stroke protocol.

Team Updates

Farewell and good luck to **Kathy Bulloch**. Kathy has taken a temporary position until May 2015. Our sincere thank you to Kathy for all her hard work with the Stroke Network!

A warm welcome to **Stephanie Rea** who has stepped into Kathy's shoes and is doing an awesome job! Stephanie will be with us for the duration of Kathy's leave.

A warm welcome to **Patti Forsyth.** Patti has taken the position of Community Stroke Prevention Clinic Nurse at the Lake of the Woods Hospital in Kenora. As such, we must say farewell and good luck to **Jennifer Manitowich.** We wish you well in your future adventures Jennifer!

One more farewell and good luck to **Pauline Bodnar.** Pauline has moved on to a position in Mental Health. We wish her well in her new adventure!

Canadian Stroke Congress 2014, Vancouver , BC

Congratulations to **Denise Taylor,** physiotherapist on the Stroke Rehab Unit at St. Joseph's Hospital in Thunder Bay for her participation as an invited speaker on an interdisciplinary panel **"Let's Have a Talk - Role of the Primary Care Team Across the Stroke Continuum".**

Denise highlighted many of the initiatives that she has been involved with through St. Joseph's Hospital in providing quality stroke care (Moving on After Stroke, Stroke Tele-Rehab, the Sandy Lake Stroke Prevention Project…). She also identified ways that the rehabilitation team can support self-management for people with stroke and opportunities for improved collaboration with primary care.

In addition to Denise, the cross-Canadian panel included Gord Gubitz, Neurologist, Mitchell Fagan, Family Physician and Kevin Harrison, Occupational Therapist.

Congratulations also go out to **Elaine Edwards, Sharon Jaspers, Caterina Kmill and Dr. Margaret Sweet** who had a poster presentation titled **"Development of a New Evidenced Based Toolkit for Triaging Transient Ischemic Attack and Mild Non-Disabling Stroke in Northwestern Ontario: The "How to" and "Lessons Learned".** The poster generated much interest and discussion around optimal care of patients with TIA and mild non-disabling stroke care.

The 2015 Canadian Stroke Congress will take place from October 3-6 in Toronto.

UPCOMING EDUCATION EVENTS

Educational events are now posted on the Northwestern Ontario Regional Stroke Network website at: http://www.tbrhsc.net/clinical_partners/regional_stroke_program/stroke_education_events.asp

The above link will take you directly to the events. However, you may go to www.nwostroke.ca where you will find tabs on the left side of the page. Click on "Stroke Education" and you will find yourself on the above link.

Most video conference events will be webcast live and archived. If this is the case, you will find the OTN Event ID number with the announcement. Archived events may be accessed for 2 years with this ID number.

We hope very soon to have a tab with a listing of all the "Archived Events".

Northwestern Ontario Regional Stroke Network Education Fund Application

The Northwestern Ontario (NWO) Regional Stroke Network Education Fund was established with funding provided by the Ministry of Health and Long Term Care. The purpose of the fund is to assist clinicians working in stroke care across the continuum to incorporate best practices through learning opportunities or projects focused on evidence based practices in stroke care.

The fund application page may now be accessed at: http://www.tbrhsc.net/clinical_partners/regional_stroke_program/stroke_education_events.asp

The above link will take you directly to the events. However, you may go to www.nwostroke.ca where you will find tabs on the left side of the page. Click on "Stroke Education" and you will find yourself on the above link.

Hemispheres® STROKE COMPETENCY SERIES

Are you interested in learning more about stroke? Do you like to learn independently?

....If you answered yes, take advantage of the Hemispheres Stroke Competency Series, available FREE from the NWORSN for those health care providers working with people with stroke.

What is Hemispheres?

- multi-level, interactive, comprehensive, web-based educational series
- Designed to train all levels of users: nurses, allied health professionals and physicians
- Curriculum is web-based - once you create an account you may log on from any computer
- You will be given a license key code to enter and you will create an account
- You will complete the test in the first module within 1 month of being provided the license key code
- You will complete the entire series within one year of being provided the license key code

Computer Requirements

Your computer must meet the requirements below:

- Internet Explorer 7.0+ (8.0+ recommended), Firefox 1.5+, Safari 3.1+, Chrome 4.0+, Opera 9.64+
- Flash 11.0+
- Cookies must be enabled in your browser
- Screen resolution of 1024 x 768 or greater
- Popups must be allowed in order to view course material
- Adobe Reader is required to view completion and CE certificates.

To view demo go to: http://www.apexinnovations.com/

For more information contact Elaine Edwards Regional Stroke Educator at edwardse@tbh.net or 807-684-6706

Network Activities

WALK WITH DOC

The Stroke Network partnered once again with the Stroke Recovery Network and March of Dimes for the Walk with Doc on June 19, 2014. Dr. Hassan was the "Doc" for the walk. Thank you to Dr. Hassan and Mrs. Hassan who joined in the fun! A big thank you to Fiona McLean for leading the warm ups and cool downs!

We had 62 people participating in this walk. According to June Bjorn Boyer, Program Coordinator, Northern Hearts, the average is around 54 people per night. The weather had been a deterrent for many walks. June points out that our stroke groups are above average every year! Good going everyone!

Call for Nominations

Northwestern Ontario Stroke Champion Award

Each year the Northwestern Ontario Regional Stroke Network (NWORSN) honours a champion in stroke care from our region. The recipient of the NWO Stroke Champion Award is an individual or organization who demonstrates strong leadership, and who goes above and beyond in the areas of professionalism, innovation, advocacy, and communication. They may be described as someone who "inspires by example".

The award winner is an individual who:

- is well known in the stroke community
- has increased the awareness of stroke in NWO or their community
- has promoted best practices in stroke care by being involved with community groups, raising issues with local government or by interacting with the media
- may have served on local committees/ groups in their community to make positive changes to improve quality of life for persons living with stroke
- shows commitment, dedication, and above all excellence in improving stroke prevention, care, recovery or community reintegration

Past winners of the NWO Stroke Champion Award include:

2008 Todd Kennedy, Ontario March of Dimes – Stroke Recovery Network

2009 Denise Taylor, Physiotherapist – Special Rehabilitation

2010 Brenda Mason, Stroke Aboriginal Advisory Committee

2011 Trish Nelson, Director – Physical Rehabilitation (retired)

2012 Dr. John Hargadon, Physiatrist

2013 Irene Erickson, Physiotherapist – Special Rehabilitation (retired)

2014 Marilyn Erwin, Community Stroke Prevention Clinic Nurse

Nomination forms for the 2015 award are available on the NWORSN website www.nwostroke.ca or are available on request by contacting Esmé French at 684-6498 or frenche@tbh.net. The award will be presented in June. Please consider nominating another worthy stroke champion in 2015.

Deadline for nominations is April 10, 2015.

Tele-Visitation Connecting Patients and Families to Support Recovery

It has long been known that recovery for patients requiring lengthy stays far from home (for specialized treatments or rehabilitation) can be adversely affected by feelings of loneliness or homesickness. Winter is an especially difficult time for travelers in Northwestern Ontario, and can result in the cancelling of visits to loved ones far away. If you or a loved one has been in isolation before, you understand the fear and anxiety that comes from not being able to see or talk with family and friends. It's not just the separation – it's that feeling that you literally cannot be there at a time when they might need you most. Visits with family and friends play an important role in the care, support and recovery of our patients and clients.

Thunder Bay Regional Health Science Centre (TBRHSC) and St. Joseph's Care Group (SJCG) are now able to provide virtual visits "Tele-Visitation" for their patients requiring care in Thunder Bay. A tele-visit allows family and friends to see and talk to each other in real time using secure video-conferencing technology; removing barriers caused by expenses, geography, or weather.

Tele-visitation itself is not new to TBRHSC, but until recently, tele-visitation strictly meant connecting an in-patient at TBRHSC via video conferencing technology to a loved one at a telemedicine studio at another hospital or nursing station. Last year TBRHSC's Telemedicine Department, in partnership with the Ontario Telemedicine Network (OTN), launched a pilot project to investigate the possibility of enhancing the service so that patients' loved ones would be able to tele-visit from a home computer. A key component is security so that a patient's privacy is protected.

"We're now able to securely connect family members anywhere to the patient as long as they have a personal computer, webcam and an Internet connection," says Trina Diner, Manager, Palliative Care and Telemedicine. *"Our focus is on helping people get better and a big part of that is staying connected to their loved ones. Tele-visits play such an important part in people's recovery."*

Marilyn Erwin, Riverside's Stroke Prevention Clinic Nurse in Fort Frances reports that in the past, some stroke survivors, who would have greatly benefitted from transfer to a specialized stroke unit, have voluntarily forfeited their right to this care. Some patients have told her that fear of further isolation and loneliness has been the reason for their choice. She states *"... this (tele-visitation) is an important step in the right direction for care of our patient's emotional health."*

Patients can request a videoconference simply by talking to their nurse, doctor, or staff member. The Telemedicine Department takes care of all the details including scheduling times.

Tele-Visitation Contacts

Thunder Bay Regional Health Sciences Centre: 807-684–6715 or telemedicine@tbh.net

St. Joseph's Care Group: 807-343-2431 ext. 2525 or hosptelemed@tbh.net

With thanks to Robin Cano, Steve Coghill, Trina Diner, Marilyn Erwin, Donna Faye and Graham Strong for background, content and photographs.

NOW AVAILABLE
Taking Charge of Your Stroke Recovery

NOW AVAILABLE: "Taking Charge of Your Stroke Recovery: A Survivor's Guide to the Canadian Stroke Best Practice Recommendations" and "Post-Stroke Checklist".

Canadian medical experts recently developed the publication: **Taking Charge of Your Stroke Recovery: A Survivor's Guide to the Canadian Stroke Best Practice Recommendations.** This document, geared at stroke survivor's and their families outlines key recommendations for the best care and best possible outcomes for someone who has had a stroke. The document stresses the need for stroke survivor's to 1. "Be informed and learn about stroke", 2. "Be involved and be part of the process" and 3. "Take action and do what needs to be done to get better".

The Post-stroke Checklist is included as the last page of the guide and can help stroke survivors start a conversation about issues they may be experiencing. The checklist can be filled out before every medical appointment. It gives stroke survivors an ongoing record of their progress and makes it easier for the healthcare team to understand how patients/clients are doing and to guide referrals or follow-up care that may be needed.

Available online at Canadian Stroke Best Practices: www.strokebestpractices.ca

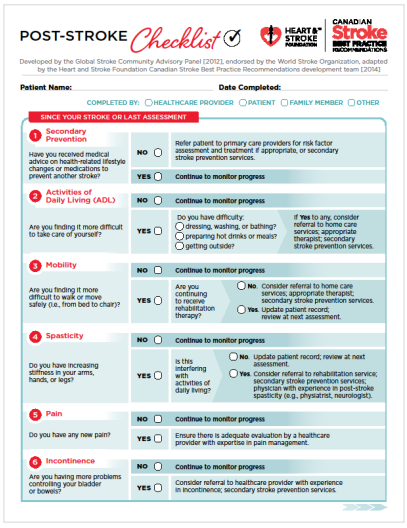
Stroke in Young Adults

A 60-page resource book, has been developed by the Canadian Partnership for Stroke Recovery in partnership with the University of Toronto Stroke Program and the Heart and Stroke Foundation. The resource book for patients and families will be available for download at www.canadianstroke.ca beginning in early January. Printed copies can be ordered by emailing cathy@canadianstroke.ca

Updates to Stroke Engine website

The Canadian Partnership for Stroke Recovery is now the primary funder of the popular Stroke Engine website, led by Dr. Annie Rochette and her team at the Universite de Montreal. The site provides valuable information on post-stroke therapies for patients and clinicians, as well as downloadable assessment tools. Stroke Engine is the go-to place for information on stroke recovery.

The site is undergoing a complete reorganization and redesign. Content is being updated and, when the site is relaunched, all material will be available in French as well as English. The new and improved Stroke Engine is expected in early 2015.


POST-STROKE Checklist

Developed by the Global Stroke Community Advisory Panel (2012), endorsed by the World Stroke Organization, adapted by the Heart and Stroke Foundation Canadian Stroke Best Practice Recommendations development team (2014)

Patient Name: Date Completed:

COMPLETED BY: HEALTHCARE PROVIDER PATIENT FAMILY MEMBER OTHER

SINCE YOUR STROKE OR LAST ASSESSMENT

1 Secondary Prevention: Have you received medical advice on health-related lifestyle changes or medications to prevent another stroke?	NO	Refer patient to primary care providers for risk factor assessment and treatment if appropriate, or secondary stroke prevention services.
	YES	Continue to monitor progress
2 Activities of Daily Living (ADL): Are you finding it more difficult to take care of yourself?	NO	Continue to monitor progress
	YES	Do you have difficulty: dressing, washing, or bathing? / preparing hot drinks or meals? / getting outside? — If Yes to any, consider referral to home care services; appropriate therapist; secondary stroke prevention services.
3 Mobility: Are you finding it more difficult to walk or move safely (i.e., from bed to chair)?	NO	Continue to monitor progress
	YES	Are you continuing to receive rehabilitation therapy? — No: Consider referral to home care services, appropriate therapist; secondary stroke prevention services. / Yes: Update patient record; review at next assessment.
4 Spasticity: Do you have increasing stiffness in your arms, hands, or legs?	NO	Continue to monitor progress
	YES	Is this interfering with activities of daily living? — No: Update patient record; review at next assessment. / Yes: Consider referral to rehabilitation service; secondary stroke prevention services; physician with experience in post-stroke spasticity (e.g., physiatrist, neurologist).
5 Pain: Do you have any new pain?	NO	Continue to monitor progress
	YES	Ensure there is adequate evaluation by a healthcare provider with expertise in pain management.
6 Incontinence: Are you having more problems controlling your bladder or bowels?	NO	Continue to monitor progress
	YES	Consider referral to healthcare provider with experience in incontinence; secondary stroke prevention services.

RESEARCH UPDATES

Run through Clinical Trails

Dr. Ayman Hassan

Socrates - A randomized double-blind, multinational study to prevent major vascular events with Ticagrelor compared to aspiring in patients with acute ischemic stroke or TIA.

Not recruiting/Open

Dr. David Howse

EMBRACE - 30-day Cardiac Event Monitor Belt for recording atrial fibrillation after a Cerebral Ischemic Event.

Dr. Margaret Sweet

Accelerate – Assessment of clinical effects of Cholesteryl Ester Transfer Protein Inhibition with Evacetrapib in patients at a high risk for vascular outcomes.

Dr. Margaret Sweet

IRIS – A randomized, placebo-controlled trial of Pioglitazone, compared with placebo for prevention of stroke and myocardial infarction after ischemic stroke and transient ischemic attack.

Complete

Dr. Margaret Sweet

CLOTBUST-ER – A phase 3, randomized, placebo-controlled, double-blind study of the combined lysis of thrombus with ultrasound and systemic Tissue Plasminogen Activator (tPA) for emergent revascularization (CLOTBUST-ER) in acute ischemic stroke.

Run Outside of Clinical Trials Initiated

Dr. Ayman Hassan

The incidence of carotid artery disease in Northwestern Ontario

Dr. Ayman Hassan

Registry of the Canadian Stroke Network (RCSN)

Esme French

Stroke Self-Management Rehabilitation Trial (SMART)

Laura Swancar

Post-stroke depression screening evaluation strategy

Jill Cameron

Optimizing stroke family caregiver support across the care continuum by improving the timing of intervention delivery

Pipeline

Dr. Margaret Sweet

New evidence-based toolkit for triaging TIA and Non-Disabling Stroke in Northwestern Ontario

Dr. Ayman Hassan

The Ontario Neurodegenerative Disease Research Initiative

Stroke Research Growing in Thunder Bay

According to Brain Canada, 50% of Canadians have had a brain disorder impact their family. Brain disorders are among the leading causes of death in Canada and are the leading cause of disability. They affect 1 in 3 Canadians of all ages. There are more than 1,000 brain and nervous system diseases, disorders, and injuries. The economic burden of these disorders, including lost productivity and psychological costs, is estimated to be $35 billion.

Thunder Bay is well positioned to increase knowledge about recovering from brain injuries such as stroke thanks to a $2.5 million grant from FedNor and Northern Ontario Heritage Fund Corporation provided to the Thunder Bay Regional Research Institute (TBRRI) in 2013 for state-of-the-art MRI and functional MRI (fMRI) equipment.

Dr. Jane Lawrence-Dewar's stroke research took a giant step forward and many more clinical studies will be enabled by this new technology.

"fMRI is becoming a standard technique now for mapping the brain," Dr. Lawrence-Dewar said. "One of the most interesting developments with fMRI is that we are able to examine connectivity – how areas of the brain may interact – rather than just measuring what 'lights up' during a task. That allows us to look at the neural pathways as a whole to see how those networks are disrupted following injury and what new networks lead to improved hand function following rehabilitation."

Using this method, Dr. Lawrence-Dewar is investigating how the brain "rewires" itself after a stroke, reorganizing function to regain lost motor ability. Ultimately her goal is to optimize rehabilitation methods and develop new tools to improve recovery of hand function for better patient outcomes.

To learn more about research at TBRRI and TBRHSC visit www.tbrri.com

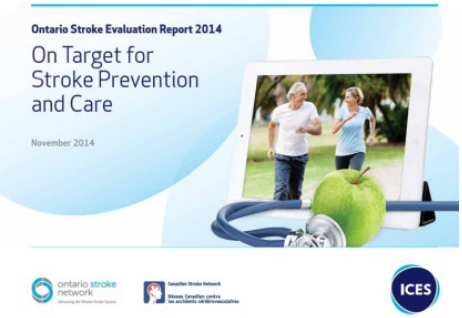
Upcoming study on a community based hand rehabilitation program for stroke survivors in Thunder Bay

A stroke can impact on an individual's ability to function independently, particularly if hand function is affected. Improvements in hand function have been linked with improved quality of life, as individuals are better able to manage various activities of daily living such as bathing, eating, and getting dressed with greater independence.

A group of four Thunder Bay residents (Dr. Jane Lawrence Dewar, Ms. Kirsti Reinikka, Mr. Daniel Vasiliu, and Mr. Vineet Johnson) are investigating the role of a community based hand rehabilitation program for stroke survivors in Thunder Bay. The primary objective of their research is to examine the impact of a specially designed piece of equipment on enhancing hand function in stroke survivors. In order to better understand the processes involved in recovery post-stroke, changes in muscle and brain function that may be associated with improvements in hand function, will be investigated. In addition, the team aims to develop and produce the equipment as an affordable and means to improve hand function in stroke survivors worldwide.

The research team intends to begin the project with local stroke survivors in 2015 with funding recently received from the Thunder Bay Community Foundation. These researchers from Lakehead University, Thunder Bay Regional Research Institute and St. Joseph's Care Group are highly motivated to develop a Northern Ontario grown solution for a global issue facing many stroke survivors.

EVALUATING STROKE CARE



Ontario Stroke Evaluation Report:

On Target for Stroke Prevention and Care

Hall R, Khan F, O'Callaghan C, Kapral MK, Levi J, Cullen A, Wu J, Fang J, Bayley M.

This comprehensive report, published in November 2014, documents progress made by the Ontario Stroke System in the provision of stroke care from 2003/04 to 2012/13 with a particular focus on the Phase 1 Quality Based Procedures (QBP) for stroke. Variations in adult and paediatric stroke care and services are presented by health care sector, Local Health Integration Network (LHIN) and type of health care facility, as well as by patient age group and sex. Recommendations for improving Ontario's stroke care system are provided. New for this year's report is the inclusion of graphical presentation of results to enable easy comparison of progress on best practices over time and of current performance on Phase 1 QBP indicators. Maps are used to illustrate regional or facility performance relative to provincial performance.

Report cards, published in June 2014, that grade progress in the delivery of stroke care for each of Ontario's 14 Local LHINs are also available for 2012/13.

NW LHIN Stroke Report Card

The data in the report is reflective of the care provided to stroke and TIA patients admitted to Ontario hospitals during the 2012/13 fiscal year. The NW LHIN report card provides a year-to-year comparison of performance across nineteen quality care indicators that span the care continuum. The report card also determines the performance level of the NW LHIN (exemplary, acceptable or poor) in comparison to established provincial benchmarks for each indicator.

Overall, the NW LHIN demonstrated an improvement in nine of the nineteen indicators where comparative data were available. NW LHIN strengths include treatment of atrial fibrillation, timely brain imaging and referral to outpatient rehabilitation. The NW LHIN's 30-day mortality rate places it as a high performer provincially.

Areas for improvement and associated or planned activities:

Less than half of those eligible for tPA received the medication. A working group has been instituted in the regional stroke centre with a mandate to improve door-to-needle times. A regional acute stroke working group has been established to review processes related to acute stroke care at the Telestroke site.

The proportion of ALC days to total length of stay in acute care was well above the provincial benchmark. We are working in collaboration with inpatient rehabilitation to streamline patient flow from acute care. We have collaborated with the laboratory, diagnostic imaging, and cardiology to improve timely access to and timely reporting of diagnostic tests and procedures. A geographically designated Regional Stroke Unit is planned for April 1, 2015 at Thunder Bay Regional Health Sciences Unit.

The admission rate for stroke and TIA was almost double the provincial benchmark. Plans are in place to consult with regional stakeholders for the development of a LHIN-wide TIA triage tool that will help to identify the right care in the right place at the right time, with the potential to decrease the number of TIA and minor stroke admissions.

The proportion of inpatient rehabilitation patients achieving the active length of stay target was lower than the provincial benchmark. A dedicated inpatient rehabilitation stroke unit with increased staffing and weekend therapy was implemented over the summer/fall of 2014. Consultations are underway to support the development of a proposal for an early supported discharge service for enhanced community-based care.

The NWORSN, in collaboration with the NW LHIN and it's partners, will continue to use the results of this report card as part of its planning and implementation of the Stroke Quality Based Procedure (QBP) across the region.

Access the link below to view the full report and LHIN report cards.

http://ontariostrokenetwork.ca/about-the-osn/media-centre/ontario-stroke-evaluation-report/

Regional Stroke Centre at TBRHSC Exceeding Targets in Key Indicators

Door to Needle time for tPA administration:

Target is 60 minutes as per Canadian Best Practice Recommendations.

TBRHSC Baseline: 2010/2011 data from the Ontario Stroke Audit - median time = 66.9 minutes.

Ontario: 2012-13 median time = 62.8 minutes

Quarter	Median Time (minutes)
April – June 2014	56.5
July – September 2014	57

"For every minute delay in treating a stroke, the average patient loses 1.9 million brain cells, 13.8 billion synapses, and 12 km of axonal fibres (Saver, 2006)."

Endarterectomy Wait Times:

Target is 14 days as per Canadian Best Practice Recommendations.

Quarter	Median Time (days)
April – June 2014	1.5
July – September 2014	2.5

Northwest Interlink Collaborative

The purpose of the Northwest Interlink Collaborative (NWIC) is to improve delivery of education to caregivers in long term care and retirement homes and to promote interdisciplinary knowledge translation. They are a multidisciplinary group of service providers who are committed to providing evidence-based information and services to long term care and retirement homes. Members include representatives from across the health care continuum.

The Collaborative's activities have involved: sharing information about resources, activities and events; developing a common calendar; collaborating to address common issues in LTC; and determining ways to better support LTC homes. The Northwest Interlink Collaborative meets quarterly, or more often as required.

With thanks to the Lakehead Social Planning Council and 211, the Collaborative has a website at: www.nwinterlink.ca where more information about the collaborative can be found. Also, an educational calendar of events by the various members will be updated regularly.

If you would like more information about becoming a member of NWIC, please contact Heather Woodbeck at 707-0477, NWIC Co-Chair

Stroke Rehabilitation

Time is Function and Every Minute Counts

Best practices stress the importance of providing appropriate levels of **Rehabilitation Intensity** for Inpatient Stroke Rehabilitation. Patients who received total therapy time less than 3 hours per day had significantly lower total functional gain than those treated for greater than 3 hours per day. The daily average and total amount of therapy time provided by OTs, PTs, and SLPs are significantly correlated with gains in activities of daily living, cognition and mobility as well as overall functional improvement on the Functional Independence Measure.

Rehabilitation Intensity Definition: *The amount of time the patient spends in individual, goal-directed rehabilitation therapy, focused on physical, functional, cognitive, perceptual and social goals to maximize the patient's recovery, over a seven day/week period. It is time that a* ***patient*** *is engaged in active face to face treatment, which is monitored or guided by a therapist.*[2]

Rehabilitation Intensity entails:

- An individualized treatment plan involving a minimum 3 hours of direct task-specific therapy per day by the core therapies (OT, PT, SLP, OTA, PTA, CDA)[1,3,4,] for at least six days per week[1,3]
- Does not include groups
- Maximum of 33 percent of therapy time with therapy assistants
- Documentation of time from the patient perspective with co-treatment time split between the treating therapists

As of April 1, 2015 Rehabilitation Intensity data collection and reporting in NRS will be mandatory for patients with stroke in designated rehabilitation beds. Although the data collection is only mandatory for designated rehabilitation beds, the minimum of 3 hours of intensive therapy per day is suggested for all services that provide rehabilitation to stroke patients.

For more information on Stroke Rehabilitation Intensity:

Recorded OTN session: http://mediasite.otn.ca/Mediasite/Play/dbfc79f8b90449a7bff9fdba0a9bd3f01d?catalog=fd668812-d87c-47f9-b1ba-6d979fed9af4.

OSN Communique and FAQ's

http://ontariostrokenetwork.ca/stroke-rehabilitation-resource-centre/wp-content/uploads/sites/2/2014/01/OSN-Rehabilitation-Intensity-Communique-June-2014.pdf

http://ontariostrokenetwork.ca/stroke-rehabilitation-resource-centre/wp-content/uploads/sites/2/2014/01/OSN-Rehab-Intensity-FAQs-July-2014.pdf

Please contact Esmé French, frenche@tbh.net or 807-684-6498 for any questions.

Stroke Survivor's Success Story

Mr. Melvin Jourdain suffered a stroke last year and spent several months at St.Joseph's Hospital undergoing rehabilitation. He was transferred back to LaVerendrye Hospital in Fort Frances where he spent Christmas and New Years while his apartment was being set up for independent /wheelchair living. Mr. Jourdain receives daily help at home in a seniors complex, and utilizes accessible transportation services to get out as much as possible. From his motorized wheelchair he joined the Moving on After Stroke (MOST) group participating via videoconference with group members and facilitators in Thunder Bay. Once it had finished he wanted to continue meeting and learning from his peers. With great enthusiasm he then went on to join the Living With Stroke group in the spring and following its conclusion became one of the "founding members" of the Fort Frances "friends" stroke group now meeting monthly. Not challenged enough, he asked if he might take part in the next MOST group as a volunteer. Now, twice a week he comes in before the group starts to collect glasses, pitcher and ice. These he takes to the meeting room, balancing the water filled pitcher on the foot plate of his motorized wheelchair. Once the meeting begins, he is there on hand with a list of extension numbers to call in case of technical difficulties, problems with furniture in the room, or in the event of an emergency. One could say that Mr. Jourdain will certainly continue in his journey of stroke recovery and is an inspiration to other stroke survivors.

Thank you and acknowledgments to Mr. Jourdain and Marilyn Erwin, Stroke Prevention Nurse – Riverside Health Care Facilities, Fort Frances and for sharing this story.

Long-Term Care Corner

The Regional Geriatric Program Central (RGPc) website contains considerable best practice (BP) resources and tools for free. The website is: http://www.rgpc.ca/index.cfm

The index is simple to use. For example if you wish to see all the Stroke BP Bloggers, just type that in the search line. Index site: http://www.rgpc.ca/resource/index.cfm

The Regional Geriatric Program central (RGPc), located at St. Peter's Hospital in Hamilton, is one of 5 regional geriatric programs (RGPs) located in Ontario:

- Hamilton
- London
- Toronto
- Kingston
- Eastern Ontario

All RGP sites are affiliated with Academic Health Science Centres. The RGPc is affiliated with McMaster University and sponsored by Hamilton Health Sciences.

Stroke Prevention Clinics

Fort Frances (CSPC)
La Verendrye General Hospital
807-274-3266 ext. 4542

Kenora (CSPC)
Lake of the Woods District Hospital
807-468-9861 ext. 2528

Marathon (CSPC)
Wilson Memorial General Hospital
807-229-1740 ext. 289

Sioux Lookout (CSPC)
Meno Ya Win Health Centre
807-737-2877 ext. 5112

Thunder Bay (SSPC)
Thunder Bay Regional Health Sciences Centre
807-684-6700

Secondary Stroke Prevention Clinic (SSPC)

Upon referral, patients who experience a transient ischemic attack (TIA) or who have had a stroke see a neurologist, nurse practitioner and dietitian. This program addresses stroke prevention in a coordinated and interprofessional manner based on best practices and also educates patients regarding lifestyle changes to modify risk factors for stroke.

Community Stroke Prevention Clinics (CSPC)

Patients with stroke and TIA are seen to monitor risk factors and assist with strategies to prevent reoccurrence.

Telestroke Sites

Dryden
Dryden Regional Health Centre
807-223-8200

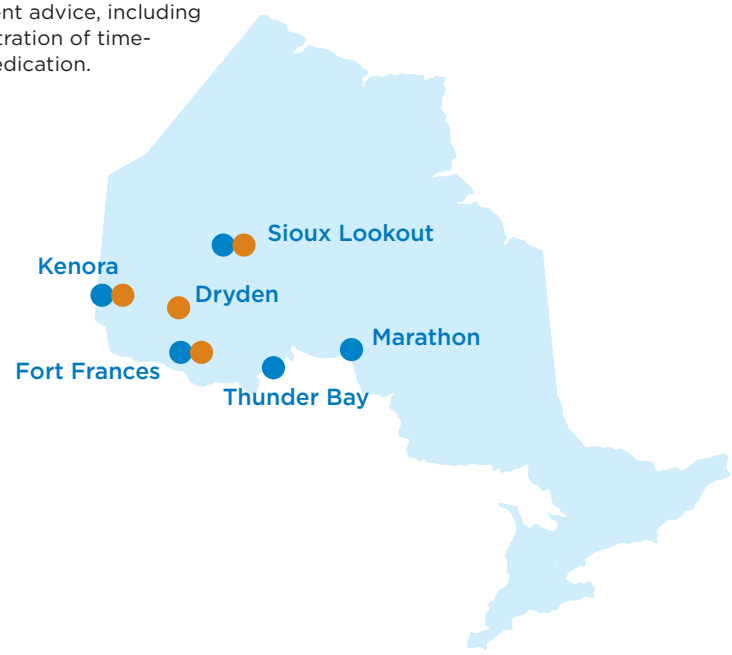
Fort Frances
La Verendrye General Hospital
807-274-3266

Kenora
Lake of the Woods District Hospital
807-468-9861

Sioux Lookout
Meno Ya Win Health Centre
807-737-3030

Telestroke
The Telestroke Program provides stroke patients in remote areas of the province with 24/7 access to life-saving emergency care that they might not receive without this real-time expert neurological assessment.

Emergency Physicians use Ontario Telemedicine Network to connect with neurologists to obtain urgent diagnosis and treatment advice, including the administration of time-sensitive medication.



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