Champlain Regional Stroke Network
Quarterly Steering Committee Communiqué

1. Establish Stroke Units at High Volume Stroke Centres

The Champlain Regional Stroke Network (CRSN) has successfully implemented the following Stroke Unit/Cohorts in the Champlain Region:

- The Ottawa Hospital, Civic Campus - 2003
- Pembroke Regional Hospital (PRH) - 2004
- The Ottawa Hospital, General Campus – January 2012
- Cornwall Community Hospital (CCH) – December 2013
- Montfort Hospital – November 2014
- Queensway Carleton Hospital (QCH) – April 2015

The CRSN best practice team continues to support and work closely with designated Clinical Coaches and Primary Contacts at each Stroke Unit/Cohort site. The CRSN encourages all sites to direct any questions to: strokeunitquestions@toh.on.ca

The CRSN provides numerous educational events, webinars, regional rounds and other resources throughout the year to support stroke best practices. Information about educational events can be found on the CRSN website.

The Ontario Stroke Network (OSN) has defined a Stroke Unit as “A geographical unit with identifiable co-located beds (eg 5A-7, 5A-8) that are occupied by stroke patients 75% of the time and have a dedicated inter-professional team with expertise in stroke care with the following professionals at a minimum: nursing, physiotherapy, occupational therapy, speech language pathologist.”

The Ministry of Health and Long Term Care and OSN have worked with Canadian Institute for Health Information (CIHI) to have the OSN definition of a stroke unit be included in the CIHI Discharge Abstract Database (DAD) abstracting manual update. Effective July 1st, 2016, this definition has been added to DAD Special Project 340 and 640, which will support Quality Based Procedure (QBP) implementation across the province and improve data quality.

As of October 2016, the Champlain Regional Stroke Centre (The Ottawa Hospital, Civic Campus) designated 12 beds (10 on F7/D7 and 2 on NACU) to join PRH as the second site in Champlain to officially meet the OSN definition of ‘Stroke Unit’. The Ottawa Hospital QBP working group, Performance Measurement and Decision Support worked with the CRSN to launch the ‘Stroke Unit’. They also created a dashboard to capture relevant metrics in line with the Ontario Stroke Report Card and QBP indicators. Also note, the CRSN BPT has been temporarily (80% of BPT FTEs until March 2017) designated to the Civic unit to support the implementation. All learnings and experiences around the planning, processes and metrics will be disseminated through the Champlain Regional Stroke Prevention and Acute Care Committee (CRSPACC).

The four additional stroke unit/cohorts, housed on medicine units, have been asked to identify their barriers to meeting the definition. Occupancy, designating beds, staffing resources and patient flow seem to be the largest challenges. The CRSPACC has identified a need for support from the LHIN to move towards meeting this definition. The CRSN is eager to support the stroke cohorts and will begin the initial dialogue with the LHIN to discuss the gaps and challenges for stroke cohorts in Champlain.

CRSN Participants: Whitney Kucey, Dr. Grant Stotts, Isabelle Martineau, Lise Zakutney, Karen Mallet, Moira Teed, Marianne Thornton, Laura Dunn, Fred Beauchemin, Dr. Debbie Timpson, JoAnn Tessier, Therese Antoun, Donna Cousineau
3. Stroke Door-to-Transfer Time

TOH-Civic and Bruyère’s Door-to-Transfer Time Working Group continue to discuss process improvements for decreasing the time between stroke onset and admission to inpatient stroke rehabilitation. One of the more recent initiatives is to submit a rehab application for all stroke patients with an AlphaFIM score in the moderate range (41-80) on day three of admission to acute care. This is a significant change for both hospitals and the Transitional Care Team; however, it is expected that efficiencies and quicker access to rehabilitation should result. Total LOS for this group of patients at TOH-Civic continues to hover around 20 days.

In the Eastern Counties work has begun between the two major referral sources to Glengarry Memorial Hospital’s stroke rehabilitation program. HGH, GMH, and CRSN met to discuss their processes and identified some opportunities to provide faster access to rehab for HGH stroke patients. CCH and GMH have reviewed data and their processes as well and will meet in January to determine how to best move forward. PRH has leading performance in Ontario for DTTT.

CRSN Participants: Dr. Grant Stotts, Dr. Christine Yang, Anne Mantha, Beth Donnelly, Whitney Kucey, Isabelle Martineau, Kathy Greene, Fred Beauchemin, Sean Gehring, Susan Longbottom, Angela Ryan, Sherry Daigle, Sophie Parisien, Chantal Mageau-Pinard, Jo-Ann Tessier
4. Ischemic Stroke/TIA Atrial Fibrillation Management

On the 2012/13 Ontario Stroke Network (OSN) report card, Champlain performance for this indicator was 78.6%. The provincial benchmark is 87.4%. CRSN strategic goal #4 - Increase the proportion of ischemic stroke/TIA patients with atrial fibrillation prescribed or recommended anticoagulant therapy on discharge from acute care to ≥87.4% was created to meet the provincial benchmark. Of note, no additional data has been available regarding Champlain performance of this indicator and subsequent report card have noted this indicator as grey.

Supported by the CRSPACC and the CRSN, a site audit was conducted for FY 2014/15 at TOH, PRH, CCH, HDGH and Montfort. This audit was completed to evaluate performance in regards to management of atrial fibrillation with anti-coagulant therapy at inpatient stroke units, emergency departments and regional SPCs.

The audit and analysis are now complete and detailed site level data has been presented to TOH, PRH, CCH, HDGH and Montfort management.

Performance for this indicator at audited centres for SPC, Inpatient and ED is now at 92% for FY 2014/2015.

5. 72 Hour Alpha-FIM Completion Rate

The AlphaFIM® is an instrument that provides a consistent method of assessing patient disability and functional status in the acute care hospital. The AlphaFIM® serves two separate functions: (1) post-acute triage tool for stroke, and (2) outcome measure for tracking functional status at various points in time and to identify change over time.

The Canadian Institute for Health Information (CIHI) implemented Project 740 to add mandatory AlphaFIM® fields for all stroke admissions to the Discharge Abstract Database (DAD) in October 2014. The Champlain region’s target completion rate (AlphaFIM® completed within 72 hours of admission) is ≥80%. In an effort to improve performance, the CRSPACC reviews completion rates (generated from Project 740) and focuses on identifying strategies or supports that have been shown to increase/improve the 72 hour AlphaFIM® completion rate. (e.g. quality assurance strategies).

Ongoing QA is recommended to help identify missed assessments or coding errors and establish strategies for improvement, which should be communicated to the management as well as the front line clinicians.

Ongoing data has shown improvement and steady progress in terms of AlphaFIM® completion rates across all stroke unit/cohort sites:

<table>
<thead>
<tr>
<th></th>
<th>Stroke pt. Discharges</th>
<th>Completed (median)</th>
<th>Within 72 hrs (median)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOH Civic</td>
<td>216</td>
<td>100%</td>
<td>92%</td>
</tr>
<tr>
<td>TOH General</td>
<td>31</td>
<td>100%</td>
<td>84%</td>
</tr>
<tr>
<td>Montfort Hospital</td>
<td>32</td>
<td>94%</td>
<td>72%</td>
</tr>
<tr>
<td>Cornwall Community Hospital</td>
<td>38</td>
<td>68%</td>
<td>66%</td>
</tr>
<tr>
<td>Pembroke Regional Hospital</td>
<td>24</td>
<td>88%</td>
<td>83%</td>
</tr>
<tr>
<td>Queensway Carleton Hospital</td>
<td>27</td>
<td>89%</td>
<td>85%</td>
</tr>
</tbody>
</table>
6. Telerehabilitation

A total of 15 patients have been enrolled into the Telerehab at Home research study since March 14, 2016. All project milestones to date have been met. The research team previously anticipated a hold on recruiting patients because of competing research at TOH, but this was not the case. The research group is optimistic that they will meet the March 2017 deadline, regardless. Work has begun on some of the data analysis parts of the research.

About the research: In this randomized controlled study, the objective is to test the value of providing a mobile platform-based Speech Language Therapy (SLT) program to patients discharged from an acute care hospital with stroke and PSCD and awaiting outpatient rehab services versus standard of care treatment. The study will offer iPad-based SLT/standard of treatment to a convenience sample of 20 patients with post-stroke communication deficits. The primary outcome will be feasibility (recruitment rate, adherence rate, retention rate, and protocol deviations), and the secondary outcome will be improvement in PSCD.

CRSN Participants: Karen Mallet, Beth Donnelly, Jacinthe Lecompte-Collin, Dr. Dar Dowlatshahi, Rany Shamloul

7. Stroke Unit Consolidation

An Acute Transfer & Admission protocol for Renfrew County was developed and approved in February 2015 by the Renfrew County District Stroke Council. The protocol ensures that the County of Renfrew Paramedic Service (CRPS) and Renfrew County community hospitals work collaboratively to transfer stroke patients outside the tPA window to the District Stroke Centre at Pembroke Regional Hospital within 72 hours. 2016/2017 tracking report demonstrated that 5 patients were transferred within 1-2 days from April /16–Oct/16. Two stroke patients remained in community hospitals due to patient choice and transfer back to Arnprior Hospital. Follow up site visits and education will be scheduled for Jan./ Feb. 2017. The pilot will be evaluated in 2017 and the protocol will be scaled to the entire Champlain region if success is demonstrated.

CRSN Participants: Karen Roosen, Whitney Kucey, Janice McCormick, Michel Ruest, James Fahey, Mike Nolan, Penny Price, Sabine Mersmann, Dr. Grant Stotts, Justin Maloney, Laura Dunn
8. Stroke Rehabilitation System Capacity & Allocation

The LHIN’s Sub-Acute Capacity Planning Steering Committee report and recommendations were approved by the LHIN Board at the end of May. The report is available on the LHIN’s website. The CRSN-RNOC Stroke Rehabilitation Sub-Committee discussed the stroke-related recommendations at their meeting in June, and will wait for next steps about implementation from the LHIN.

The report projects a required increase of 18.8 stroke rehabilitation beds (by 2019 and based on 2014/15 bed numbers) to increase total number of stroke rehabilitation beds to 12.7 in Eastern Counties, 33.2 in greater Ottawa and 12.3 in Renfrew County. The report supports the distribution of stroke rehabilitation to three locations across the LHIN; the three locations should be in alignment with the distribution of acute stroke services. The report notes that investment is needed in community based, ambulatory services that ideally located or co-provided in the same organizations that deliver acute stroke and rehabilitation stroke care.

CRSN Participants: Anne MacDonald, Dr. Christine Yang, Dr. Debbie Timpson, Beth Donnelly, JoAnn Tessier, Shelley Coleman, Anne Mantha, Sabine Mersmann, Glenda Owens, Leah Bartlett, Therese Antoun, Fred Beauchemin

9. Systematic Referral to Community Services

The project’s goal is to provide systematic referrals to Stroke Survivor peer support, self management training and HeartWise exercise for those stroke patients who are discharged from acute care hospitalization with no further services (no rehab or CCAC support) or who are clients of the secondary stroke prevention clinic. On the request of the Community & LTC operational committee, an environmental scan was completed during the summer. A report of current discharge practices in five of the six acute stroke units in Champlain was prepared. This helped the shape the design of the pilot.

The Queensway Carleton Hospital (QCH) team and the community partners (SSAO, City of Ottawa and Living Healthy with Chronic Conditions) met on September 13 to discuss and launch the six month pilot. QCH clients of the secondary prevention clinic and those admitted to the acute stroke unit with a mild, non-disabling stroke will be served, using a single referral process. Lessons from The Ottawa Hospital Stroke Prevention Clinic’s e-referral to Living Healthy Champlain pilot were integrated into the project planning and evaluation. Quantitative and qualitative pilot evaluation data will help understand if this referral process is going to help patients and care partners with the transition to the community and to put into practice the stroke prevention advice received. The pilot partners also want to learn whether this referral process is feasible in the long term and whether it could be used in other hospitals.

Key CRSN partners: Melanie Parnell (QCH), Donna Cousineau (QCH), Janet McTaggart (Stroke Survivors Association Ottawa), Anita Findlay (City of Ottawa), Alyssa Hurtubise (Living Healthy with Chronic Conditions), Jennifer Harris (Heart Institute)
Champlain Regional Stroke Network
Quarterly Steering Committee Communiqué

10. <14 Day to Carotid Endarterectomy/Stenting

The 2014 Canadian Best practice recommendations for Stroke note that “Individuals with mild stroke or TIA should have carotid endarterectomy performed within 48 h of symptom onset and within 14 days for patients who are not clinically stable within the first 48 h”. As such CRSN strategic goal #10 - (Achieve a median time from stroke index event to CEA or CAS of ≤14 days for the Champlain region) was developed. Supported by the CRSPACC and the CRSN, a site audit was conducted for FY 2014/15 at TOH, PRH, CCH, HDGH and Montfort. This audit was performed to evaluate performance in regards to revascularization timelines at inpatient stroke units, emergency departments and regional SPC’s.

The audit and analysis are now complete and detailed site level data has been presented to TOH, PRH, CCH, HDGH and Montfort management. Performance for this indicator at audited centres for SPC, Inpatient and ED is now at Median 8 days FY 2014/2015.

Sophia Gocan and SPC team members have published in the Canadian Journal of Neurological Sciences (CJNS) a research project titled “System factors contributing to delays in the delivery of urgent carotid endarterectomy among Stroke Prevention Clinic patients”. This research project explored delays to CEA timelines from regional SPC in Champlain for FY 2011/12, 12/13 and 13/14 (13/14—TOH only). The median time to CEA was 31 days from initial symptom onset of TIA/stroke symptoms. CEA treatment within 2 weeks was achieved for 21% of patients. A follow-up quality improvement analysis for January 2015 to June 2016 was completed to examine quarterly performance of revascularisation at the Ottawa hospital which is the only site that performs revascularisation procedures in the Champlain LHIN. Results from this analysis demonstrate that the median time per quarter to revascularisation ranges between 7 and 13 days which is within best practice targets.

To facilitate a standardized process for revascularisation referrals, The CRSN Stroke Prevention team has developed a regional Symptomatic Stenosis Referral Algorithm for Champlain SPC outpatients. The goal of this algorithm is to improve revascularisation timelines within Champlain to meet Best Practice Recommendations for stroke care — which includes patients having CEA wait times of <14 days from their stroke/TIA event.

CRSN Participants: Sophia Gocan, Aline Bourgoin, Dr. Grant Stotts, Dr. Debbie Timpson
The Champlain CCAC and CRSN submitted an operational evaluation report on the Community Stroke Rehabilitation Program in Stormont, Dundas, Glengarry, and Akwesasne to the Champlain LHIN in November. The document was a report of the services to date, including information and data outlined in the Program’s funding letter and evaluation framework. The report sought to assess the effectiveness and outcomes of the Program between January 25, 2016 and September 30, 2016.

Some highlights include:

- 54 patients referred; 44 patients completed (discharged) the program
- Care strives to be in alignment with Stroke Quality-Based Procedures Recommendations. Average time to first visit was 2.1 days and time to first therapy visit 5.9 days.
- Average LOS was longer than anticipated at 89 days. This is partially attributed to staggered services.
- Patients received an average of 27 visits while in the program. Occupational Therapy and Physiotherapy were most commonly provided, with 90% and 83% of patients receiving the service, respectively.
- Patient outcomes, measured by Return to Normal Living Index (RNLI), and Canadian Occupational Performance Measure (COPM), were very positive.
- 85.7% of patients and families that responded to the patient/caregiver experience survey indicated that the agree or strongly agree that therapists provided information or helped link them to other services in the community.
- Continuous quality improvement is a key component to the Program and will continue. A full evaluation report will be completed in early 2017/18.

The full report was presented to the CRSN-RNOC Stroke Rehabilitation Sub-Committee and C&LTC Operational Committee at their December meetings. For a copy, contact Beth Donnelly (bedonnelly@toh.ca).

Key CRSN partners: Jeanne Bonnell (CCAC), JoAnn Tessier (Cornwall Community Hospital), Chantal Mageau-Pinard (Glengarry Memorial Hospital), Dr. Debbie Timpson (Pembroke Regional Hospital), Steve Archer, Leah Bartlett (LHIN), Marc Tessier (Centre de santé communautaire de l’Estrie)
All stroke rehabilitation programs in the Champlain LHIN use the RM&R as the standard application form. All six acute stroke unit/cohort hospitals use the RM&R to refer to the stroke rehabilitation programs in the LHIN. Pembroke Regional Hospital targeted the launch of the RM&R in early FY16/17, however, had initially been delayed. There was an idea that some hospitals’ had adjusted or altered the RM&R, for example: items re-ordered, moved, deleted, added, changed formatting to be paper and fax friendly. Each hospital’s form copy was collected and compared to the provincial standard (Cluster 3: Rehab and CCC). Insignificant adjustments from the provincial standard RM&R form were found. Now that RM&R launch at PRH, the CRSN-RNOC Stroke Rehabilitation Sub-Committee will submit this operational goal as complete.

CRSN Participants: Dr. Debbie Timpson, Dr. Christine Yang, Janice McCormick, Chantal Mageau-Pinard, Whitney Kucey, Beth Donnelly, Fred Beauchemin, Anne MacDonald, Julie Budd

13. Vascular Disease Online Education

Following the pilot and evaluation of an integrated Vascular Health Education program in Renfrew County from June 2014- March 31, 2016, regional interest had been expressed to revise and leverage a vascular health education model across the Champlain LHIN. To date 4 meetings occurred between the LHIN, regional stroke, cardiac & diabetes networks to discuss components of an educational framework based on the following principals: collaborative partnerships, client centred approach, supportive of CDSM, aligned with best practice guidelines for the prevention & management of vascular disease and improved awareness / access to local supporting resources. Representatives from each regional network have stepped forward to participate in the development of a Champlain Vascular Health Education Program. A patient focus group has been scheduled for Dec. 8 to seek client input and inform the development of this educational session.

CRSN Participants: Karen Roosen, Marianne Thornton, Lisa Keon, Rachel England
Champlain Regional Stroke Network
Quarterly Steering Committee Communiqué

14. Stroke Quality Based Procedures Education

This goal is completed as defined by the strategic planning process. There is ongoing education that will continue as requested/required and we continue to monitor and assess the situation.

CRSN Participants: Marianne Thornton, Beth Nugent, Whitney Kucey, Lise Zakutney, Karen Mallet, Isabelle Martineau, Moira Teed, Chantal Mageau-Pinard, Charline Boudreau, Dr. Heidi Sveistrup, Peggy Wallace, Stephanie Crampton, Carmen Sanchez, Jeanne Bonnell, Prudy Menard, Crystal Graham, Tracey Bungay, Kristie Tousignant, Rachel England

15. Stroke Unit Orientation Modules

The standard for training of new staff in CRSN stroke units includes the Apex Hemispheres modules. The uptake of these modules has been very good with feedback that the new staff are much better informed and educated when they have completed these modules prior to beginning to work on the stroke units. Completion of the NIHSS module that is the final module of the Hemispheres series comes with a certificate that expires after one year. An initiative is underway to work with sites to ensure that nurses recertify annually or biannually.

Dysphagia Screening Module

The dysphagia screening module that the team developed at Montfort with input from Karen Mallet, SLP with the CRSN BPT is completed in French and has been translated to English. We have shared the French translation with the hospital in Outaouais and it is being used at Montfort hospital.

With the English one close to completion we are asking each hospital to respond how they could incorporate this into their learning system (LMS). This would be preferred so that staff can more easily access the modules. Alternatively, sites could access the module through the CRSN website.

The regional rollout of the online modules implementation is targeted for early 2017. Karen Mallet hopes to be able to put together some education resources/ideas including the e-module in order to ensure a smooth transition of tools and education across the region. Because of competing priorities at various sites, there may be staggered go-live dates.

The module may be included as part of the package available to the region for those wishing to have it on their LMS. The module is scorm compliant and available to be used by various sites by uploading onto their LMS. Each site can track who completed the module through their LMS. Educators at each site will report the usage of the module to CRSN through the education committee. If changes are made to the module by any site or individual, the group/person making the change would need to explicitly state what change was made in a slide at the end to clearly identify who is responsible for the new content.

Further module development or use of existing modules will be discussed by the education committee with consultation from the Best Practice Team to complement on-site training.

CRSN Participants: Marianne Thornton, Whitney Kucey, Lise Zakutney, Karen Mallet, Isabelle Martineau, Moira Teed, Kristie Tousignant, Chantal Mageau-Pinard, Charline Boudreau, Dr. Heidi Sveistrup, Peggy Wallace, Stephanie Crampton, Crystal Graham, Prudy Menard, Carmen Sanchez, Jeanne Bonnell, Rachel England