Communiqué 2:

STROKE GUIDELINE IMPLEMENTATION

Toronto Central LHIN
MSK/Stroke Implementation Group
IN DECEMBER 2012, THE TORONTO CENTRAL LHIN (TCLHIN) ESTABLISHED THE MSK/STROKE IMPLEMENTATION GROUP TO SUPPORT IMPLEMENTATION OF BEST PRACTICES RELATED TO TOTAL JOINT REPLACEMENT, HIP FRACTURE AND STROKE. ONE OF THE PRIORITIES OF THE GROUP IS TO KEEP STAKEHOLDERS INFORMED AND ENGAGED THROUGHOUT THE PROJECT.

THE PURPOSE OF THIS COMMUNIQUÉ IS TO PROVIDE AN UPDATE ON KEY ACTIVITIES SUPPORTING IMPLEMENTATION OF THE RECOMMENDED STROKE FLOW GUIDELINES. SUBSEQUENT UPDATES WILL FOLLOW THROUGHOUT 2013/14.

Goals of the Recommended Stroke Flow Guidelines

- Re-organize acute stroke services to ensure access to acute ‘stroke units’ with critical mass to achieve best practice care
- Increase access to timely and appropriate rehabilitation
- Implement defined ‘best practices’ including administrative and clinical processes for acute and rehabilitation services (inpatient and outpatient)

The TCLHIN MSK/Stroke Implementation Group is working to ensure alignment of the Stroke Flow Guidelines with the newly released Quality Based Procedures (QBP) clinical targets and practices.

Additional Funding Allocated to Support Costs Associated with Establishing Outpatient Rehabilitation Services

In 2012/13, the TCLHIN invested $1.9 million to support further implementation of the orthopaedic/stroke best practices. The funding will support costs associated with transitional and/or one-time expenses that were incurred by hospitals to advance implementation of orthopaedic and stroke rehabilitation best practices.

The Toronto Stroke Networks are leading and supporting the organizational and system changes required to implement the recommended stroke flow guidelines.
Achieving full implementation of the ‘desired state’ standards for stroke

**ACUTE STROKE UNITS**

- Minimum volume 200 patient admissions/year (QBP target: 165)
- Minimum 6 bed unit for the minimum volume
- Minimum number of beds supported by appropriate allied health staffing (7 days/week): 1 FTE PT; 1 FTE OT; 0.6 FTE SLP
- Commitment to staff education including the use of common assessment tools (AlphaFIM®, CNS/NIHSSS, etc.)
- Transfer of patients to rehabilitation on day 5 (ischemic stroke) and day 7 (hemorrhagic stroke)

**INPATIENT STROKE REHABILITATION**

- 7 days/week admissions
- 40% of stroke patients leaving acute care to inpatient rehabilitation
- New lengths of stay targets based on stroke severity (RPG)**

**QBP targets:**
- RPG 1100 = 48.9 days (severe/most complex)
- RPG 1110 = 41.8 days
- RPG 1120 = 25.8 days
- RPG 1130 = 25.2 days
- RPG 1140 = 14.7 days
- RPG 1150 = 7.7 days
- RPG 1160 = 0 days (mild/least complex)

- Increased inpatient therapy intensity

**QBP targets:**
- 3 hours of OT/PT/SLP per patient per day/6-days/week
  1:6 therapist bed ratios for PT and OT and 1:12 for SLP

- Increased number of patients with severe stroke accessing high intensity inpatient rehab

**TC LHIN Best Practice Target**

**RPG admission volumes**
- Severe: 41.5%
- Moderate: 49.5%
- Mild: 9%

*The provincial standards and the development of the QBP are being led by Health Quality Ontario and the Ontario Stroke Network in partnership with Regional Stroke Networks and LHINS across the province.*

**OUTPATIENT STROKE REHABILITATION**

- Outpatient programming for patients with mild stroke and for those with moderate and severe stroke discharged home from inpatient rehabilitation
  
  Access within 2 weeks of discharge from acute care
  
  Recommended intensity 1 hour each of PT/OT/SLP 2-3 x/week for 8-12 weeks

- Early Supported Discharge (ESD)* programs for all inpatients to support transition home.

**SECONDARY PREVENTION**

- Access to timely secondary prevention diagnostics and services

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* ESD programs to be developed in Phase 2 (refer to handbook at link below)

** Resource Patient Groups (RPG) is a methodology used to categorize client data submitted by participating organizations to CIHI’s National Rehabilitation Reporting System (NRS) database. Based on a client’s reason for receiving inpatient rehabilitation services, and using the client’s admission age and admission motor and cognitive functional status scores, client episodes are assigned to 1 of 83 RPGs. Upon discharge, episodes are then weighted based on their length of stay, RPG and associated Rehabilitation Cost Weights.

Recent Activities & Milestones

Consolidation of Acute Stroke Services

*Stroke unit hospitals have committed to a specialized geographically defined unit served by dedicated staff with expertise in stroke care.*

Acute stroke services have been re-organized and consolidated at fewer hospitals. As a result, there are now nine (9) confirmed Stroke Unit Hospitals in the Toronto Area.

**Status of Committed Acute Stroke Unit Hospitals**

<table>
<thead>
<tr>
<th>In place</th>
<th>In progress</th>
<th>Non stroke unit hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Humber River Hospital – Church site</td>
<td>9. Rouge Valley Health System – Centenary site</td>
<td>• Humber River Hospital – Finch site</td>
</tr>
<tr>
<td>2. North York General Hospital</td>
<td></td>
<td>• Mount Sinai Hospital*</td>
</tr>
<tr>
<td>3. Sunnybrook Health Sciences Centre* (SHSC)</td>
<td></td>
<td>• The Scarborough Hospital – Birchmount site</td>
</tr>
<tr>
<td>4. St. Michael’s Hospital*</td>
<td></td>
<td>• University Health Network (UHN) – Toronto General Hospital*</td>
</tr>
<tr>
<td>5. The Scarborough Hospital – General site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Toronto East General Hospital*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. University Health Network (UHN)– Toronto Western Hospital*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. St. Joseph’s Health Centre*</td>
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</tr>
</tbody>
</table>

* TCLHIN hospitals

These organizations are aligning their stroke care practices in accordance with the standards that have been established for acute stroke unit care.
Update on Current Progress

Acute stroke unit hospitals are at varying stages of implementing the stroke flow guidelines. While ongoing attention is required to meet the targets, a number of milestones have been achieved. These include:

- **Consolidation of inpatient volumes with protocols implemented to shift volumes from:**
  - UHN- Toronto General to UHN- Toronto Western Hospital.
  - Mount Sinai Hospital to UHN- Toronto Western Hospital.

  Protocols are in process for volume shifts at other multisite hospitals including Humber River Hospital and The Scarborough Hospital.

- **Progress in achieving dedicated staffing standards with:**
  - 3 of the 9 acute stroke units have achieved the target of 7-days/week access to PT, OT, and SLP (Sunnybrook Health Sciences Centre; UHN- Toronto Western Hospital; and North York General Hospital).
  - 2 of the 9 hospitals have established a core team of dedicated nurses for their stroke units (St. Michael’s Hospital, UHN- Toronto Western Hospital).

- **Improvements in priority flow processes have been implemented across the Toronto area to ensure that stroke patients move quickly to the designated acute stroke units.**

- **Implementation of new and revised citywide protocols to support pre-hospital care and early access to hyper-acute treatment at the three Regional Stroke Centres (i.e., SHSC, St. Michael’s Hospital and UHN-Toronto Western Hospital). These protocols include:**
  - A new “Walk-In” Code Stroke Protocol for all Emergency Departments
  - A revised Memorandum of Understanding for Medical Redirect and Repatriation among hospitals including Toronto Emergency Medical Services. (This includes updated parameters for repatriation of appropriate cases to local community stroke unit hospitals.)
  - Standardized communication and documentation across the system to safely support transitions of care
  - Creation of an incident reporting process and tracking form to support continuous improvement within the system
Strengthening Rehabilitation Programs to Support Recovery

*Time to rehab referral has been reduced system-wide by approximately one day.*

Status of rehab hospital programs

In the TCLHIN, outpatient rehabilitation programs for stroke are being co-located with inpatient rehabilitation programs at the following hospitals:

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Inpatient rehab - stroke</th>
<th>Outpatient rehab - stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baycrest</td>
<td>In Transition*</td>
<td></td>
</tr>
<tr>
<td>Bridgepoint Active Healthcare</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providence Healthcare</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sunnybrook Health Sciences Centre (SHSC) - St John’s Rehab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>University Health Network (UHN) – Toronto Rehab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>West Park Healthcare Centre</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* Baycrest is transitioning out of stroke care with volumes being consolidated at other hospitals to achieve critical mass for quality and efficiency.

These hospitals are committed to offering both inpatient and outpatient rehabilitation for stroke and are working towards increasing access to timely and appropriate rehabilitation in accordance with the ‘desired state’ for stroke rehabilitation.

Update on current progress

<table>
<thead>
<tr>
<th></th>
<th>Bridgepoint</th>
<th>Providence</th>
<th>SHSC – St. John’s</th>
<th>UHN – Toronto Rehab</th>
<th>West Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct access to OP rehab from acute care</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓ *</td>
<td></td>
</tr>
<tr>
<td>Access to OP rehab within 2 week target</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7 days/week admission to rehab</td>
<td></td>
<td>5 days/week</td>
<td>✓</td>
<td>6 days/week</td>
<td>6 days/week</td>
</tr>
<tr>
<td>Staffing levels for 6 days/ week therapy &amp; 3 hrs therapy/patient/day</td>
<td>3 hrs therapy 5 days/week (+ limited weekend therapy)</td>
<td>2.4 hrs therapy 5 days/week</td>
<td>2.4 hrs therapy 5 days/week</td>
<td>✓</td>
<td>2.5 – 3.5 hrs therapy 5 days/week</td>
</tr>
<tr>
<td>Increase in # severe stroke admissions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved LOS targets based on stroke severity (RPG)</td>
<td></td>
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</tbody>
</table>

On February 1, 2013, a triage tool was implemented system-wide to support efficient referral processes, clinical decision-making and transitions to appropriate levels of rehabilitation. The initial focus is being placed on moderate stroke patients with the goal of facilitating automatic transfer to high-intensity rehab programs.

*For UHN – Toronto Western Hospital patients only*
Stroke Networks Focus on Education & Knowledge Translation

The Toronto Stroke Networks have developed a comprehensive Education and Knowledge Translation Strategy to enable cross-system collaboration, strengthen relationships and trust within the system, and support leaders and providers in adoption of recommended practices as an expected standard of care for stroke. Two of the core outcomes of this strategy are:

1. To develop a broader ‘Stroke Community’ consisting of health service providers and stroke alumni working together to bring about system change.

2. To monitor and track progress in achieving greater systems’ integration and adoption of stroke flow recommendations.

A number of tools, protocols and other resources have been developed to support this work.

| Standardized care | • Development of best practice implementation guides describing key processes and specific clinical and administrative supports.  
|                   | • Adoption of standardized quality improvement tools (e.g., E-Stroke rehab referral, incident reporting).  
|                   | • Confirmation of protocols, patient care transition and clinical decision-making tools. |

| Patient engagement | • Single point access to resources and information on stroke best practice, and services for persons with stroke and caregivers across the care continuum featured on the Toronto Stroke Networks website. www.tostroke.com  
|                    | • Introduction of two system resources: Peers Fostering Hope program and My Stroke Passport to improve the transition experience for patients by providing emotional support and facilitating self-management and system navigation during recovery. |

| Provider education/ knowledge translation | • Establishment of a Virtual Community of Practice - a forum to link clinicians, administrators and academics, encouraging peer support, collaboration and sharing of knowledge and resources. www.strokecommunity.ca  
|                                            | • Enhanced collaboration for patient care management during transitions between health service providers facilitated by the “knowing each other’s work” program.  
|                                            | • Development of an Aboriginal Resource Guide for Health Service Providers and a workshop to support stroke prevention and management strategies that respect the cultural nuances of this population. |

| Systems planning and evaluation | • Implementation of an evaluation framework for Stroke Flow including evidence-based targets. |
Next Steps

The TCLHIN MSK/Stroke Implementation Group is currently working with the Toronto Stroke Networks to confirm the siting, sizing, and standards for outpatient rehabilitation.

The Implementation Group is also exploring ways to address a number of gaps in the current system including:

- Resources and investment to support outpatient stroke rehabilitation services and appropriate intensity and allied health coverage in acute and inpatient rehabilitation.

- Facilitating required alignment of and investment in comprehensive community-based supports including:
  - Early Supported Discharge
  - Coordinated Access to Secondary Stroke Prevention services, and
  - Home First type programs to facilitate timely discharge of stroke patients from inpatient rehabilitation.

- Development of a standardized minimum dataset for outpatient rehabilitation data.

NIHSS:
http://www.nihstrokescale.org/

CNS:

AlphaFIM®:
http://www.udsmr.org/WebModules/Alpha/Alp_About.aspx

Stroke Unit Care:

A Guide to the Implementation of Stroke Unit Care:
Toronto Central LHIN
MSK/Stroke Implementation Group

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