Best Practice Update
In Stroke and Complex Neurological Conditions

Outcome Measurement Tools
You Can Use in Care Coordinator Role
in Client Transitions

Discharge Link Update
Enhancing Community and LTC Rehabilitation Services for Stroke Survivors:

Improving the System of Care

The Discharge Link
A Cross - Continuum Partnership

Caryn Langstaff
SE Regional Stroke Rehabilitation Coordinator

Jo Mather
Manager, Client Services
SE Community Care

Gwen Brown
SE Regional Stroke LTC & Community Coordinator
South East Ontario

- Population ~ 525,000
- 20,000 km²
- 46% rurality
Discharge Link: The Goal

To investigate best practice and health system improvement related to stroke rehabilitation and client transition to the community by:

- enhancing community rehabilitation therapy
  - intensity
  - timeliness
- augmenting provider communication
- building team capacity and stroke expertise
The “Discharge Link” provides:

- timely enhanced intensity (front-end loading) of community-based rehabilitation for new stroke survivors on transition from hospital to home, a residential setting or a Long Term Care Home;
- Discharge link meeting/conference between community/LTC and hospital providers;
- Development of stroke expertise with an emphasis on interprofessional care.
Treatment Model: Community

- **Services** ⇒ PT, OT, SLP, SW
- **Time frame** ⇒ 8 weeks (flexibility re SW needs)
- **Front end loaded** ↑↑ services in first 4 weeks
- **Timely first visit:** within 5 days (CCAC ‘high priority’)

- **Individual Service Plan**
  - First 4 weeks by CCAC Hospital Team;
  - Second 4 weeks by CCAC Community Team

- **Discharge link meeting**
# Methods: Enhancing Service CCAC Total Visits

## Total Visit Comparison Pre-Implementation vs Enhanced Services

<table>
<thead>
<tr>
<th>Discipline</th>
<th>No Enhanced Services</th>
<th>With Enhanced Services</th>
</tr>
</thead>
</table>
| **PT**        | Up to 1 every week for 8 weeks                                            | Up to 3 every week for first 4 weeks  
Up to 2 every week for next 4 weeks |
| **OT**        | Up to 1 every week for 8 weeks                                            | Up to 3 every week for first 4 weeks  
Up to 2 every week for next 4 weeks |
| **SLP**       | Up to 1 every week for first 4 weeks  
Up to 1 every 2 weeks for next 4 weeks | Up to 2 every week for first 4 weeks  
Up to 2 every 2 weeks for next 4 weeks |
| **Social Work**| As required                                                               | Up to 1 every week for first 4 weeks  
Up to 1 every 2 weeks for next 4 weeks  
Can be extended up to 12 weeks |
Evaluation

- Faster improvement in functional outcomes and sustained functional ability at one year both previously demonstrated in Pilot 2002-04

- SE LHIN – current focus on hospital utilization outcomes:
  - Access to care and efficient health system utilization
    - Length of Stay
    - Readmission Rates
    - FIM Change and LOS Efficiency for rehab group
Evaluation

SE LHIN – current focus also on quality of care:

- Quality Care
  - Uptake of Best Practice
  - Advancement of IPC in community and LTC
- Coordination of Services
- Capacity Building
- Patient perspectives
## Process Evaluation: Referral Numbers

### Discharged from:

- **Rehab**: 66%
- **Acute**: 31%
- **Other**: 3%

### Table of FISCAL Participants:

<table>
<thead>
<tr>
<th>FISCAL</th>
<th>N - Participants</th>
<th>n - Community</th>
<th>n - LTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 2009 – March 2010</td>
<td>173</td>
<td>145</td>
<td>28</td>
</tr>
<tr>
<td>April 2010 – March 2011</td>
<td>182</td>
<td>153</td>
<td>29</td>
</tr>
<tr>
<td>April 2011 – March 2012</td>
<td>236</td>
<td>226</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTALS TO DATE</strong></td>
<td><strong>591</strong></td>
<td><strong>524</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>
Process Evaluation: % Referred by Discipline

Services by Discipline

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Pre</th>
<th>Post</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT</td>
<td>78</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>PT</td>
<td>59</td>
<td>72</td>
<td>13</td>
</tr>
<tr>
<td>SLP</td>
<td>12</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>SW</td>
<td>17</td>
<td>28</td>
<td>11</td>
</tr>
</tbody>
</table>
Process Evaluation: % Referred - Change

Services by Discipline

<table>
<thead>
<tr>
<th>Discipline</th>
<th>OT</th>
<th>PT</th>
<th>SLP</th>
<th>SW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>11</td>
<td>13</td>
<td>24</td>
<td>11</td>
</tr>
</tbody>
</table>
Small number of clients pre implementation required very intensive SW and SLP service.
Process Evaluation: CCAC Rehab Therapy Wait Times

- Pre-implementation – average wait time to community rehab service **44 days**

- Since implementation – average wait time now **4.4 days**
Outcome Evaluation: System Utilization – Length of Stay

- **Mean active LOS for acute-plus-rehab group** has **decreased** from just under 70 days in fiscal 2008/09 (pre implementation) to 53 days in fiscal 2010/11

- FIM scores and FIM change remained stable, notwithstanding significant decrease in LOS

![Acute and Rehab Length of Stay (LOS) by Fiscal Year](image)
Outcome Evaluation: System Utilization - Readmissions

avg. visits per follow up client within 1 year after index stroke event

System Utilization: Readmissions
Average visits per follow up client within one year of index stroke event
System Utilization Outcomes

- **15.7-day decrease** in mean total hospital length of stay
- FIM change scores remain **stable**
- Substantially **improved** FIM LOS Efficiencies
- **Decreased** readmission rates and visits per **client** for those receiving enhanced community service especially for those discharged **directly from acute care** to home
Process Evaluation: Building Expertise

- Since implementation, over 30 Shared Work Day Experiences have been completed utilizing Regional stroke/neuro expertise and shared learnings between hospital and community therapists.

- Outcome Measure Workshops, improving cross-continuum collaboration and transitions.

- Collaborative Discharge Link Meetings occurring for rehab discharges, with significant positive feedback on the benefit of these meetings from both hospital and CCAC providers.
Qualitative Evaluation: Client Interviews
What They Valued Most...

- **Motivation** “You tend to work a little bit better for somebody out of your home, a professional, more than you would for family or for yourself”

- **SW** was a **support for depression** and helped with **linking to community** and transportation “SW set me up with stroke support group, Queen’s University… access bus… helpful in linking me to places”

- **OT approach** “She had enough material to give a wide range of mental and physical exercises”.

- Valued the **exercise training** programs and shoulder rehab

- **Reduced stress** of being alone at home (for both stroke survivor and caregiver)

- “People **coming into your home** and timing / frequency of appointments worked out fine.”
Qualitative Evaluation:  
Client Interviews  
What Would You Change...

- **Communication:** “I would like to find out what the benefits of the exercises are in terms of how I’ve done and knowing what I should expect from it myself, you know.”

- **Intensity:** PT and OT in twice a week the first month and cut back to once a week. “If it had been twice a week, that would have been better. Once a week and then six days to think about it is a long time.”

- **Duration:** “Therapy ended after two months. Instead of two months, I would maybe extend it, while you’re transitioning.”

- **Variability in Service:** “We had a little worse experience with the PTs. The first one was very good, … spent the full hour doing exercises – the next PT spent 10 minutes and then left.

- **Expertise:** “At the end of that two month period, she [PT] was saying, you know, there’s not much else she can teach me because of the limited amount of training that they get”.
Success and Sustainability

- In April, 2011, the SE LHIN committed to sustained funding as a standard of care (targeted CCAC base funding).

- Processes for ongoing Case Manager training/communication have now been embedded into standard protocols and data collection systems (i.e., embedded into CHRIS).

- Collaborative leadership of both CCAC and SEO Stroke Network and ongoing “ownership” by CCAC.
Ongoing Actions

- Continue this best practice *standard of care* in SEO
- Potential *model of service delivery* for consideration in the Restorative Care Roadmap of the SE LHIN
- Incorporating *group therapy* (e.g., Functional Communication Group) into the model
- Continue to build *links to LTC Physio* providers and build interprofessional stroke expertise in LTC
- Continue building *stroke expertise*, cross-sectoral linkages, communication, capacity building, Case Manager Workshop, 2013
- Refine *interaction of day rehab and CCAC* enhanced stroke services
Potential Next Steps

- Results may be transferrable to people living at home or LTC for (a) other regions (b) other neurological conditions
- Ongoing need to investigate models of community rehab that include rehab assistants, PTA, OTA, CDA (e.g., learn from SWO experience)
- Publication
The provision of timely intensive stroke rehabilitation services upon transition to the community has a positive impact on health system utilization and stroke survivor outcomes.
Questions

Caryn Langstaff  
Regional Stroke Rehabilitation Coordinator  
Stroke Network of Southeastern Ontario  
613 549-6666, ext. 6841  
langstac@kgh.kari.net

Jo Mather  
Manager, Client Services Coordinator  
Southeast Community Care Access Centre  
613 544-8200, ext. 4112  
jo.mather@se.ccac-ont.ca

Gwen Brown  
Regional Community & LTC Coordinator  
Stroke Network of Southeastern Ontario  
613 549-6666, ext. 6867  
browng2@kgh.kari.net

www.strokenetworkseo.ca