An Early Supported Discharge Pilot

Bridging hospital to home by enhancing a rural community stroke rehab team

Lyndsey Butler, OT Reg. (Ont)
Bonita Thompson, RN BA
Evaluation

For the Provincial Stroke Rounds Planning Committee:
• To plan future programs
• For quality assurance and improvement
• To demonstrate compliance with national accreditation requirements

For You: Reflecting on what you’ve learned and how you plan to apply it can help you enact change as you return to your professional duties

For Speakers: The responses help understand participant learning needs, and teaching outcomes, opportunities for improvement.

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Mitigating Potential Bias
(Planning Committee)

The Provincial Stroke Rounds Planning Committee mitigated bias by ensuring there was no Industry involvement in planning or education content.

To comply with accreditation requirements of the College of Family Physicians of Canada and The Royal College of Physicians and Surgeons of Canada, speakers were provided with Declaration of Conflict of Interest forms, which were reviewed by the Ontario Regional Education Group (OREG) Host member on behalf of the Planning Committee and submitted to the NOSM CEPD Office.

The Ontario Regional Education Group (OREG) Host member on behalf of the Planning Committee reviewed the initial presentation supplied by the speaker to ensure no evidence of bias.
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Disclosure of Affiliations, Financial Support, & Mitigating Bias

Speaker Name: Lyndsey Butler

Affiliations: I have no relationships with for-profit or not-for-profit organizations

Financial Support: This session/program has not received financial or in-kind support.
Objectives

• Describe the Early Supported Discharge model of care
• Identify key elements to establish an Early Supported Discharge approach
• Discuss the challenges and benefits of an Early Supported Discharge model
What is Early Supported Discharge?

- Time-limited rehabilitative care in the community
- Designed to accelerate the transition from hospital to home, alternative to a complete course of inpatient rehabilitation
- Delivered by a well-resourced, specialized, interprofessional team
- 5 days per week, same level of intensity as in the inpatient setting
- Most suitable for mild to moderate stroke survivors who are medically stable and have required resources and support to manage safely at home

What are the Benefits?

- Canadian Best Practice Recommendations for Stroke Care
- Health Quality Ontario’s *Quality Based Procedures: Clinical Handbook for Stroke (Acute and Post-Acute)*
  - ✓ reduce adverse events
  - ✓ improve patients’ activities of daily living
  - ✓ improve patient satisfaction scores
  - ✓ reduce hospital length of stay and costs


Stroke Care in Huron and Perth Counties

Bypass non designated hospitals to most appropriate designated stroke centre for hyperacute care

Receive acute, and if needed, rehab care on integrated Stroke Unit at Stratford General Hospital

Receive community rehab via stroke-specific interprofessional team
ESD Program in Huron and Perth Counties

Hyperacute care → Acute care → Early Supported Discharge

Inpatient Rehabilitation

Not every stroke survivor requires CSRT post-ESD, some are discharged from ESD with community supports.
ESD Program

Acute ESD patients
• 5 business days of daily therapy

Rehab ESD patients
• 10 business days of daily therapy

Timeline Targets
• Within 24 hrs: Rapid Response Nurse
• Within 48 hrs: First Therapy visit

<table>
<thead>
<tr>
<th>Provider</th>
<th>Week 1</th>
<th>Week 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiotherapist</td>
<td>3 (1 hr) visits</td>
<td>2 (1 hr) visits</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>3 (1 hr) visits</td>
<td>2 (1 hr) visits</td>
</tr>
<tr>
<td>Speech Language Pathologist</td>
<td>3 (1 hr) visits</td>
<td>2 (1 hr) visits</td>
</tr>
<tr>
<td>Rehabilitation Therapist</td>
<td>2 (2.5 hr) visits</td>
<td>3 (2.5 hr) visits</td>
</tr>
<tr>
<td>LHIN HCC Rapid Response Nurse</td>
<td>1 (1hr) visit</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL TREATMENT TIME</strong></td>
<td><strong>15 hrs</strong></td>
<td><strong>13.5 hrs</strong></td>
</tr>
</tbody>
</table>

What about Recreation Therapist and Social Work?
Integral member of Community Stroke Rehab Team and consulted as needed during ESD.
Evaluation

• **Patient/caregiver and staff experience**
  - Surveys
  - Interviews

• **Outcomes/service provision**
  - Prepilot cohort
  - Therapy intensity
  - FIM, RNLI, PHQ9, Zarit Caregiver burden, PROMIS-10

• **System impacts**
  - Hospital days saved
  - days from stroke onset to admission to rehab
  - % of acute patients admitted to stroke bed
  - LOS
  - % of ALC-rehab
  - 90-day mortality and readmission rate
What are we seeing so far?

- Patients enrolled to date: 50
- Percent of discharged patients referred to ESD: 48%
- ESD services required:

<table>
<thead>
<tr>
<th>Provider</th>
<th>Expected % of patients</th>
<th>Actual % of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiotherapist</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Speech Language Pathologist</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>Rehabilitation Therapist</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Recreation Therapist</td>
<td>?</td>
<td>18%</td>
</tr>
<tr>
<td>Social Worker</td>
<td>?</td>
<td>32%</td>
</tr>
<tr>
<td>Rapid Response Nurse</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Patient Experience

• Survey question: Would you recommend this team to another family member or friend needing this type of service?
  • 100% Strongly Agree/Agree
• Continuity of care
• Caregiver support
• Sleeping in own bed
• Eating own food
• Client-driven goals
• Looking forward to visits

“effect we are very patient in our community
for to have this service
it has helped me and many others. I hope you continue.”
~ ESD Patient
Outcomes

- Patient outcomes at time of ESD discharge

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>ESD cohort Acute median (n)</th>
<th>ESD cohort Rehab median (n)</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNLI</td>
<td>16.0 (12)</td>
<td>15.5 (30)</td>
<td>Range 0-22, 22 greater reintegration</td>
</tr>
<tr>
<td>PHQ 9</td>
<td>1.0 (12)</td>
<td>3.0 (29)</td>
<td>0-4 minimal depression</td>
</tr>
<tr>
<td>Zarit</td>
<td>5.5 (6)</td>
<td>15.0 (19)</td>
<td>0-20 little to no burden</td>
</tr>
</tbody>
</table>
Outcomes

- Cohort comparison

<table>
<thead>
<tr>
<th>Cohort</th>
<th>FIM efficiency (median)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-pilot: rehab inpt (8)</td>
<td>0.72</td>
</tr>
<tr>
<td>Pilot: rehab inpt + ESD (26)</td>
<td>0.98</td>
</tr>
</tbody>
</table>

- ESD intensity
- ALC
- Downstream impacts

Interim results only
Achiving Stroke QBP LOS Targets

Key Message

• ESD supporting patients achieving their target active length of stay
Achieving Stroke QBP LOS Targets

<table>
<thead>
<tr>
<th>RPG</th>
<th>#</th>
<th>Inpt Rehab LOS (mean)</th>
<th>ESD LOS (mean)</th>
<th>Inpt+ESD LOS</th>
<th>Stroke QBP Rehab LOS target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1100</td>
<td>3</td>
<td>25.3</td>
<td>9.3</td>
<td>34.7</td>
<td>48.9</td>
</tr>
<tr>
<td>1110</td>
<td>11</td>
<td>28.9</td>
<td>12.4</td>
<td>41.3</td>
<td>41.8</td>
</tr>
<tr>
<td>1120</td>
<td>6</td>
<td>21.7</td>
<td>12.7</td>
<td>34.3</td>
<td>35.8</td>
</tr>
<tr>
<td>1130</td>
<td>4</td>
<td>12.5</td>
<td>11.8</td>
<td>24.3</td>
<td>25.2</td>
</tr>
<tr>
<td>1140</td>
<td>10</td>
<td>10.1</td>
<td>12.3</td>
<td>22.4</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Key Message:
• Combined inpatient and ESD LOS is meeting Stroke QBP LOS targets
Cost Impact

- Cost analysis currently under review
- No true savings, but anticipating efficiencies:
  - Patient experience/outcomes
  - Access/flow in organization
Lessons Learned

Patients
- Intensity of ESD
- Communication tools
- Estimating discharge date
- Peer support

“It [Peer support program] provided you with hope. You saw them walking in and you saw that they were part of the community again. It was uplifting.”
- ESD patient

“As a hospital nursing staff, I often feel ‘out of the loop’ with the therapy teams regarding ESD. I feel like there could be more communication between therapies and nursing. Families frequently ask questions to nursing staff and it's best if we're all on the same page.”
- Inpatient Nurse

Inpatient team
- Culture change
- Designated lead
- ESD communication, coordination and processes
Lessons Learned

• **Community team**
  • Existing interdisciplinary structure with stroke expertise
  • Blended inpatient/community staffing model
  • Scheduling – geography, weather, notification
  • Indirect time
  • 1 team/2 different programs
Lessons Learned

- **Management**
  - HR FTE complements

- **Evaluation**
  - Data collection and retrieval
  - Isolating ESD direct impact
  - One size does not fit all
Next Steps

- Community Stroke Rehab Team model re-evaluation
- Ministry of Health and Long-Term Care
- South West LHIN
Acknowledgements

• Front-line teams
• Steering Committee and Project Team
• Huron Perth Healthcare Alliance
• Southwestern Ontario Stroke Network
• South West LHIN
• Ivey International Centre for Health Innovation
Questions?

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