

Early Supported Discharge for Stroke: An Idea Whose Time has Come

GOAL OF PRESENTATION

- To discuss the benefits of Early Supported Discharge (ESD) and its role/part in the stroke care continuum
- To describe the Calgary Stroke Program Facilitated Discharge & Transition Pilot Project (SFDT) and discuss the program's experience

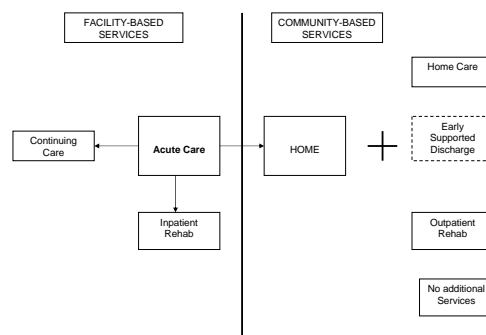
MODELS OF CARE

(from Evidence-Based Review of Stroke Rehabilitation - EBRSR)

Stroke Unit
Integrated Stroke Unit
Early Supported Discharge
Outpatient Rehab
Extended Stroke Unit Service

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STROKE CONTINUUM OF CARE



TRENDS

Mild stroke or TIA account for 82% of CVAs (Green & King, 2007)

Generally, 10-20% of patients require further rehab after stroke

Calgary: 20-25% receive further rehab

- 7.2% of stroke patients from Foothills Medical Centre (Acute) admitted to inpatient Neuro-rehab unit (U58)
- 15% of all stroke patients admitted to longer-term inpatient Neuro-rehab facility (Fanning)
- 45.7% of stroke patients discharged home (April 2008-March 2009)

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MILD STROKES

Usually discharged home with little or no rehab follow-up

Over long-term, near normal return to basic motor function, but may have invisible or hidden disabilities such as (Green & King, 2007):

- Increased mental fatigability
- Difficulties with concentration and memory
- Sensitivity to light and sounds
- Increased dependency on advanced tasks such as household management, banking, & leisure activities
- Psychological distress
- Mood disturbances

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EARLY SUPPORTED DISCHARGE The Evidence –

(from Outpatient Stroke Rehabilitation appendix)

From Meta-Analysis:

- Level 1a (strong) evidence that mild stroke patients discharged early from acute care hospital unit can successfully be rehabilitated in the community by interdisciplinary stroke rehab team
- Such programs can reduce LOS ~1wk but conflicting evidence regarding cost savings

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STROKE FACILITATED DISCHARGE AND TRANSITION & TEAM (FDTT)

Introduction -

- Pilot project funded by APSS
- Part of Homecare, but not typical Homecare criteria (i.e. no need for personal care assistance as a requirement)
- Began seeing clients in January 2009
- Comprehensive interdisciplinary team that is working towards being transdisciplinary

Vision

Thriving stroke survivors and caregivers, fully supported in their transition following recent stroke



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Mission

To facilitate hospital discharge and transition by providing short term, client driven, rehabilitation interventions for people affected by stroke who are experiencing or are likely to experience changes in activity and participation in their community.

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STROKE FACILITATED DISCHARGE AND TRANSITION & TEAM (FDTT)

Staffing -

- Occupational Therapy (3 X 0.5 FTE)
- Physical Therapy (1 X 0.6 FTE)
- Recreation Therapy (1 X 0.8 FTE)
- Social Work (1 X 0.7 FTE)
- Speech-Language Pathology (1 X 0.6 FTE)
- Therapist Assistants (3 X 0.7 FTE)
- Administrative Assistant (1 X 0.4 FTE)
- Consultation to RN/Dietitian as needed

STROKE FACILITATED DISCHARGE AND TRANSITION & TEAM (FDTT)

Project Demographics -

- Team is based in the community and is part of the homecare team
- Referral base includes:
 - Foothills Medical Centre (FMC) Unit 100 (Stroke)
 - FMC Unit 58 (Neuro-Rehab)
 - Rockyview General Hospital (RGH) Unit 82/46 (Neuro)
 - Peter Lougheed Centre (PLC) (various units)
 - Vernon Fanning Centre (VFC) (Neuro-Rehab)

KAIZEN #1: December 3-5, 2008
Purpose -

- Mission Statement and Values
- Operational processes
- Outcome measurement

KAIZEN #1: December 3-5, 2008
Outcomes -

- Referral made through Transition Services to Homecare – allocated to SFDTT
- Intake within 7 days of discharge from hospital
- Treatment for up to 3 months
- Referred on to various community resources
- Referral sources not limited, no caseload cap determined, and no firm discharge criteria (for first 18 weeks)

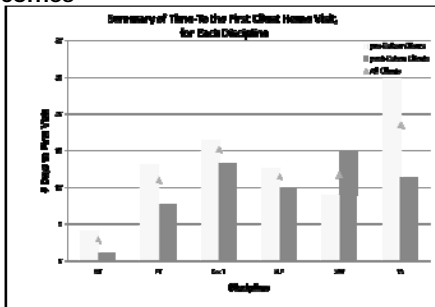
KAIZEN #2: May 19-22, 2008
Purpose -

- Review of first 18 weeks of service
- Review of client/stakeholder/referral source feedback
- Review data
- Modification of operational processes

KAIZEN #2: May 19-22, 2008
Outcomes -

- More defined referral criteria
- Revision of intake process
- Addition of 0.4 Admin Assistant
- Length of treatment reduced to 6 weeks
- Increased frequency of treatment
- Revision of Discharge process

KAIZEN #2: May 19-22, 2008
Outcomes -



STROKE FACILITATED DISCHARGE AND TRANSITION & TEAM (FDTT)
Logistics -

- *Geographical Division*
 - Calgary city limits
 - OT & TA designated 1/3 of city each
 - PT, SW, RecT, SLP whole city
- *Scheduling*
 - Team rounds every Wednesday
 - Reserved appointments for Intakes: 3 per week (Monday, Wednesday, Friday)

REFERRAL PROCESS

Admission Criteria -

- Recent stroke
- Transfer independently
- Client is willing and able to participate with the frequency recommended
- Requires rehab:
 - up to daily frequency
 - best done intensively at home/community to apply and transfer skills (ADLs/IADLs/community reintegration)
- **OR:** Referral to the team would prevent a short stay admission to inpatient rehab (Unit 58 or VFC) following a recent stroke

REFERRAL PROCESS

Exclusion Criteria -

- Severe stroke

INTAKE PROCESS

- Completed by OT Community Care Coordinator (CCC) – homecare model
- COPM, Barthel, Rehabilitation client-centred assessment (RAAT)
- Initial provision of education materials and support
- Referral to appropriate disciplines
- Client is discussed at team rounds first Wednesday after intake appointment
- Care Plan started

INTAKE PROCESS

Canadian Occupational Performance Measure (COPM) -

- Completed via client/caregiver interview at Intake and Discharge
- Address areas of Self-Care, Productivity and Leisure
- Client/caregiver identifies and rates goals according to level of importance

COPM Example

Initial Assessment:		Reassessment:		
OCCUPATIONAL PERFORMANCE PROBLEMS:	PERFORMANCE 1	SATISFACTION 1	PERFORMANCE 2	SATISFACTION 2
1. Indep. Ⓢ Mgmt/Use	3	1	6	8
2. Walking outdoors Ⓢ dog	2	2	9	9
3. Meal Plan / Prep	5	2	9	9
4. Indep. Ⓢ Groceries	2	1	8	7
6. Use of Transportation	1	1	8	8
SCORING:	PERFORMANCE SCORE 1	SATISFACTION SCORE 1	PERFORMANCE SCORE 2	SATISFACTION SCORE 2
Total performance or satisfaction scores / # of problems	13/5	7/5	40/5	41/5
	= 2.6	= 1.4	= 8.0	= 8.2
CHANGE IN PERFORMANCE = Performance Score 2 - Performance Score 1	8.0	2.6	5.4	
CHANGE IN SATISFACTION = Satisfaction Score 2 - Satisfaction Score 1	8.2	1.4	6.8	

TREATMENT PROCESS

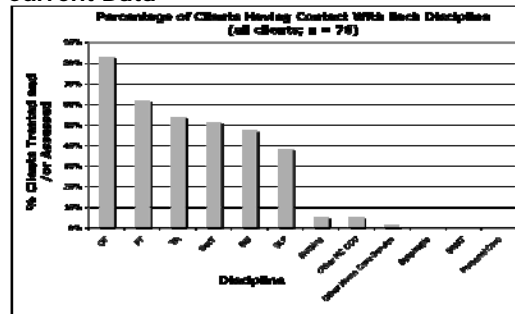
- CCC completes first treatment session within 7 days of Intake
- Therapy Assistant and all other referred disciplines to see client within 7 days of referral
- Completion of Transdisciplinary Care Plan

TREATMENT PROCESS Transdisciplinary Approach -

- *Definition:* "...involves two or more people, working together to more effectively and efficiently address the needs of the client and family. Through collaboration, consensus building, regular communication, and expanding roles across discipline boundaries, team members plan and provide integrated services"*

TREATMENT PROCESS

Current Data -



TREATMENT PROCESS

AusTOMs -

- Four domains scored out of 5: Impairment, Activity Limitation, Participation Restriction, Distress/Wellbeing
- FDTT team scores participation restriction and distress/wellbeing during rounds at week two and discharge
- Individual disciplines complete own AusTOMs for impairment and activity limitation (PT, OT, SLP)

TREATMENT PROCESS

Client's presentation dictates utilization of other possible assessments or clinical tools

- Berg balance
- Timed Up and Go (TUG) or 6 min Walk test
- Box and Blocks
- CAHAI (Arm and Hand Inventory)
- Grip and Pinch strength
- Chedoke Arm and Hand Scales
- BCOS (caregiver rating scale)
- Leisure Competency Measure (LCM)
- Communicative Effectiveness Index (CETI)
- Discipline specific AusToms
- Communication Activities of Daily Living (CADL-2)
- Boston Diagnostic Aphasia Examination (BDAE)
- Montreal Cognitive Assessment (MoCA)
- ASHA – Quality of Communication Lifescale
- Randt Memory Test, Test of Everyday Attention etc
- Depression/suicide assessment

TREATMENT PROCESS

Frequency & Intensity -

- 3-5 days/week of therapy (including TA), depending on client's needs and schedule
- Often more than one treatment session per day
- Sessions are 1-4 hrs

TREATMENT PROCESS

Therapy Focus -

- Client-centred sessions
- Address all client goals
- Assist with return to work and driving education and recommendations except when ongoing or specialized assessment are required (referral to CAR or CNS)
- Client and caregiver support and education

DISCHARGE

- Referrals to other programs made by week three (if possible)
- All clients are seen six weeks unless goals achieved prior to six weeks or community linkages have been made and commenced earlier than six weeks.

CLIENT SATISFACTION

- Based on COPM scores and satisfaction surveys done post discharge

	Score at Intake	Score at D/C
COPM: Performance (n=40)	3.3	6.6
COPM: Satisfaction (n=36)	2.7	6.6
Barthel Index (n=29)	92.3	98.2

n = # clients with both pre and post scores

CLIENT SATISFACTION Survey Comments-

“Location was great! Being able to have therapies at home was really, really nice after 4 months in hospital. All therapists were genuinely interested in helping. Altogether a great transition program from in-hospital stay to CAR program.”

“Very good service to visit pt at home. Pt felt she could make much faster progress at home because of factors such as: can try to walk more at home (no place to walk in hospital and no reason to walk); depressing being in hospital with sick people.”

REFERENCES

Evidence-Based Review of Stroke Rehabilitation - EBRSR
www.ebrsr.com/resources.

Garland, C.G., McGonigel, J.J., Frank, A., & Buck, D. (1989). The transdisciplinary model of service delivery. Lightfoot, VA: Child Development Resources; and Woodruff, G., & Hanson, C. (1987). Project KAI training packet. Unpublished manuscript. Funded by the U.S. Department of Education, Office of Special Education Programs, Handicapped Children's Early Education Program

Green, T. & King, K. (2007). The trajectory of minor stroke recovery for men and their female spousal caregivers: literature review. *Journal of Advanced Nursing*, 58(6), 517 – 31.