Backgrounder: Early Supported Discharge (ESD) for People with Stroke:

An amenable and cost-effective alternative to in-hospital rehabilitation

Rationale:

Stroke survivors should continue to have access to specialized stroke services after leaving hospital, whether from acute care or inpatient rehabilitation.[1] Early supported discharge (ESD) is a form of rehabilitation designed to accelerate the transition from hospital to home through the provision of rehabilitation therapies delivered by an interprofessional team, in the community. ESD is intended as an alternative to a complete course of in-hospital rehabilitation and is most suitable for patients recovering from mild to moderate stroke.[1]

ESD has been further defined to include services that are provided by a well resourced, specialized[a], interprofessional team with stroke expertise whose work is coordinated through regular team meetings.[1,2] Services should be provided five days per week at the same level of intensity as would have been delivered in the inpatient setting in order to address individual patient needs.[1]

ESD services support seamless transfer from hospital and allow appropriate patients to continue their rehabilitation at home.[1,2] Since the primary goal of rehabilitation is to establish skills to support community reintegration, the home itself provides the optimal rehabilitation environment.[1]

The Ministry of Health and Long Term Care (MOHLTC) - Quality-Based Procedures (QBP): Clinical Handbook for Stroke suggests that the rehabilitation needs of patients classified with "mild stroke" could be met in the community and that the availability of appropriately resourced ESD services could reduce the number of admissions to more costly inpatient rehabilitation services.[3] A module on ESD is included in Phase Two of the MOHLTC QBP work in stroke.

Patients recovering from mild strokes who received ESD services showed a 7 day reduction in LOS while achieving similar outcomes compared with patients who received inpatient rehabilitation.[1,4]

Early Supported Discharge for Rehabilitation[3]

"Early supported discharge and outpatient/community rehabilitation are essential components of best practice stroke care to achieve optimal outcomes and efficiencies....These teams have been shown to reduce length of stay and will be an essential support to consistent achievement of the targets noted previously for inpatient care."

Evidence:

The effectiveness of ESD services following acute stroke has been rigorously evaluated.[4] Patients recovering from mild strokes who received ESD services returned home earlier and were more likely to remain at home and regain independence in daily activities compared with patients who received a course of inpatient rehabilitation. The ESD groups showed significant reductions in the length of hospital stay, equivalent to approximately seven days. There were no statistically significant differences seen in carers' subjective health status, mood or satisfaction with the ESD services.[4] An international panel of ESD experts agreed that an ESD team should be based in the hospital.[2] ESD delivery by coordinated, specialized, interprofessional teams, as well as having a case manager based in the stroke unit to enable a smooth transition from hospital to home, are said to be key features contributing to favorable outcomes.[1,4] The greatest benefits were seen in trials with ESD teams who coordinated and planned hospital discharge and post-discharge care as well as delivered the home rehabilitation and support.[4]

[a] "Specialized" can be defined as having at least 80% of the ESD team members caseload confined to individuals with stroke (Foley N, Meyer M, Salter S et al. Inpatient stroke rehabilitation in Ontario: are dedicated units better? Intl J Stroke, 2013:Aug;8(6):430-5).

Challenges:

The Ontario Stroke Network (OSN) report *"The Impact of Moving to Stroke Rehabilitation Best Practices in Ontario"*[5] established length of stay (LOS) targets for stroke Rehabilitation Patient Groups (RPGs) which were adopted by the MOHLTC in the QBP Clinical Handbook for Stroke.[3] The Ontario Stroke Evaluation Report[6] indicates that LOS for people with mild stroke exceeds the targets as shown in Table 1. Note: RPG's 1150 and 1160 correspond to mild stroke.

Table 1. Actual and target lengths of stay in inpatient rehabilitation in Ontario, by Rehabilitation Patient Group (RPG), 2011/12 (Exhibit 5.4A)[6]

Disability Level	RPG	Actual No. of Days, mean (median)	Target No. of Days[3,5]
Mild	1160	15.3 (14)	0.0
	1150	21.4 (20)	7.7

Small reductions in hospital LOS can result in significant savings to the health care system. Access to appropriate, community-based programs are variable and limited across the province. These limited resources often need to be allocated first to high risk and high acuity patients which can limit access to those with mild and moderate stroke.

Currently, community-based stroke rehabilitation is not optimally designed or resourced to meet best practices for timely access and the recommended amount of therapy.[5] Furthermore, at this time true ESD services do not exist in Ontario despite successful implementation in Europe[4], the UK[4] and other Canadian provinces.[4,7]

Opportunity for Change:

Early supported discharge services are a recommended best practice in stroke care, and many stroke networks are currently in the process of developing frameworks for ESD services in their regions. ESD services have the potential to positively impact both the patient and the health care system by delivering an amenable and cost-effective alternative to hospital-based inpatient rehabilitation. This valuable service should be accessible to Ontarians who have experienced a mild or moderate stroke.

"ESD services are an acceptable form of rehabilitation for a select group of patients, when available and provided by a well-resourced, coordinated, specialized interprofessional team."

[Evidence Level A][1]

For more information, please contact the:

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