

## Background

### Equitable Access for Appropriate Patients from Acute Facilities to Rehabilitation: Access to Specialized Inpatient Stroke Rehabilitation for Severe Stroke

#### Current State:

Despite having the greatest number of impairments and the most significant disabilities, individuals who have experienced a severe stroke have limited access to stroke rehabilitation.<sup>1</sup>

Research shows that this category of stroke is a major contributor to the ER/ALC issue<sup>2</sup> and represents a great burden on health and economic resources.<sup>3</sup>

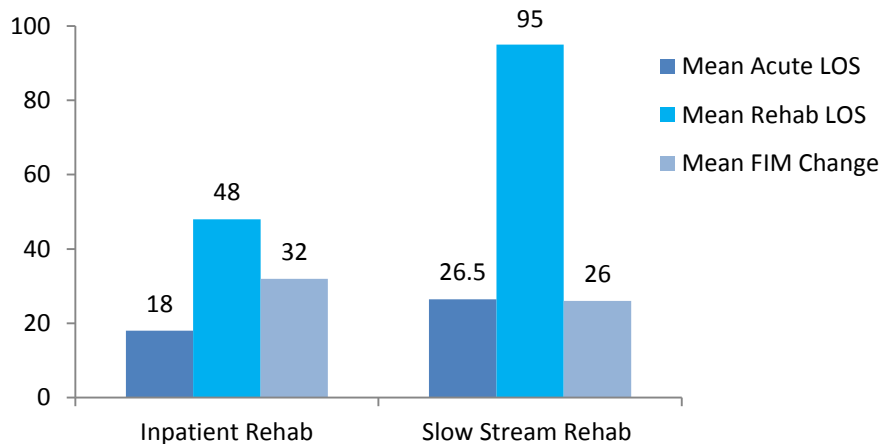
#### Evidence:

Evidence shows that individuals with severe stroke who receive specialized inpatient stroke rehabilitation are more likely to be discharged home, have a shorter length of hospital stay (LOS) and reduced mortality.<sup>5,6</sup> One study demonstrated an 86% reduction in negative outcomes and a reduction of relative risk of 1 and 5 year mortality by 40% and 70%.<sup>6</sup>

A recent analysis of Toronto data<sup>7</sup> indicated that individuals with severe stroke who were admitted to an active stroke rehabilitation program had a shorter length of stay (by almost 50 days) and similar (or slightly better) functional outcomes as compared to a similar population who were admitted to a slow-stream stroke rehabilitation program. These results are most likely explained by the difference in therapy intensity received in the two programs.

*Patients with moderate or severe stroke, who are ready for rehabilitation and have goals amenable to rehabilitation, should be given an opportunity to participate in inpatient stroke rehabilitation.<sup>4</sup> [Evidence Level A].<sup>CBPR (2013)</sup>*

**Outcomes of Severe Stroke by Program<sup>7</sup>**  
Toronto Stroke Networks E-Stroke Referral System 09/10  
Admission Motor FIM 12-38; RPG 1100-1110



The Ontario Stroke Network Stroke Reference Group recommends that patients currently admitted to Complex Continuing Care (CCC) or “slow-stream” rehabilitation would be better served by admission to an active stroke inpatient rehabilitation bed.<sup>8</sup>

Data from the 2012 Ontario Stroke Evaluation Report on patients admitted to CCC in 2010/11 indicated that 28.9% of CCC patients with severe stroke were discharged home. Based on the assumption that these CCC patients would experience shorter lengths of stay if admitted to active stroke rehabilitation, estimates suggest that approximately 11,964 hospital bed days could be made available annually. In total, this amounts to an estimated annual cost reduction of \$5,955,888 in healthcare spending annually.<sup>8</sup>

Identifying individuals who would derive clear benefits from inpatient rehabilitation, such as those who have the ability to return home, may help ensure optimum utilization of resources. From a recent research study of persons with severe stroke admitted to inpatient rehabilitation, “it was evident, from the difference between the proportion of individuals discharged home with a caregiver (99.2%) and those discharged home without an available caregiver (0.8%) that this factor plays a significant role in determining where individuals with severe stroke are discharged following rehabilitation. Given the importance of adequate post rehabilitation care in this population, in the absence of a caregiver, additional support in the form of community resources and services may play an essential role in facilitating a home discharge”.<sup>9</sup>

#### **Impact:**

When rehabilitation care is provided on a stroke unit for persons with severe stroke that have potential to return home it will:

- reduce death and disability
- reduce the need for institutionalization
- reduce hospital length of stay
- reduce cost to the health care system

#### **The time is right to make rehabilitation system change:**

Ensuring that all severe stroke rehabilitation candidates have equitable and timely access to the rehabilitation they need will lead to improved health system flow and provide an opportunity to alleviate Emergency Department and ALC pressures.<sup>8</sup>

**For more information on strategies for planning rehabilitation services for persons with severe stroke contact:** the Ontario Stroke Network at 416-489-7111, [www.ontariostrokenetwork.ca](http://www.ontariostrokenetwork.ca) or [info@ontariostrokenetwork.ca](mailto:info@ontariostrokenetwork.ca)

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