

REHABILITATION INTENSITY

NEWSLETTER

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Stroke rehabilitation is important in enhancing functional recovery, patient experience and outcomes for persons with stroke. Three components are required to optimize rehabilitation: increased intensity of therapy, practice of skills outside of therapy time, and a complex, stimulating environment. Rehabilitation intensity (RI) is a component of inpatient rehabilitation that measures direct task specific therapy from PT, OT, SLP. All rehabilitation activities are essential to meet the individual's rehabilitation goals, including nursing, recreation therapy, social work, group therapy, volunteer programs, independent practice etc.



RI Task Group

A Rehabilitation Intensity Task Group was recently formed in Ontario. Presently, the group is conducting a scoping literature review to examine any additional articles related to RI that may influence a provincial direction with respect to RI.



Rehabilitation Intensity

According to Canadian Stroke Best Practice Recommendations (CSBPR, 2019), “patients should receive rehabilitation therapies of appropriate intensity and duration, individually designed to meet their needs for optimal recovery and tolerance level” [Evidence Level A]. In Ontario, Rehabilitation Intensity is defined as the amount of time the patient spends in individual, goal-directed rehabilitation therapy, focused on physical, functional, cognitive, perceptual, communicative and social goals to maximize the patient’s recovery, over a seven day/week period. It is time that a patient is engaged in active face-to-face treatment, which is monitored or guided by a therapist. CSBPR states “more therapy results in better outcomes” [Evidence Level A].



Since 2015, stroke teams have been collecting and reporting on RI. This is an excellent achievement and thank you to all teams and organizations providing inpatient stroke rehabilitation in Ontario for your commitment and ongoing efforts.

The association between inpatient rehabilitation intensity and outcomes after stroke in Ontario, Canada

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RI data reported by stroke teams was utilized in a recently published study to determine the association between rehabilitation intensity (RI) and total Functional Independence Measure (FIM) Instrument change. It is a retrospective study with over 12,000 patients from 2017–2021 using Canadian Institute for Health Information data from Ontario. The mean RI time was 74.7 min with a range of 5–162 mins/day. The study concluded:

- **Higher RI** was associated with **improved outcomes** post stroke
- Most improvements were seen in patients who received ≥ 95 mins/day

Summary

To achieve best patient outcome, teams are encouraged to continue to strive for the targeted 180 minutes per day. Understanding the current human resource issues, and incorporating the findings of the MacDonald, Linkewich et al (2023) study, it is reasonable to strive for RI of ≥ 95 minutes per patient per day (7 days per week) as the minimal therapy. It is still important to remember that RI time is one part of best practice rehab, with all members of the team involved in working with the person with stroke to meet their therapeutic goals. Teams should continue to develop and share innovations to extend RI beyond the median of 95 minutes/ per day, as one component to provide a comprehensive and stimulating rehabilitation environment.

Coming Soon

The Canadian Stroke Best Practice Recommendations will be releasing the 7th edition of the Rehabilitation and Recovery following Stroke module in the near future. When available, this updated module will be available at: <https://www.strokebestpractices.ca/recommendations>

RI Resources:

<https://www.corhealthontario.ca/resources-for-healthcare-planners-&-providers/stroke-general/qbp/clinical-tools-&-resources/in-patient-rehabilitation>