



Briefing Note: Ontario Stroke Report Card Rehabilitation Intensity Indicator Calculation

PURPOSE:

To provide an update on the Ontario Stroke Report Card Rehabilitation Intensity Indicator calculation and to support local quality reporting within sites.

BACKGROUND:

Since 2013, the Ontario Stroke Network (OSN) has included rehabilitation intensity (RI) as a measure of system efficiency and effectiveness within the Ontario Stroke Report Card. Effective April 1, 2015, the number of minutes the patient participates in inpatient stroke rehabilitation therapy must be recorded within the National Rehabilitation Reporting System (NRS) as mandated by the Ministry of Health and Long-Term Care. This data collection comprises the total number of minutes that the patient is actively engaged in face-to-face, one-on-one therapy. This therapy can be provided by an occupational therapist (OT), physiotherapist (PT), speech-language pathologist (S-LP), occupational therapy assistant (OTA), physiotherapy assistant (PTA) or communicative disorders assistant (CDA). These data elements will be used to calculate the OSN RI indicator.

The Quality-Based Procedures (QBP): Clinical Handbook for Stroke (Acute and Postacute) (2015)¹ states that stroke patients should receive, via an individualized treatment plan, at least 3 hours of direct task-specific therapy per day by the above core therapies for at least 6 days per week. Additionally, the OSN Stroke Reference Group has recommended that therapy assistant time (minutes by an OTA, PTA, or CDA) may comprise up to 33% of the total RI time. This recommended assistant RI time will be used when calculating the OSN RI indicator.

Calculation of the Daily Rehabilitation Intensity Time per Patient

Below are the steps in calculating the daily RI time per patient, which will be used in calculating the RI indicator on the OSN Stroke Report Card (median daily RI time):

Sample Scenario: A stroke patient participated in a total of 1925 minutes of intensive therapy by an OT, PT, and S-LP. In addition, this patient participated in a total of 2250 minutes of intensive therapy by an OTA, PTA and CDA. This patient had an active rehab length of stay of 35 days.

Step One: PATIENT TOTAL RI TIME (minutes) = PATIENT TOTAL THERAPIST RI TIME (OT, PT, S-LP minutes) + PATIENT TOTAL THERAPY ASSISTANT RI TIME (OTA, PTA, CDA minutes)

e.g., PATIENT TOTAL RI TIME = 1925 minutes + 2250 minutes = 4175 minutes

Step Two: PATIENT MAXIMUM THERAPY ASSISTANT RI TIME (minutes) = 33% of PATIENT TOTAL RI TIME (minutes)

e.g., PATIENT MAXIMUM THERAPY ASSISTANT RI TIME = 4175 minutes * 0.33 = 1377.75 minutes

**Step Three:**

If **PATIENT TOTAL THERAPY ASSISTANT RI TIME (minutes) > PATIENT MAXIMUM THERAPY ASSISTANT RI TIME (minutes):**

PATIENT ADJUSTED TOTAL RI TIME (minutes) = PATIENT TOTAL THERAPIST RI TIME (minutes) + PATIENT MAXIMUM THERAPY ASSISTANT RI TIME (minutes)

e.g., As **PATIENT TOTAL THERAPY ASSISTANT RI TIME > PATIENT MAXIMUM THERAPY ASSISTANT RI TIME:**
PATIENT ADJUSTED TOTAL RI TIME = 1925 minutes + 1377.5 minutes = 3302.5 minutes

Otherwise,

PATIENT TOTAL RI TIME (minutes) = PATIENT TOTAL THERAPIST RI TIME (minutes) + PATIENT TOTAL THERAPY ASSISTANT RI TIME (minutes)

This equation is not applicable for the above sample scenario as the PATIENT TOTAL THERAPY ASSISTANT RI TIME is greater than the PATIENT MAXIMUM THERAPY ASSISTANT RI TIME.

Step Four:

PATIENT DAILY RI TIME (minutes/day) = PATIENT TOTAL RI TIME (minutes) or PATIENT ADJUSTED TOTAL RI TIME (minutes) / ACTIVE REHAB LENGTH OF STAY (days)

Calculation of Rehabilitation Intensity Indicator on the OSN Stroke Report Card

Below is the equation for the OSN rehabilitation intensity indicator:

LHIN MEDIAN DAILY RI TIME = MIDDLE VALUE IN THE RANKED LIST OF DAILY RI TIMES FOR ALL STROKE PATIENTS (OR NRS CASES) ACROSS ALL FACILITIES WITHIN A LHIN

RECOMMENDATION:

It is recommended that facilities use the above calculation to monitor adherence to QBP recommendations for stroke rehabilitation intensity. This calculation should not be applied to data submitted to the NRS.

ACTION:

Please distribute this information to all hospitals that report stroke RI data to the NRS.

Written/Submitted by/Date:

This OSN Briefing Note was developed in December 2015 and submitted by OSN Rehabilitation Intensity Working Group members: Beth Linkewich (co-chair), Sylvia Quant (co-chair), Jennifer Beal, Gwen Brown, Jenn Fearn, Ruth Hall, Shelley Huffman, Linda Kelloway, Amy Maebrae-Waller, Judy Murray, Donelda Sooley, Janine Theben, Jennifer White, and Deb Willems. This OSN Briefing Note was recently revised on December 20, 2016.

¹ Health Quality Ontario; Ministry of Health and Long-Term Care. Quality-based procedures: clinical handbook for stroke (acute and postacute). Toronto: Health Quality Ontario; 2015 December. 148 p. Available from: <http://www.hqontario.ca/Portals/0/Documents/evidence/clinical-handbooks/community-stroke-20151802-en.pdf>.