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Stroke Rehabilitation Intensity Frequently Asked Questions

1) What is the provincial definition of Rehabilitation Intensity?

Rehabilitation Intensity[1] is:

*The amount of time the patient spends in individual, goal-directed rehabilitation therapy, focused on physical, functional, cognitive, perceptual 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.*

Rehabilitation Intensity entails:

- An individualized treatment plan involving a minimum 3 hours of direct task-specific therapy per patient per day by the core therapies [2,3,4], for at least six days per week[2,3]
- Does not include groups
- Maximum of 33 percent of therapy time with therapy assistants
- Documentation of time from the patient perspective with co-treatment time split between the treating therapists

For the purposes of this work, rehabilitation therapists include occupational therapists (OT), physiotherapists (PT) and speech-language pathologists (S-LP), and face-to-face treatment assumes a 1:1 staff-to-patient ratio.

Rehabilitation Intensity factors in time and effort. Individualized face-to-face treatment reflects effort that provides the patient with the most benefit over time.

2) Does Rehabilitation Intensity apply to acute care, inpatient rehabilitation and integrated stroke units?

Rehabilitation Intensity applies to acute care, inpatient rehabilitation and integrated stroke units. Rehabilitation Intensity is a recommended Quality-Based Procedures (QBP) indicator only for inpatient rehabilitation settings[2] and will be reported only for inpatient rehabilitation at this time.

3) What is the minimum number of hours and days per week that intensive rehabilitation therapy should be provided in inpatient rehabilitation and the integrated stroke unit?

An individualized treatment plan involving a minimum 3 hours of direct task-specific therapy per patient per day by the core therapies should be offered for at least 6 days a week.[2,3]

4) Does the number of hours of therapy intensity per week apply to acute care?

Rehabilitation assessment and meaningful and intensive therapy should begin as early as clinically possible. Rehabilitation Intensity is not a QBP indicator in acute care at this time. Nonetheless, we should continue to strive for improved access to rehabilitation as early as possible with increased intensity to support improved recovery for stroke patients.[2,4]

5) The Canadian Best Practice Recommendations for Stroke Care (Update 2013) suggests that intensive rehabilitation therapy should be provided 5 days per week. Why should we do this at least 6 or 7 days per week?

Organizations should strive for 7 days per week of intensive rehabilitation therapy to maximize patient recovery and reduce risk of deterioration in function due to lack of therapy on weekends.

Provision of 5 days, as mentioned in the Canadian Best Practice Recommendations for Stroke Care (Chapter 5, Update 2013)[5], and at least 6 days, as mentioned in QBP for Stroke Care (2013)[2], are considered incremental steps to achieve the 7 days per week target.[4]

6) What disciplines are included in 'core therapies' or the measurement of therapy intensity?

Core therapies for Rehabilitation Intensity include physiotherapy, occupational therapy, and speech-language pathology. Outcomes for stroke patients receiving these core therapies have been shown to be most sensitive to intensity.[6,7]

7) What are the recommended staffing ratios to achieve Rehabilitation Intensity?

Recommended staffing ratios for inpatient rehabilitation are:

- 1 PT per 6 inpatient beds
- 1 OT per 6 inpatient beds
- 1 S-LP per 12 inpatient beds [2,4]

These staffing levels are recommended, irrespective of whether or not therapy assistants are available to augment therapy provided.

8) If one of the core therapies is not required for the patient, does the team still need to provide 3 hours of therapy per stroke patient per day?

Yes, the total time the patient is engaged in therapy is important and should include 3 hours of therapy per stroke patient per day.[4,6] In order to achieve this, the other 2 core therapies could be increased and include up to 33% therapy assistant time.

9) Why is the time of nursing, social work, recreational therapy and other disciplines not included in the measurement of therapy intensity?

Available Rehabilitation Intensity evidence has demonstrated that occupational therapy, physiotherapy, and speech-language pathology result in improved functional outcomes when 3 hours or more of intensive therapy is provided daily.[6] Nursing, social work, recreational therapy and other disciplines are an integral part of the rehabilitation health care team and contribute significantly to patient recovery. The rehabilitation interventions within these professions should be considered in addition to 3 hours of core therapies.[4,5,8]

Research has shown that enhanced staffing ratios for nursing and greater diversity of rehabilitation staff are related to more positive stroke patient outcomes.[9] Access to a dedicated interprofessional team is considered a primary contributing factor by which stroke units can improve patient outcomes. Nursing staff play a key role, being present on the unit 24 hours a day, 7 days per week. Using an interprofessional team approach, tasks and activities learned in therapy should be reinforced by all team members.

Although there is some evidence to support the roles of other interprofessional team

members, more research is needed to explore the impact on patient outcomes, system flow and associated economic impact. This should be included in future evaluations.[4]

10) If you have a physiotherapy, occupational therapy, or speech-language pathology student, would the patient's time with the student be considered a part of the Rehabilitation Intensity time?

Yes. If the physiotherapy, occupational therapy, or speech-language pathology student is providing face-to-face, one-on-one intensive therapy, it would be included as part of the Rehabilitation Intensity time. Within the National Rehabilitation Reporting System (NRS), this time would be captured under PT, OT or S-LP categories, respectively. This time should not be "double counted" by the supervising therapists, as Rehabilitation Intensity captures the time the **patient** spends in therapy (see question 21 for information regarding collaborative treatment between a therapist and a student).

11) Within the 3 hours of intensive therapy time, what percentage of time can be provided by therapy assistants (e.g., occupational therapy assistants, physiotherapy assistants, communicative disorder assistants)?

As we strive to achieve condensed length of stay targets, the requirements for continuous assessment should be integrated into treatment with programs updated accordingly by therapists to progress and direct the patient's care.

Rehabilitation Intensity literature does not include therapy assistant time. However, therapy assistants, such as occupational therapy assistants (OTAs), physiotherapy assistants (PTAs) and communicative disorders assistants (CDAs), are a valuable resource in supporting patient recovery. As such, the Ontario Stroke Network Stroke Reference Group recommended that a total of up to 33% of the 3 hours can be provided by therapy assistants, with all remaining time spent on face-to-face therapy by an OT, PT, and/or S-LP.

For example, if the patient receives 2 hours of one-on-one intensive therapy by an OT, PT, and/or S-LP during the day, a therapy assistant can provide up to 1 hour of additional one-on-one intensive therapy during the same day.

12) If an organization has Rehabilitation Assistants (RAs) and not OTAs, PTAs or CDAs, how will Rehabilitation Intensity be recorded?

If an organization has RAs, they will need to record the minutes the patient spends in therapy with them under the professional grouping that best reflects the nature of the therapy provided. For example, if the RA is engaged in an occupational therapy related activity or therapy that supports an occupational therapy goal, the RA would record the total number of minutes of intensive therapy time under the OTA category.

13) What can patients do beyond time spent in face-to-face Rehabilitation Intensity time?

Stroke best practices suggest that all patients should receive rehabilitation therapy in an active and stimulating environment.[5] Strategies can be utilized to provide additional therapy outside of the 3 hours of Rehabilitation Intensity. Examples include group therapy, autonomous practice and self-management activities (teaching patient and families to perform exercises outside of therapy time), additional use of therapy assistants (OTAs, PTAs, CDAs, etc.), and interventions from other disciplines (nursing, social work, recreational therapy, etc.).

14) Are assessments included in the 3 hours of Rehabilitation Intensity?

Yes, if the assessment meets the provincial definition for Rehabilitation Intensity. However, time in assessment activities should be limited to what is necessary in order to ensure adequate time focused on therapeutic activities. Assessment activities should be integrated with therapeutic activities whenever possible. This includes initial assessments.

15) What happens if you are assessing the patient (actively engaging with the patient) while documenting at the same time, is this included in Rehab Intensity?

Yes. If the clinician is documenting while assessing the patient, and the patient is actively engaged throughout this period, the documentation time would be included as part of the Rehabilitation Intensity time. If documentation occurs after the assessment

has taken place, or while the patient is not actively engaged in a therapeutic activity the documentation time will not be included.

16) Why is group therapy not included in Rehabilitation Intensity?

Group therapy is an important adjunct to face-to-face therapy that reinforces techniques learned in individual therapy and provides social interaction and support. Time spent in group therapy is not included in the provincial definition as it is difficult to provide individualized task-specific treatment in a group setting. For example, all group members would need to have the same goal, skill level and ability to follow instructions independently.

17) Is circuit training included in Rehabilitation Intensity?

Yes, if it meets the provincial definition of Rehabilitation Intensity, which involves individualized, face-to-face therapy that is aimed at helping the patient achieve their functional therapy goals. Only the individualized face-to-face or 1:1 time would be considered part of the 3 hours of intensive therapy.

As the patient progresses, they may spend more time in independent exercises (e.g., exercising with the NuStep® or arm ergometer, practicing their ADLs independently, doing communication exercises independently or GRASP exercises independently). This is an important part of their therapy and recovery but would NOT be included in the 3 hours of intensive therapy.

18) Is time spent educating patient and family members included in the 3 hours of Rehabilitation Intensity?

Yes, if it meets the provincial definition of Rehabilitation Intensity and the patient is actively engaged during the education session.

19) Is time spent in patient and family conferences/ meetings included in the 3 hours of Rehabilitation Intensity?

Although patient and family conferences are an important part of the rehabilitation

process, these meetings are not considered a part of the Rehabilitation Intensity time.

20) If there is collaborative treatment (e.g., treatment provided by more than one provider), how will the time be recorded?

a) Co-treatment by 2 therapists (e.g., OT & S-LP)
Time is split equally between the treating therapists and tracking of time will be from the patient perspective (i.e., per patient therapy time and not per therapist therapy time). For example, if the patient spends 1 hour with both the OT and S-LP, only 30 minutes will be recorded for each discipline.

b) Co-treatment by 2 therapy assistants (e.g., OTA & PTA)
Time is split equally between the therapy assistants. For example, if the patient spends 1 hour with both the OTA and PTA, only 30 minutes will be recorded for each therapy assistant.

c) Collaborative treatment with a therapist and assistant (e.g., S-LP & CDA)
The time will not be split between the therapist and the therapy assistant. The therapist will record the total time the patient spends in therapy and the therapy assistant will not record patient therapy time. For example, if the S-LP and CDA provide collaborative treatment for an hour, the S-LP will record 1 hour of patient time in therapy and the CDA will not record any time.

21) How will Rehabilitation Intensity be recorded if you have collaborative treatment between a therapist and his/her respective student?

When there is collaborative treatment between a therapist and his/her respective student, the supervising therapist records the Rehabilitation Intensity time.

22) If a patient cannot tolerate 3 hours of therapy per day, what happens?

Therapists need to structure the therapy time to suit the patients' endurance, needs and goals. For example, patients with lower tolerance could be provided with shorter treatments at higher frequency (e.g.15 to 20 minute increments throughout the day). One of the goals of therapy would be to improve activity tolerance.

23) Where does therapy occur to be counted in the Rehabilitation Intensity calculation?

Therapy can happen anywhere. For example, individualized face-to-face therapy can be provided at the patient's bedside, in the corridor, therapy room or other locations.

24) What do we do if we do not have weekend staffing?

As we strive to provide therapy 7 days per week, we recognize that resources are limited. Rehabilitation Intensity will be reported based on the amount of face-to-face therapy time the patient receives per week. As such, if your organization only provides therapy 5 days per week, this will be reflected in your data and show less intensity. However, as you collect data reflecting the amount of therapy time the patient receives, this will provide further evidence and support to identify opportunities to support the achievement of Rehabilitation Intensity targets, which may include hiring additional staff.

25) What intensity should be provided in outpatient settings?

Although Phase 2 QBP recommendations are under review, current best practices recommend that therapy should be provided for a minimum of 45 minutes per day (up to 3 hours per day), 3-5 days per week, based on individual patient needs and goals.[5]

26) If clinicians are engaged in research, and the research activity includes face to face therapy and is considered a part of the patient's care plan, would this time be considered as Rehabilitation Intensity time?

When research activities align with the Rehabilitation Intensity definition and involve the patient's usual care team, this would be included in the Rehabilitation Intensity time.

27) If there are adjunct therapies (such as a private physiotherapist visiting the patient), would this be considered as part of the Rehabilitation Intensity time?

No. If there are adjunct therapies (such as a private therapist providing additional therapies), time the patient spends during these adjunct therapies would not be included

as part of the Rehabilitation Intensity time provided by your organization.

28) If the therapy session was conducted using Ontario Telemedicine Network (OTN) and involves the patient, would this be considered a part of the Rehabilitation Intensity time?

Yes. When the therapy aligns with the Rehabilitation Intensity definition and as long as the hospital reports to NRS, the intensive therapy time offered to the stroke patient at his/her facility will be included as part of the Rehabilitation Intensity time.

29) How will the amount of Rehabilitation Intensity be recorded by the therapist?

Rehabilitation Intensity will be calculated based on the amount of face-to-face therapy time (in minutes) per stroke patient per day. Organizations can revise/adapt their current workload measurement systems (WMS) to capture the **amount of time the patient spends in therapy per day as opposed to therapist time spent in therapy per day**. Your team manager and/or health data records manager will be able to help guide you through the process of capturing patient time spent in rehabilitation within your WMS.

30) As of April 1st 2015, what data are mandatory to report to the NRS?

Effective April 1st 2015, the NRS discharge assessment will have 6 new data elements. The 6 new data elements will include the total number of minutes of Rehabilitation Intensity time over the patient's active length of stay (LOS) for each professional group (OT, PT, S-LP, OTA, PTA, and CDA).

It will be mandatory to complete these new elements for clients discharged from inpatient rehabilitation under the stroke RCG in the province of Ontario. Completing these elements for other rehabilitation cases or in other provinces will be optional.

31) As Rehabilitation Intensity will be measured as the total number of minutes of the patient's time in therapy (as per the provincial definition of Rehabilitation Intensity) over the patient's active length of stay (LOS), does this include service interruptions?

Since the reporting of data is over the 'active' LOS, the calculations for Rehabilitation Intensity metrics will not include service interruptions.

32) Is Alternate Level of Care (ALC) time included in Rehabilitation Intensity reports to the NRS?

Organizations are required to provide Rehabilitation Intensity data for the active LOS. Rehabilitation Intensity data is not reported once the patient is designated ALC.

33) After the person is designated ALC, should organizations continue to collect Rehabilitation Intensity therapy time?

Organizations are required to report Rehabilitation Intensity data for the active length of stay (LOS) only. However, it may be easier for clinicians to continue to input Rehabilitation Intensity therapy time if the organization is able to separate ALC days from the total LOS for reporting purposes. The Rehabilitation Intensity time collected during ALC days should not be submitted to the NRS.

34) What happens if Rehabilitation Intensity data is not available as of April 1st 2015?

If Rehabilitation Intensity data is not available as of April 1st 2015, organizations will report 99999 as a transition until your organization is able to collect this data.

35) When the NRS Rehabilitation Intensity fields open on April 1st 2015, should organizations include patients who were admitted prior to April 1st?

Rehabilitation Intensity data will be collected for stroke patients who were admitted on April 1st and onwards. Organizations may choose to include patients admitted prior to April 1st 2015 in the initial report if data from the full active LOS is available.

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36) If Rehabilitation Intensity collection is not mandatory for patients admitted prior to April 1st 2015, could organizations wait to collect this information until that date?

Yes, CIHI will not be accepting submission of data prior to April 1st, 2015. However, since significant preparation will be required to set up the collection, train staff, and conduct internal audits/quality checks, organizations are encouraged to initiate the implementation of pilot data collection as soon as possible and prior to April 1st.

37) Is there an expectation from the Ministry of Health and Long-Term Care (MOHLTC) for rehabilitation organizations to achieve the minimum 3 hours of Rehabilitation Intensity time per day by April 1st 2015?

No. Organizations should strive to provide a minimum of 3 hours of Rehabilitation Intensity time per day, but only the reporting of Rehabilitation Intensity data to the NRS will be mandatory as of April 1st 2015.

38) How will the MOHLTC and the Ontario Stroke Network (OSN) use the Rehabilitation Intensity data?

As Rehabilitation Intensity is a recommended Quality-Based Procedures indicator and an indicator on the Ontario Stroke Report Card, the MOHLTC and OSN will review these data to monitor the current state of Rehabilitation Intensity provided within Ontario. At this time, these data elements are not linked to funding.

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References

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