Stroke Rehabilitation Intensity

February 2015

These slides were developed by the Ontario Stroke Network Rehabilitation Intensity Working Group and are meant to be customized and used to support clinical implementation of Rehabilitation Intensity data collection.
Agenda

• Why Rehabilitation Intensity is important?

• Definition of Rehabilitation Intensity

• How will Rehabilitation Time be recorded

• Clinical examples
Why is Rehabilitation Intensity Important?

• Patients spend 60% of their day alone and only 13% of their day on therapeutic activities *(Bernhardt et al., 2004)*

• The earlier therapy starts the better *(Kalra et al., 1994)*

• There is a positive relationship between scheduled therapy time and outcomes *(Lohse et al., 2014)*

• Higher intensity therapy is associated with better outcomes and reduced length of stay *(Jette et al., 2005)*
Why is Rehabilitation Intensity Important?

• More therapy means better outcomes
  There was a significant relationship between therapeutic duration and functional outcomes – significantly better for those receiving 3 to 3.5 hours of therapy per day (Wang et al., 2013)

• Core therapies more sensitive to intensity
  Daily therapy time by OT, PT, & S-LP was significantly correlated with gains in ADLs, cognition, mobility & overall functional improvement (Wang et al., 2013)

• Patient to staff ratio was not the main factor contributing to differences in therapy time provision (De Wit et al., 2007)
Evaluation Opportunity

4 years ago the Ontario Stroke Network Stroke Evaluation and Quality Committee

- Identified Rehabilitation Intensity as a important indicator of system efficiency and effectiveness
- Included on the Ontario Stroke Report Card

GAP: Rehabilitation Intensity
Quality-Based Procedures: Clinical Handbook for Stroke includes Rehabilitation Intensity:

- as a recommended best practice, and
- as a recommended performance indicator of appropriate stroke rehabilitation

(Quality-Based Procedures: Clinical Handbook for Stroke, Health Quality Ontario & Ministry of Health and Long-Term Care, 2013)
Definition of Rehabilitation Intensity

Rehabilitation Intensity *

The amount of time the patient spends in individual, goal-directed therapy, focused on physical, functional, cognitive, perceptual and social goals to maximize the patient’s recovery. It is time that a patient is engaged in active face-to-face treatment which is monitored or guided by a therapist.

* Definition established as part of the OSN Rehabilitation Intensity Project through literature review, stakeholder consultation, and expert consensus.
Defining Rehabilitation Intensity

• An individualized treatment plan involving a **minimum 3 hours of direct task-specific therapy** per patient per day by the core therapies, for **at least 6 days a week**

• **Face-to-face treatment** provided by an occupational therapist (OT), physiotherapist (PT), speech-language pathologist (S-LP), occupational therapy assistant (OTA), physiotherapist assistant (PTA) and communicative disorders assistant (CDA)

• **Documentation of time (in minutes)** from the patient perspective
Further Defining Rehabilitation Intensity

• Does not include group therapy

• Co-treatment time split between the treating therapists

• Maximum of 33% of the 3 hours/day with therapy assistants (OTA, PTA, CDA)

• If one core therapy is not required, then more time is required in the other core therapies to achieve 3 hours of intensive therapy per patient per day over the active length of stay
“Rehabilitation Time” will be Added to the NRS

• Effective April 1st, 2015 Ontario facilities will be required to collect and submit “Rehabilitation Time” for stroke patients discharged from inpatient rehabilitation or integrated stroke units

• Rehabilitation Time data will be collected for:
  • OT
  • PT
  • S-LP
  • OTA
  • PTA
  • CDA
Defining “Rehabilitation Time”

• For NRS data collection, “Rehabilitation Time” is the total time in minutes the patient spent in direct/active therapy with a therapist or therapy assistant over the patient’s active rehab length of stay (LOS)

• Direct therapy refers to individual, face-to-face treatment that is guided or monitored by the therapist for the purposes of achieving therapy goals and maximizing recovery within an individualized treatment plan
Defining Active Rehab LOS?

- The active rehab length of stay (LOS) is considered the number of days between the date of admission to a rehabilitation bed and the date ready for discharge.

- This does not include service interruption days or days waiting for discharge (alternative level of care days).

(adapted from Canadian Institute for Health Information, Tips for Coders: Capturing Service Interruptions in the National Rehabilitation Reporting System, pages 1-3)
When Adding Up the Minutes...

Activity captured in the new Rehabilitation Time measures in NRS

Implementation of new NRS measures = starting point
Recognizing definitions, what is the current level of rehab intensity?

All the rehab activity clients are engaged in to meet their therapeutic goals

Rehab Intensity Best Practice Recommendations: What can be achieved by setting your targets for performance?

(Slide was adapted from the Rehabilitation Intensity CIHI webinar presentation that was presented on February 12th, 2015)
Adjuncts to Therapy Captured in “Rehabilitation Time” Data Collection

- Stroke best practices suggest that all patients should receive rehabilitation therapy within an active and complex stimulating environment (Dawson et al., 2013).

- Adjuncts to the 3 hours of core therapy include: nursing, recreation therapy, social work, group therapy, volunteer programs, independent practice etc.

- Other disciplines and programming play an integral role in the rehabilitation environment and can contribute significantly to patient recovery. However, this time is not included in the Rehabilitation Time data collection and requires more research.
What is Included in “Rehabilitation Time” Data Collection?

• Any time (in minutes) that a patient engages in individualized, face-to-face treatment which is monitored and guided by a rehabilitation therapist (OT, PT, S-LP).

• If the PT, OT, or S-LP student is providing independent face-to-face, one-on-one intensive therapy, this time would be included in Rehabilitation Time data collection. Within the NRS, this time would be captured under PT, OT or S-LP categories, respectively.
Is Assessment Included in “Rehabilitation Time” Data Collection?

• Yes, if the assessment meets the provincial definition for Rehabilitation Intensity.

• 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.
Is Circuit Training Included in “Rehabilitation Time” Data Collection?

- Yes, if it provides individualized, face-to-face therapy aimed at helping the patient achieve their functional therapeutic goals.
Is Group Therapy Included in “Rehabilitation Time” Data Collection?

• No. 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.

• Group therapy is an important adjunct to face-to-face therapy that reinforces techniques learned in individual therapy and provides social interaction and support. As such, group therapy could be offered in addition to the 3 hours of intensive therapy per patient per day.
Are Independent Exercises Included in “Rehabilitation Time” Data Collection?

• No, independent exercises such as Nu-Step®, arm/leg ergometry, independent ADL practice or GRASP exercises are not included in the provincial definition of Rehabilitation Intensity.
Is Time Spent Educating Patients Included in “Rehabilitation Time” Data Collection?

• Yes, if it meets the provincial definition and the patient is actively engaged during the education session (e.g., education with the patient regarding transfer or gait training, swallowing, dysphagia management, etc.)
What is Not Included in “Rehabilitation Time” Data Collection?

- Therapy that is not provided by the core therapies (e.g. recreational therapy, nursing activities, etc.)
- Clinical documentation time that does not actively engage the patient as per the Rehabilitation Intensity definition
- Group therapy
- Time spent in independent exercises (e.g. Nu-Step® exercises, arm ergometry, etc.)
- Education that does not relate directly to the patient’s therapy goals (e.g. education about stroke in general)
- Time spent in patient and family conferences
- Other examples?
Some Guiding Questions for Therapists and Therapy Assistants

• When determining whether your activity is included in Rehabilitation Intensity, please ask yourself the following questions:

  1) *Was I assessing, monitoring, guiding or treating the patient face-to-face?*
  2) *Was my activity with the patient one-on-one*?*
  3) *Was the patient actively engaged in the activity throughout the session?*
  4) *Were we working on things that would help the patient achieve his/her goal(s) and maximize his/her recovery?*

• If you answered **YES** to all questions: this activity would likely be included.
• If you answered **NO** to any of the questions: this activity would NOT likely be included.

* Although co-treatment or collaborative treatment sessions involve more than one therapist/therapy assistant, these sessions would be considered one-on-one if they align with the Rehabilitation Intensity definition and their time is split in half.
Tips for Capturing the Time Spent Delivering Rehabilitation Intensity
How will “Rehabilitation Time” be Recorded?

- Rehabilitation Time will be calculated based on the amount of face-to-face therapy time per stroke patient per day

- [Please insert additional statements of where the Rehabilitation Time data will be collected at your facility]
How Do I Collect the Data?

[Please insert your facility’s workload measurement screen shot or a copy of your manual collection form here. Below is an example of a workload measurement screen shot from Lakeridge Health]

New features (e.g., additional data fields and lookup) were added to support Rehabilitation Time data collection.
How Do I Record Co-Treatment?

Co-treatment by 2 therapists:

• Time is split equally between the 2 therapists

• For example, a 60-minute session would be recorded as 30 minutes by the OT and 30 minutes by the PT
How Do I Record Co-Treatment?

Co-treatment by 2 therapy assistants:

• Time is split equally between the 2 therapy assistants

• For example, a 60-minute session would be recorded as 30 minutes by each therapy assistant
How Do I Record Collaborative Treatment?

Collaborative treatment with a therapist and therapy assistant:

• Time is not split

• The therapist records the total time the patient spent in therapy

• For example, a 60-minute collaborative therapy session by a PT and a PTA would be recorded as 60 minutes by the PT only
How Do I Record Collaborative Treatment?

Collaborative treatment with a therapist and his/her student:

- Time is not split

- The therapist records the total time the patient spent in therapy

- For example, a 60-minute collaborative therapy session by a PT and a PT student would be recorded as 60 minutes by the PT only
## Clinical Examples

[This slide could include specific examples from your facility]

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Rehab Intensity ?</th>
<th>Data Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>730 - 800</td>
<td>Nurse provides cueing for morning breakfast and grooming activities</td>
<td>No - nursing activities not measured as part of the metric, nursing support and practice encouraged above the goal of 3 hours of intensive therapy/day</td>
<td>Not applicable</td>
</tr>
<tr>
<td>830 - 900</td>
<td>OTA with patient for therapeutic dressing activities</td>
<td>Yes</td>
<td>OTA - 30 minutes</td>
</tr>
<tr>
<td>915 - 1015</td>
<td>Transfers and gait training with PT and OT jointly</td>
<td>Yes</td>
<td>OT - 30 minutes&lt;br&gt;PT - 30 minutes</td>
</tr>
</tbody>
</table>
### Clinical Examples

[This slide could include specific examples from your facility]

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<tr>
<td>1045 - 1100</td>
<td>Patient practicing speech exercises in room with IPAD program</td>
<td>No - no therapist or therapy assistant present with patient</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1100 - 1200</td>
<td>Pet Therapy with Volunteers in Lobby</td>
<td>No - no therapist or assistant present with patient</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1330 - 1400</td>
<td>Collaborative treatment: Upper extremity /functional activity exercises with OT and OTA</td>
<td>Yes</td>
<td>OT - 30 minutes</td>
</tr>
</tbody>
</table>

**Collaborative treatment example**
### Clinical Examples

[This slide could include specific examples from your facility]

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<tr>
<td>1415 - 1500</td>
<td>Speech therapy session with S-LP</td>
<td>Yes</td>
<td>S-LP - 45 minutes</td>
</tr>
<tr>
<td>1515 - 1530</td>
<td>Social work meeting at bedside with patient and family</td>
<td>No</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1600 - 1630</td>
<td>Balance activities with PT for 15 minutes followed by 15 minutes on Nu-Step® in PT gym on unit while PT is working with another patient</td>
<td>Yes (time in balance activities would be included)</td>
<td>PT - 15 minutes</td>
</tr>
<tr>
<td></td>
<td><strong>Independent activity example: Time spent on the Nu-Step®</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900 - 1930</td>
<td>Mobility Exercises with volunteers</td>
<td>No</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
Resources

• Ontario Stroke Network (OSN) Resources:
  • “A Resource Guide to Support the Measurement of Rehabilitation Intensity in In-Patient Stroke Rehabilitation”
  • “Stroke Rehabilitation Intensity Frequently Asked Questions”

• A Rehabilitation Intensity Discussion Forum has been set up through the Toronto Stroke Network’s Virtual Community of Practice (VCoP) to support clinicians and administrators (www.strokecommunity.ca)

• Canadian Institute for Health Information (CIHI) resources
References


Questions?

[For this slide, you could include a hospital contact for further questions]
Thanks for coming