

# Stroke Rehabilitation Intensity Education Session

Beth Linkewich, on behalf of the OSN Rehabilitation  
Intensity Working Group

November 18, 2015

1200-1330



## Objectives

At the end of this education session, you will be able to:

1. Define rehabilitation intensity.
2. Discuss the rationale for collecting data (NRS rehabilitation time).
3. Apply rehabilitation intensity from the patient perspective into practice.
4. Review the rehabilitation intensity provincial survey results.
5. Give examples of what activities are included in rehabilitation intensity and which are not.
6. Identify where to access current rehabilitation intensity resources.



## Rehabilitation Intensity: Why is this important?

## What does this mean for persons with stroke?

“knowing when my therapy is,  
I can rest between my sessions”

“I love knowing how my day is going to go”

## Why is Rehabilitation Intensity important?

- Patients spend 60% of their day alone and only 13% on therapeutic activities (Bernhardt et al, 2004)
- Rehabilitation Intensity is a practice opportunity that enhances the patient experience
- Deliberate practice leads to improvement (Ericsson et al, 1993)
- More face to face OT, PT, and S-LP therapies lead to better functional outcomes (Wang et al., 2013; De Wit et al., 2007)



## Why is Rehabilitation Intensity important?

- 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)
- Rehabilitation Intensity is an evaluation opportunity that supports the OSN stroke report cards and Quality-Based Procedures for stroke care (QBP, 2015)
- Foundation for implementing meaningful rehabilitation.



## Why measure Rehabilitation Intensity?

- We're not there yet...
- Better understanding of our current baseline to advocate and support best care and outcomes for stroke patients
- Inform planning of stroke services
- Acknowledge where we are: How can we support moving towards this goal of 3 hours?
- In the end, this is meant to BENEFIT stroke patients



## What does Rehabilitation Intensity entail?

## Definition of Rehabilitation Intensity

**Rehabilitation Intensity** is defined as:

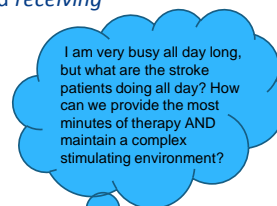
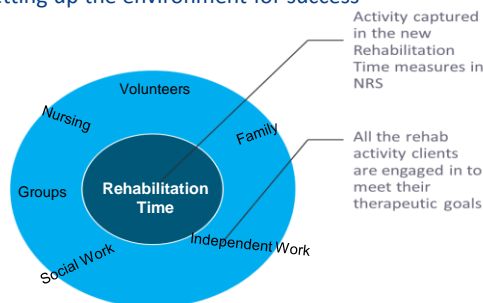
- The amount of time that a **patient** is engaged in active, goal-directed, face-to-face rehabilitation therapy, monitored or guided by a therapist, over a seven day/week period.
  - *Physical, functional, cognitive, perceptual and social goals to maximize the patient's recovery*

**Measuring Rehabilitation Time in the NRS:  
# minutes of Rehabilitation Intensity (defined above) for OT,  
PT, S-LP, OTA, PTA, CDA**



## Rehabilitation Intensity requires a culture shift

- Shift in thinking from therapist time spent *providing* the therapy to the patient time spent actively engaged and *receiving* therapy.
- “Bigger picture” experience
- Setting up the environment for success



## Gathering insight from clinician's experiences on how to support Rehabilitation Intensity data collection and implementation

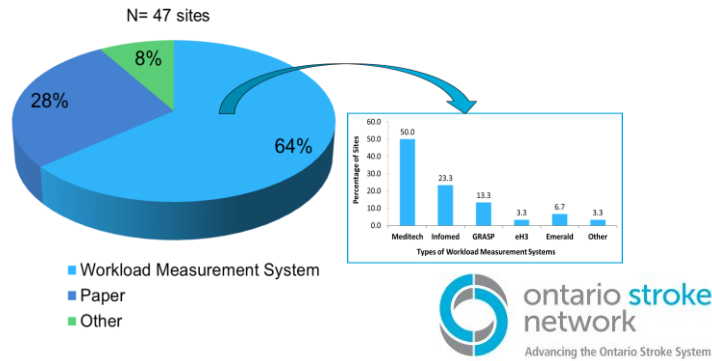
### Provincial Survey Results 2015

- Objective: to understand the clinicians' experiences in order to support Rehabilitation Intensity data collection.
- Survey was administered to integrated stroke units and rehabilitation sites that report rehabilitation intensity data to the National Rehabilitation Reporting System (NRS).
- Survey was sent to OTs, PTs, S-LPs, CDAs, OTAs, PTAs, and RAs who see stroke patients on a regular basis.
- 47 sites (321 clinicians) responded



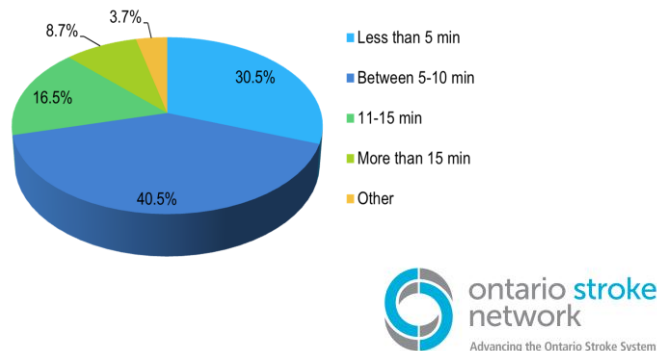
## More sites were using workload measurement systems to track Rehabilitation Intensity data

64% of sites were using workload measurement systems (WMSs) to collect Rehabilitation Intensity data (321 clinicians, 47 sites); 28% of sites were using paper.



## Most clinicians reported feasibility in collecting Rehabilitation Intensity data

71% of clinicians (N=321) reported 10 min or less to enter Rehabilitation Intensity data



## Clinicians reported common challenges during rehabilitation intensity data collection

- **5 key challenges in collecting RI data:**
  - 1) Data accuracy/quality assurance (most frequently reported)
  - 2) Time constraints/workload demands
  - 3) Limited staff/lack of resources
  - 4) Confusion around the definition
  - 5) Culture shift



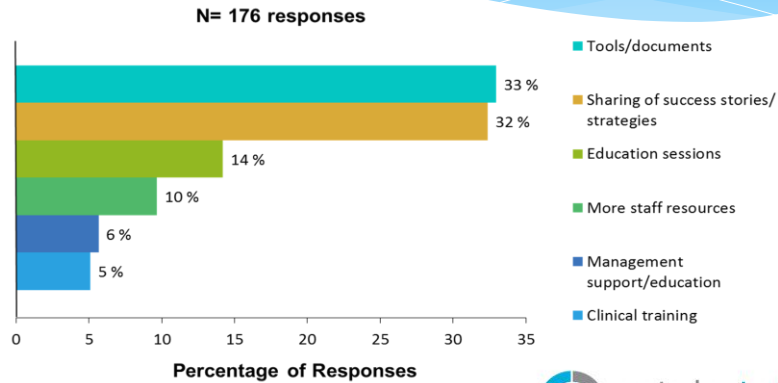
## Clinicians reported common enablers for Rehabilitation Intensity data collection

- **5 key enablers in collecting RI data:**
  - 1) Ease of collecting Rehabilitation Intensity data through WMSs (most frequently reported)
  - 2) Increased interprofessional team collaboration
  - 3) Scheduling and keeping track of data throughout the day
  - 4) Education provided
  - 5) Setting aside time to collect Rehabilitation Intensity data
  - 6) Using a clock or stopwatch





## Clinicians told us they need...



## NEEDED: A shared vision



“The impossible is possible with a *SHARED VISION*”

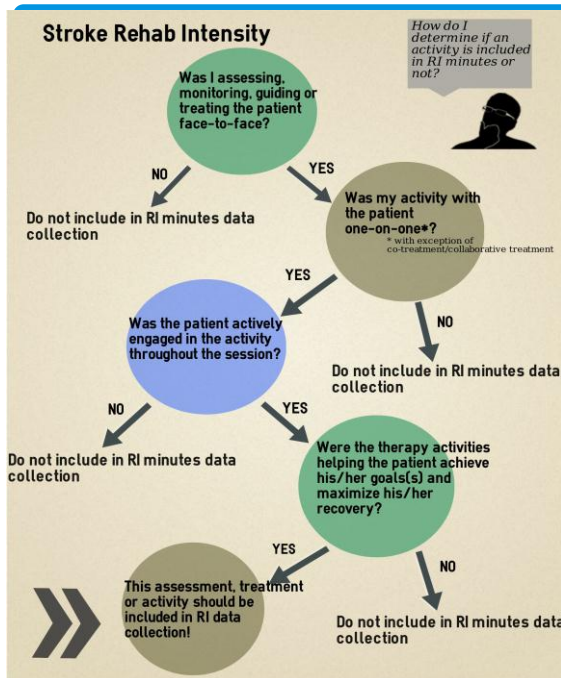


## Moving towards a culture of participation...

- Shared vision of active participation in an engaging and stimulating environment
  - Transparent expectations across the continuum
- Value of therapy – the reason for being here
- Focus on function and meaningful activity
  - Integrate functional activity into routines wherever possible
  - How do we set up our environment, program, schedule, etc. to maximize rehabilitation intensity?
- Shift in thinking from therapist time to **patient time** in therapy



How do we support Rehabilitation Intensity data collection and implementation?



### STROKE REHAB INTENSITY

**Guiding questions to determine if your activity is included in Rehabilitation Intensity (RI) measurement**

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 the therapy activities helping the patient achieve his/her goal(s) and maximize his/her recovery?

If the answer to **all** questions is YES, include the activity in RI measurement.

If the answer to any question is NO, **do not** include the activity in RI measurement.

\*with the exception of co-treatment/collaborative treatment

## What is included?

**Example:**

- Time spent in circuit training that is face-to-face, one-on-one, and is geared towards the patient's goals
  - PTA guides patient through the circuit, adjusting instruction or activity at each station to meet the patient's goals

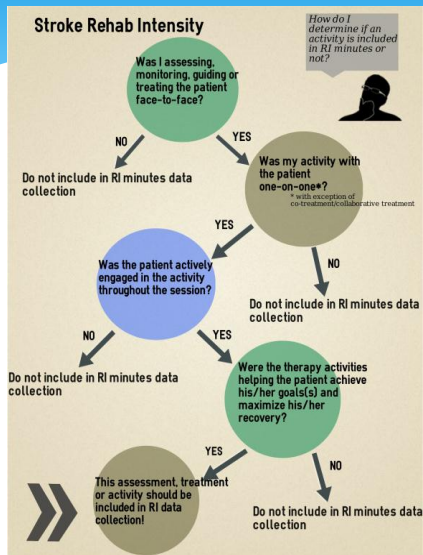
# What is excluded?

## Example:

- Patient education where patient passively receives information
  - The OT provides a pamphlet to the patient on energy conservation and explains the concepts without asking him/her to practise or demonstrate any of these



# Questions



## Freeing up therapist time for intensive therapy

- Standardize and/or simplify assessment
- Integrate assessment into treatment wherever possible
  - Continuous opportunities for progression to facilitate condensed stay
- Reduce duplication across the continuum
  - Common assessment tools
  - Sharing information to support transitions of care
- Simplify and tighten up charting
- Staggered schedules
- Therapist coverage/replacement



## Freeing up patient time for therapy

- Scheduling
  - Electronic scheduling
  - Whiteboards
  - Master schedules – for patients' time
- Communication
  - Interprofessional approach to prioritizing morning care to facilitate participation in therapy
  - Transfer of care report
- Timing and duration of therapy to meet patient needs and maintain intensity
  - E.g. allowing for enough rest prior to and between therapies for those that require, 3 x 20 minutes vs 1 hour straight
- Integrate family and visitors into treatment time

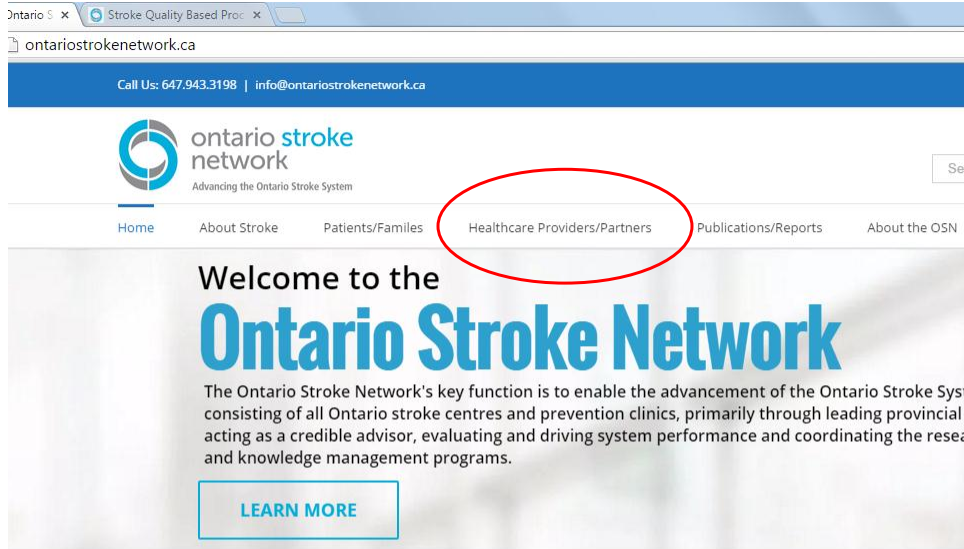


## Therapy Environment

- Therapy doesn't only happen in the gym
  - Take advantage of therapeutic opportunities in patients' rooms whenever possible
    - E.g. Swallowing during lunch
- Set-up of therapy environment to create efficiencies and support more active engagement



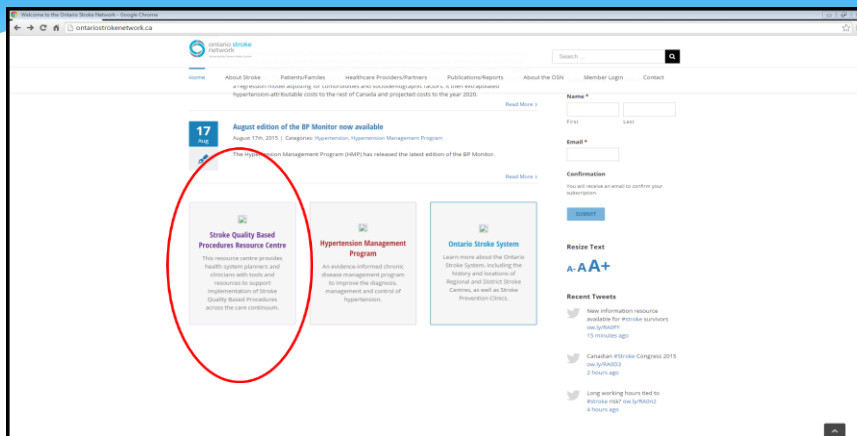
## Resources Developed to Support Rehabilitation Intensity Data Collection and Implementation



## Our Mission

We provide provincial leadership and planning for the Ontario Stroke System by measuring performance, partnering to achieve best practices, and creating innovations for stroke prevention, care, recovery and reintegration.

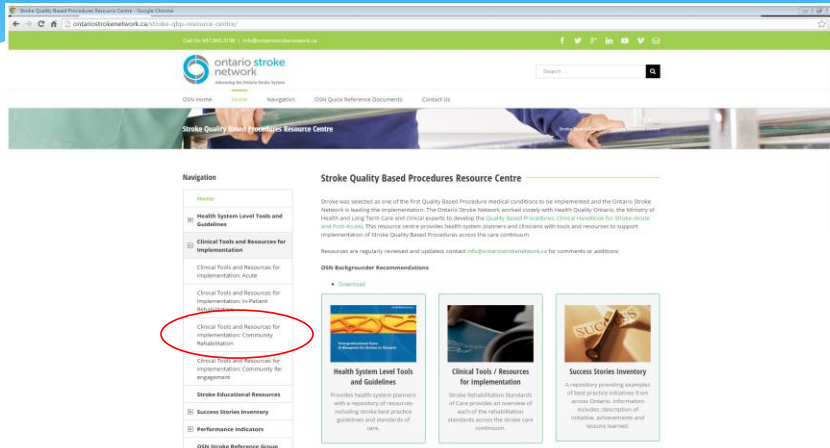
## OSN Website: Stroke QBP Resource Centre



www.ontariostrokenetwork.ca



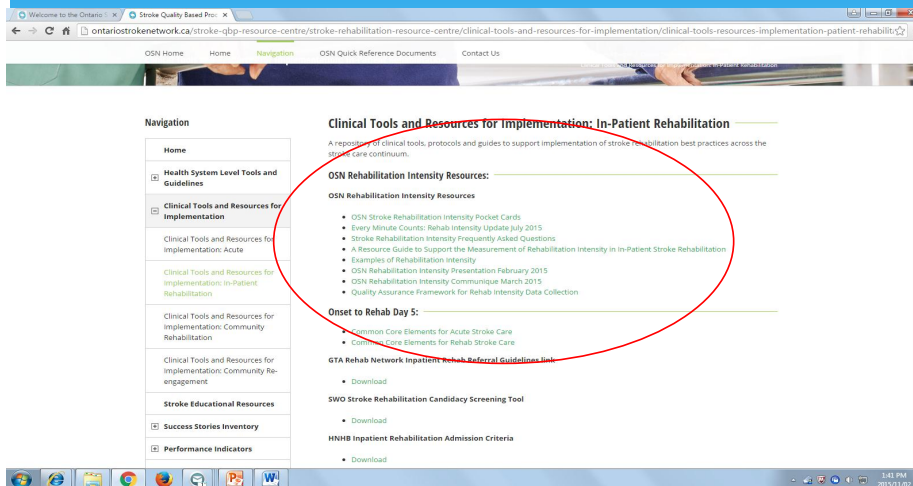
# OSN Website: Clinical Tools & Resources for Implementation In-Patient Rehabilitation



www.ontariostrokenetwork.ca



# OSN Website: Rehabilitation Intensity



www.ontariostrokenetwork.ca







### Navigation

<b>Home</b>
<b>Health System Level Tools and Guidelines</b>
<b>Clinical Tools and Resources for Implementation</b>
Clinical Tools and Resources for Implementation: Acute
Clinical Tools and Resources for Implementation: In-Patient Rehabilitation
Clinical Tools and Resources for Implementation: Community Rehabilitation
Clinical Tools and Resources for Implementation: Community Re-engagement
<b>Stroke Educational Resources</b>
<b>Success Stories Inventory</b>
<b>Performance Indicators</b>

## Clinical Tools and Resources for Implementation: In-Patient Rehabilitation

A repository of clinical tools, protocols and guides to support implementation of stroke rehabilitation best practices across stroke care continuum.

### OSN Rehabilitation Intensity Resources:

#### OSN Rehabilitation Intensity Resources

- OSN Stroke Rehabilitation Intensity Pocket Cards
- Every Minute Counts: Rehab Intensity Update July 2015
- Stroke Rehabilitation Intensity Frequently Asked Questions
- A Resource Guide to Support the Measurement of Rehabilitation Intensity in In-Patient Stroke Rehabilitation
- Examples of Rehabilitation Intensity
- OSN Rehabilitation Intensity Presentation February 2015
- OSN Rehabilitation Intensity Communique March 2015
- Quality Assurance Framework for Rehab Intensity Data Collection

### Onset to Rehab Day 5:

- Common Core Elements for Acute Stroke Care
- Common Core Elements for Rehab Stroke Care

### GTA Rehab Network Inpatient Rehab Referral Guidelines link

- [Download](#)

### SWO Stroke Rehabilitation Candidacy Screening Tool

- [Download](#)

### HNHB Inpatient Rehabilitation Admission Criteria

- [Download](#)



## Rehabilitation Intensity Resources

**ontario stroke network**  
Advancing the Ontario Stroke System

### Stroke Rehabilitation Intensity Frequently Asked Questions

**1) What is the provincial definition of Rehabilitation Intensity?**

Rehabilitation Intensity<sup>1</sup> 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<sup>2,3,4</sup>, for at least six days per week<sup>2,3</sup>
- Does not include groups



# Rehabilitation Intensity Resources

**Every Minute Counts: Rehab Intensity Update**  
July 2015

**Myth Busting**

**Myth #1:** With rehab intensity implementation, group therapy and other adjunct therapies are considered less important.  
**Answer:** False. Stroke best practice notes that therapy should occur within a complex stimulating environment. Groups and other therapies are important.

**Myth #2:** Rehab intensity time is only recorded for OT, PT, SLP and their assistants, making other disciplines such as nursing and recreational therapy not as important for a stroke patient's recovery.  
**Answer:** False. Stroke best practice indicates that core team members are involved in rehab intensity.

**Myth #3:** Rehab intensity is only for those who can tolerate a lot of therapy.  
**Answer:** False. A common therapy goal is to increase tolerance and work towards desired rehab intensity to maximize recovery. Try to think creatively, for example:

**STROKE REHAB INTENSITY**

**Definition:** "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, 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."

\*The rehabilitation intensity definition was developed through literature review, expert consensus, and stakeholder engagement, and was approved by the Ontario Stroke Network Stroke Reference Group.

**STROKE REHAB INTENSITY**

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# Toronto Stroke Networks Virtual Community of Practice (VCoP)

**Toronto Stroke Networks Virtual Community of Practice**

**Collaborate**

Do you need some help with a policy document?  
Do you have a question about a new treatment and want to find someone who is actively using it?  
Does your research need a fresh perspective?

[Learn More](#) [Become a Member](#)

The Toronto Stroke Networks (TSNs) are passionate about and dedicated to implementing high quality stroke care across the care continuum. The Toronto Stroke Networks Virtual Community of Practice (VCoP) focuses on the practice of improving stroke care. Being part of its membership will give you access to an extensive body of knowledge allowing you to share, learn and to develop your individual practice while collaborating with other healthcare providers.

**VCOP Training Module**  
Please click the button below to access the eLearning module on how to navigate VCoP.  
[VCOP Training Module](#)  
VCOP User Guide

**Become a member**

**Member Resources**  
Explore the Toronto's settings and an educational approach to stroke care. Gain user expertise or participate in research.  
[Learn More](#)

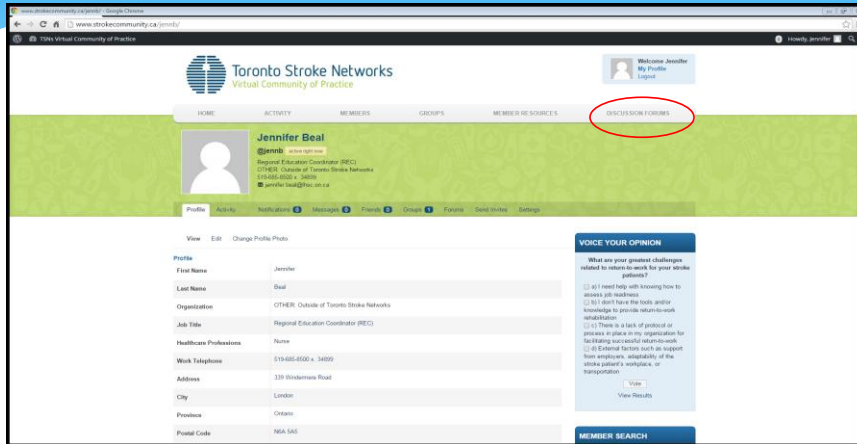
**Discussion Forum**  
Participate in the Discussion Forum. Post a question or discuss a topic. Meet the community and share the discussion board.  
[Learn More](#)

**Membership Directory**  
Access to the Membership Directory. Search the membership directory and other members by name and display their resources.  
[Learn More](#)

www.strokecommunity.ca



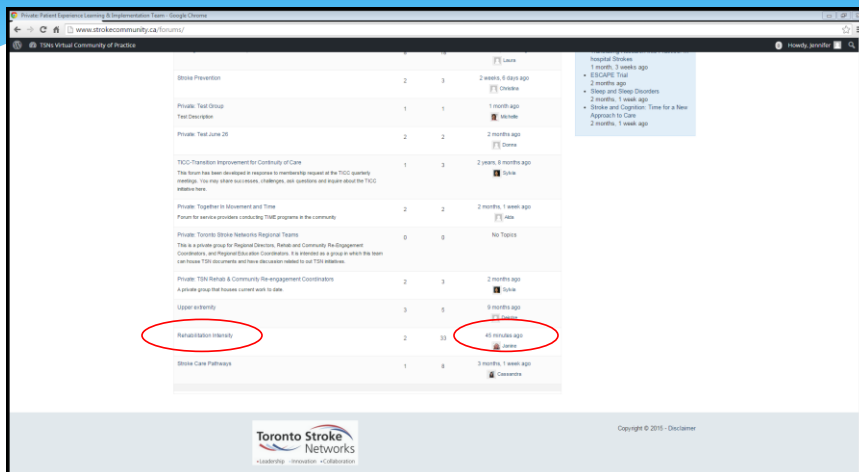
# VCoP Discussion Forum: Rehabilitation Intensity



www.strokecommunity.ca



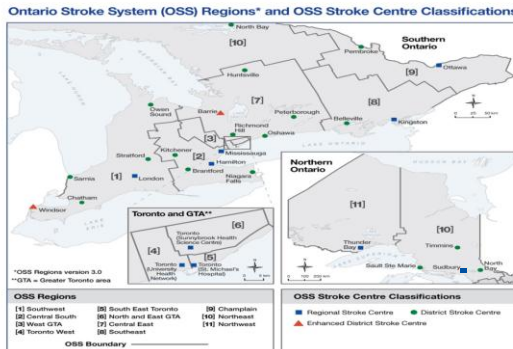
# VCoP Discussion Forum: Rehabilitation Intensity



www.strokecommunity.ca



# Map of Ontario Stroke System (OSS) Regions



For any inquiries related to rehab intensity, please contact your **OSS Regional Rehabilitation Coordinator**.

For your OSS region, please view this map.

Next slide will provide a listing of all Regional Rehabilitation Coordinators for each OSS region.



# Listing of all OSS Regional Rehabilitation Coordinators

NAME	EMAIL	PHONE	FACILITY/SITE/REGION
Beth Nugent	bnugent@toh.on.ca	613-798-5555 x14430	Champlain Regional Stroke Network
Janine Theben	janine.theben@trilliumhealthpartners.ca	905- 848-7580 x 5683	West GTA Stroke Network
Shelley Huffman	huffmas1@kgh.kari.net	613-549-6666 x 6841	Stroke Network of Southeastern Ontario
Deb Willems	deb.willems@lhsc.on.ca	519- 685-4292 x 42681	Southwestern Ontario Stroke Network
Donelda Sooley	SooleyD@rvh.on.ca	705- 728-9090 x 46312	Central East Stroke Network
Donna Cheung	cheungd@smh.ca	416- 864-6060 x 3832	South East Toronto Stroke Network
Esmé French	frenche@tbh.net	807- 684-6498	Northwestern Ontario Regional Stroke Network
Jenn Fearn	jfearn@hsnsudbury.ca	705- 523-7100 x 1718	Northeastern Ontario Stroke Network
Jocelyne McKellar	jocelyne.mckellar@uhn.ca	416- 603-5800 x 3693	Toronto West Stroke Network
Nicola Tahair	nicola.tahair@uhn.on.ca	416- 690-3660	Toronto Stroke Networks
Sylvia Quant	sylvia.quant@sunnybrook.ca	416-480-6100 x 7424	North & East GTA Stroke Network
Stefan Pagliuso	pagliuso@hhsc.ca	905-527-4322 x 44127	Central South Regional Stroke Network

## What can you do as a clinician?

- Are there ways to maximize therapy time?
- How can you change the way you schedule patients to meet their endurance and participation needs?
- How can you coordinate with interprofessional team members to support therapy sessions with your patients?
- Can you advocate for changes to equipment, space, processes on your unit?
- How can you use volunteers, families, and caregivers to support the process?



## Share your ideas and success stories

Please share your ideas or strategies for increasing Rehabilitation Intensity with your regional rehabilitation coordinator and through the VCoP Rehabilitation Intensity discussion forum

### **Save the Date for our next Rehabilitation Intensity videoconference:**

- January 13, 2016 (1200-1330) – OTN details to follow.
- Focus: to share ideas and strategies used by organizations across Ontario to support Rehabilitation Intensity implementation



# Thank You!

## Questions?

Members of OSN Rehabilitation Intensity Working Group:

- Beth Linkewich (Co-Chair), Sylvia Quant (Co-Chair), Donelda Sooley, Janine Theben, Deb Willems, Shelley Huffman, Amy Maebræ-Waller, Judy Murray, Jennifer White, Jennifer Fearn, Jennifer Beal, Gwen Brown, Linda Kelloway, and Ruth Hall.



## What is included?

Included	Examples
Assessment that is face-to-face, one-on-one with patient actively engaged	The OT completes an OSOT with patient
Time spent in circuit training that is face-to-face, one-on-one, and is geared towards the patient's goals	The PTA guides the patient through the circuit, adjusting instruction or activity at each station to meet that patient's goals
Active training of therapeutic guidance provided during aerobic exercise	The patient is on a Body Weight Supported Treadmill but the PT is actively facilitating leg/foot movement while providing verbal cueing throughout
Self care or mobilization done outside of 'planned' therapy time but that still contributes to helping patient meet their goals	The OT decides to assist the patient to practise toileting with the patient after 15 minutes of planned upper extremity activities because independent toileting is another goal the client has and the client indicated the need to toilet right after the treatment session
Patient education where patient is actively involved	The PT demonstrates to the family member a one-person pivot transfer with patient, then has them practice while she provide tips and cueing

## What is excluded?

Excluded	Examples
Time patient spends in group therapy	The patient participates in a 30-minute seated group exercise led by the PTA
Time patients spends receiving passive treatments without therapist present	The OT applies functional electrical stimulation to the forearm while the patient is in bed and then leaves the patient for 20 minutes
Preparation and clean up for assessment and treatments	The PT adjusts the parallel bars before bringing the patient down to the therapy room
Discharge planning activities, e.g., team meetings, filling out forms, phone calls.	The PT, OT and S-LP spend one hour in a family meeting to discuss discharge plans with the family and discharge planner
Group education classes	The patient attends an education session on healthy eating
Patient education where patient passively receives information	The OT provides a pamphlet to the patient on energy conservation and explains the concepts without asking him/her to practise or demonstrate any of these
Independent cardiovascular activities without therapist present	The patient walks to the gym independently and does 15 minutes of pedalling on the NuStep®

## OSN Website: How to access the Rehabilitation Intensity resources

Steps for accessing the stroke rehab intensity resources:

- 1) Go to <http://ontariostrokenetwork.ca/>
- 2) Click on the 'Healthcare Providers/Partners' tab near the top and select 'Stroke Quality Based Procedures Resources Centre' from the drop-down menu
- 3) Within the navigation section, click on 'Clinical Tools and Resources for Implementation'
- 4) Click on the green link called 'Clinical Tools and Resources for Implementation: In-Patient Rehabilitation'
- 5) Go to the 'OSN Rehabilitation Intensity Resources' section and select the resource link(s) that you are interested in accessing/downloading.

