Understanding the Clinicians' Experiences in Collecting Stroke Rehabilitation Data within Ontario

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Background and Issues

Within Ontario, collection and reporting of Rehabilitation Intensity (RI) was mandated for stroke on April 1, 2015 to support evaluation of stroke best practice implementation. RI includes the total number of minutes of direct task-specific therapy that patients receive during their inpatient active rehab length-of-stay. This requires a shift in thinking to reflect **patient** versus clinician time spent in therapy. To support implementation, it was important to understand clinicians' experiences in collecting RI data.

PURPOSE: To evaluate the implementation of RI and identify enablers and barriers to capturing RI.

Provincial Definition of Stroke Rehabilitation Intensity

Rehabilitation intensity* is defined as:
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 for at least six days per week
- 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

* 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.

Methods

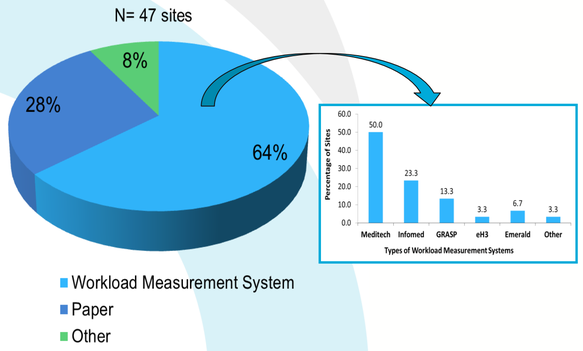
- A 12-item electronic survey was developed by the Ontario Stroke Network (OSN) Rehabilitation Intensity Working Group to describe the experiences of clinicians (occupational therapists, physiotherapists, speech-language pathologists, occupational therapy assistants, physiotherapy assistants and communicative disorders assistants) 3 weeks post implementation.
- The survey was administered via SurveyMonkey® to clinicians at 48 sites** across Ontario.
- Analyses involved descriptive statistics and thematic analysis.
- Overall results were used to inform resource development**.**

** Organizations that submit RI data to the National Rehabilitation Reporting System include freestanding or non-freestanding inpatient rehabilitation hospitals/programs/services and integrated stroke units.

Results

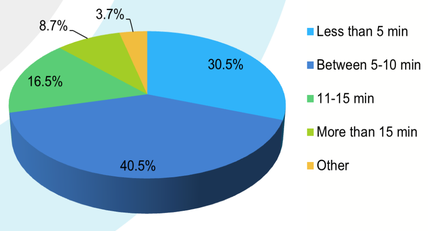
Of the 47 sites across Ontario that responded to the survey (321 clinicians), 64% of sites (n=30) reported using their workload measurement systems (WMS) to collect RI data (see Figure 1).

FIGURE 1: Rehabilitation intensity data collection method



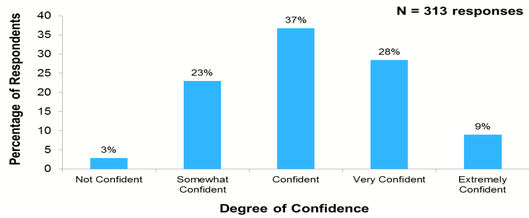
Of the 321 clinicians that responded to the survey, 71% of responses reported needing 10 min or less to enter RI data (see Figure 2).

FIGURE 2: Percentage of time taken to enter RI data



When asked to rate their degree of confidence in accurately entering RI data, 65% of clinicians reported feeling confident or very confident (see Figure 3).

FIGURE 3: How confident do you feel in accurately entering RI data on a daily basis?



Challenges in Capturing RI

Five key themes related to collection challenges were identified. Data accuracy was the most frequently cited challenge (30% of 358 challenges reported).

Themes listed by frequency:
1. Data accuracy/quality assurance
2. Time constraints/workload demands
3. Limited staff/lack of resources
4. Confusion around the definition
5. Culture shift

"When you have more than one person in the gym at a time but are doing some individualized therapy between them during rest periods, it's hard to accurately calculate the time you spent with one person." *Survey Respondent*

Enablers in Capturing RI

Six key themes related to enablers in collecting RI data were identified. Ease of access in collecting RI data through WMS was the most frequently cited enabler (50% of 23 enablers reported).

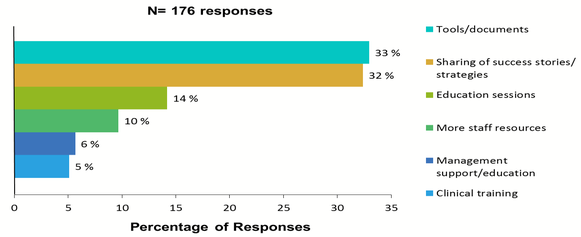
Themes listed by frequency:
1. Ease of collection through workload measurement
2. Increased interprofessional team work
3. Scheduling and keeping track of data
4. Education provided/received
5. Setting aside time to collect RI time each day
6. Using a clock or stopwatch

"I do it along with my workload which makes it easy for me." *Survey Respondent*

"As I keep track of my daily schedule every day it makes it easy to mark rehab intensity." *Survey Respondent*

Several suggestions for supporting resources were also submitted through the survey (see Figure 4).

FIGURE 4: Resource suggestions to support RI implementation



When asked if RI data collection made a positive impact on their practice, responses were limited. However, for those who did observe practice changes, it appeared that clinicians were more mindful of the patients' versus therapists' time in therapy.

"There have not really been any challenges so far, other than shifting the focus from therapist's time with patient to patient time with therapist." *Survey Respondent*

Through anecdotal reports, focus has now shifted to support clinicians in implementing quality improvement initiatives aimed at increasing RI provision for stroke patients.

Conclusions and Next Steps

Majority of clinicians participating in the survey were confident in entering their RI time and could do so in timely manner. Based on key challenges and enablers that impact data quality, resources have been developed to support provincial implementation. As RI data fields are now available for use in a national rehabilitation database, this sets the foundation for other provinces interested in the systematic collection and reporting of RI for stroke and other diagnostic groups.

ACKNOWLEDGEMENTS

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1 Toronto Stroke Networks
2 West GTA Stroke Network
3 Central East Stroke Network
4 Stroke Network of Southeastern Ontario
5 Northeastern Ontario Stroke Network
6 Southwestern Ontario Stroke Network
7 Institute for Clinical Evaluative Sciences
8 Ontario Stroke Network

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Advancing the Ontario Stroke System