Evaluating the Clinical Experience of Stroke Rehabilitation Intensity Data Collection in Ontario

Sylvia Quant[1], Janine Theben[2], Amy Maebrae-Waller[3], Shelley Huffman[4], Jenn Fearn[5], Jennifer White[3], Jennifer Beal[6], Gwen Brown[4], Ruth Hall[7,8], Judy Murray[3], Donelda Sooley[3], Deb Willems[6], and Elizabeth Linkewich[1]

Background

- Rehabilitation intensity (RI) data collection in the National Rehabilitation Reporting System (NRS) was mandated on April 1, 2015 for all stroke patients within Ontario to support Quality-Based Procedures for Stroke Care[1].
- The process for collecting RI data relies on clinicians self-reporting and documenting patient rehabilitation time and requires a shift in thinking to reflect **patient** versus clinician time spent in therapy.

PURPOSE: To understand the clinician's experience in order to support and evaluate RI data collection.

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

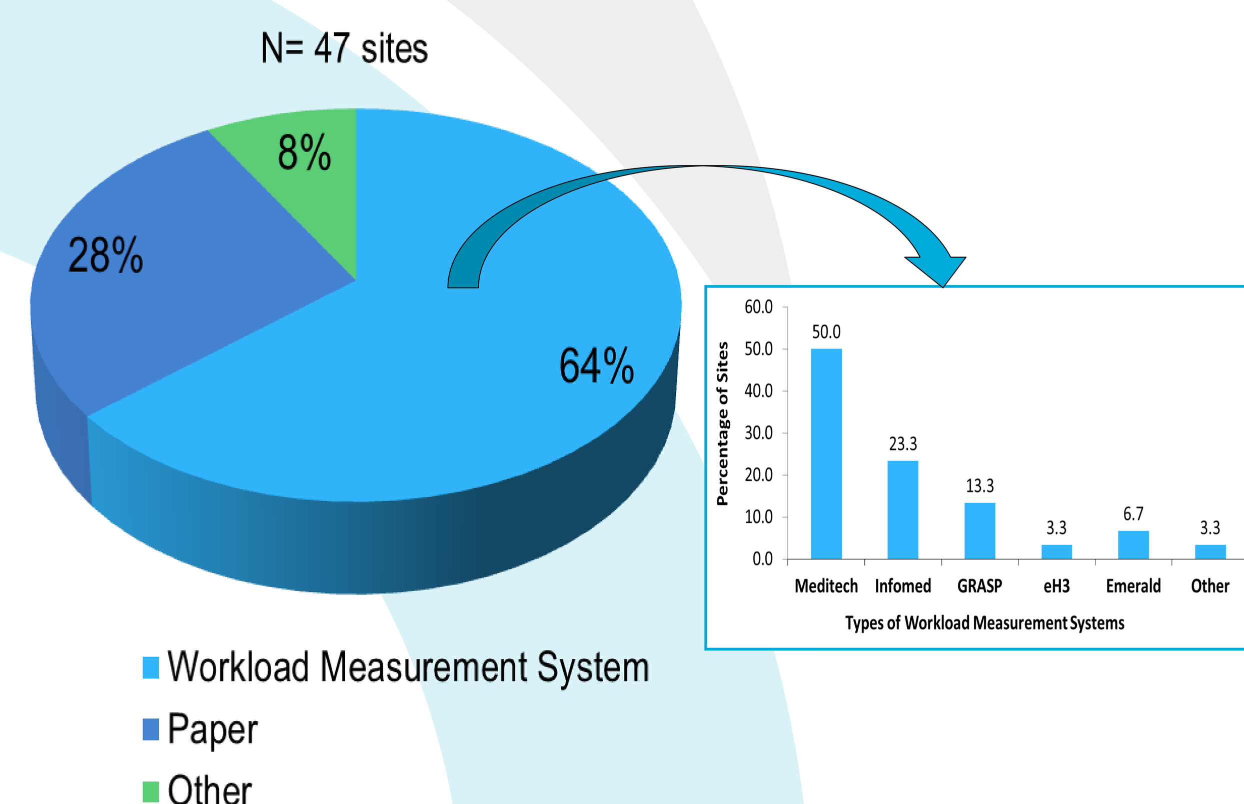
- A 12-item electronic survey was developed by the Ontario Stroke Network (OSN) Rehabilitation Intensity Working Group to evaluate the experience of clinicians three weeks post implementation and inform ongoing education and development.
- The survey was administered at one pilot site, revised based on pilot data, and distributed via OSN Regional Rehabilitation Coordinators to 48 organizations** that submit RI data to the NRS in Ontario.
- Site-specific data were analyzed using descriptive statistics as well as thematic analysis. Overall results were used to inform ongoing implementation and resource development.

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

Results

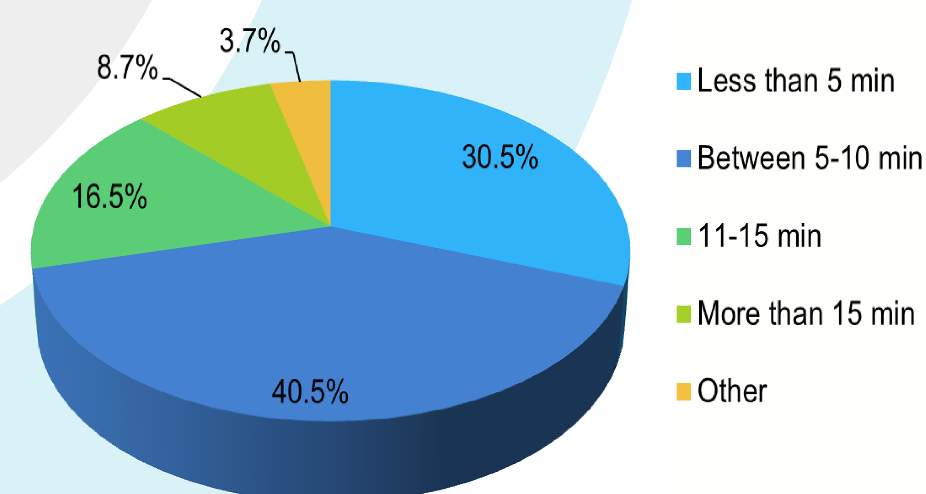
Of the 321 responses from 47 organizations across Ontario, 64% of sites (n=30) were using their workload measurement systems (WMS) to collect RI data (see Figure 1).

FIGURE 1: Rehabilitation intensity data collection method



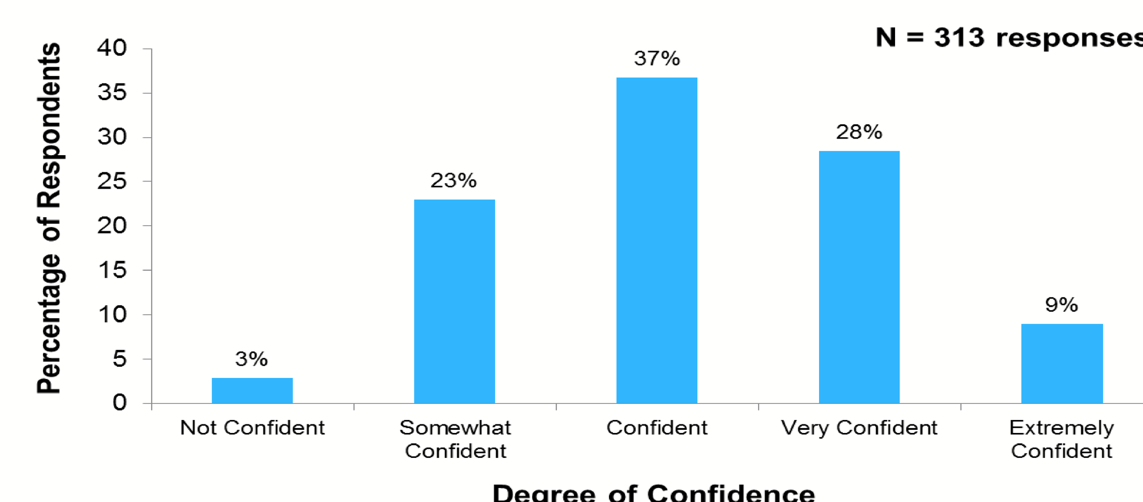
Results suggest that RI collection is feasible for clinicians: 71% of responses (N=321) reported 10 min or less to enter RI data (see Figure 2).

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 in entering RI data (see Figure 3).

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



Challenges and Enablers

Despite self reports of confidence in accurately collecting RI data, 5 key themes related to challenges in collecting RI data were identified, with the most frequently cited challenge relating to data accuracy.

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*

Six key themes related to enablers in collecting RI data were identified, with ease of access in collecting RI data through WMS being the enabler most frequently cited.

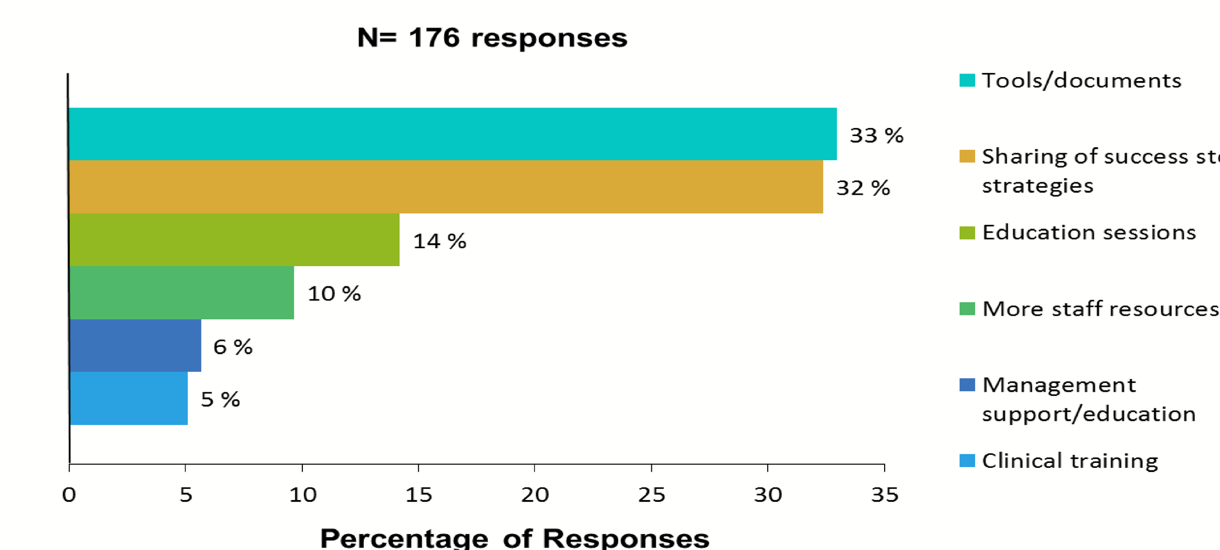
Themes listed by frequency:
1. Ease of collection through workload measurement
2. Increased interprofessional team work
3. Scheduling and keeping track of data
4. Education provided/received
5. Setting aside time to collect RI time each day
6. Using a clock or stopwatch

> "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



As this survey was administered 3 weeks post implementation, most clinicians were not yet certain if RI data collection made a positive impact on their practice. However, for those who did observe practice changes post implementation, 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*

Conclusions and Next Steps

Based on survey results, process issues for collecting RI were not identified as a key concern. Rather, opportunities for improvement related to enhancing data quality and the consistency of what is included in the reporting of RI time.

Future work will address issues related to quality assurance and the supports needed for clinical implementation of RI.

REFERENCES

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 February. 148 p. Available from: http://www.hqontario.ca/evidence/evidence-process/episodes-of-care#community-stroke.

ACKNOWLEDGEMENTS

We wish to acknowledge our system stakeholders including clinicians and managers in their role in supporting the dissemination and completion of this survey. In particular, we would like to thank the staff at Lakeridge Health and all OSN members who have contributed to this work.

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