Implementing a System-Wide Engagement Strategy to Support Collection of Stroke Rehabilitation Intensity Data across Ontario

Elizabeth Linkewich¹, Jennifer Fearn², Shelley Huffman³, Janine Theben⁴, Amy Maeabae-Waller⁵, Jennifer Beal⁶, Gwen Brown³, Ruth Hall⁷, Judy Murray⁷, Donelda Sooley⁷, Jennifer White⁵, Amy Maebrae-Waller⁵, Jennifer Beal⁶, Judy Murray⁷, Donelda Sooley⁷, Jennifer White⁵, Amy Maebrae-Waller⁵, Jennifer Beal⁶, Judy Murray⁷, Donelda Sooley⁷, Jennifer White⁵, Amy Maebrae-Waller⁵, Jennifer Beal⁶, Judy Murray⁷, Donelda Sooley⁷, Jennifer White⁵, Amy Maebrae-Waller⁵, Jennifer Beal⁶, Judy Murray⁷, Donelda Sooley⁷, Jennifer White⁵

Background/Context:
Quality-Based Procedures Clinical Handbook for Stroke (2015) recommends that each person with stroke receive a minimum of 3 hours of individualized intensive therapy per day in inpatient rehabilitation. Currently, as patient time in therapy is not captured, the Ontario Stroke Network (OSN) collaborated with the Ministry of Health and Long-Term Care (MOHLTC) and Canadian Institute for Health Information (CIHI) to have rehabilitation intensity (RI) included in the National Rehabilitation Reporting System (NRS). As of April 1, 2015, the MOHLTC mandated RI collection in the NRS for all stroke patients in Ontario. Given this is a province-wide initiative, an engagement strategy that includes collaborating with multiple stakeholders was necessary to develop a standardized knowledge translation approach for clinical implementation and sustainability of RI measurement.

Objectives:
1) To implement a province-wide strategy to support stroke RI data collection and reporting;
2) To understand the clinicians’ experiences in collecting RI data in order to further support clinicians during RI data collection.

Measures:
A province-wide survey was conducted in 2015 to assess uptake and understand the clinicians’ experiences in implementing RI. Outcome measures included:
1) Total number of hospitals reporting readiness to collect RI data;
2) Percentage of hospitals that used workload measurement systems (WMS) versus other methods to collect RI;
3) Percentage of clinicians who entered RI data in 10 minutes or less.

Qualitative questions on a one-time electronic survey were used to understand clinicians’ experiences in order to identify barriers and enablers for RI data collection. Thematic analysis was used to identify themes related to practice change and unintended consequences from RI data collection.

Change Concepts:
Collecting RI requires a shift from accounting for time clinicians spend providing therapy to documenting how much time the patient spends in therapy. Capturing patient time in therapy relies on clinicians having the tools to track these data, educational materials and training. Adaptation of WMS to collect RI requires organizational support and resources.

The Approach
In 2014, the OSN struck a task group that collaborated with the MOHLTC and CIHI to develop and implement a province-wide strategy to support RI collection and reporting. For current state analysis, the task group reviewed provincial use of WMS and conducted site interviews with 4 hospitals that were going through the change process in adapting their WMS to accommodate RI data collection. In learning from these hospitals on the steps taken to adapt their WMS, educational resources were then developed to support provincial implementation. To facilitate provincial spread and the transfer of knowledge, the OSN Regional Rehabilitation Coordinators Group (OSN RC Group) was leveraged to disseminate resources/information and gather ongoing feedback to identify emerging issues and inform implementation. A 12-item electronic post-implementation survey was also developed by the group and disseminated by the OSN RC Group to inform ongoing resource development. This survey was designed to capture the clinicians’ experiences during RI data collection, and was piloted at one site before dissemination to NRS hospitals 3 weeks post implementation.

Outcomes and Results/Lessons Learned:
Based on information gathered from the OSN RC Group, 46 hospitals reported readiness to collect RI data as of April 1, 2015, with 2 other hospitals reporting a start date 1-3 months later. Three hundred and twenty-one clinicians from 47 hospitals responded to the survey. Common approaches for collecting RI were identified and included adaptation of WMS to accommodate RI data fields (64% of sites, N=47) and manual collection. Clinicians also reported that collection was feasible, with 71 percent of clinicians reporting that it takes 10 minutes or less to enter RI time. Among clinicians, data accuracy had the highest frequency (30%) of all challenges reported (N=358). Ease of access through WMS was the most prevalent enabler reported (50%, N=23). Qualitative themes related to practice changes and unintended consequences. Further analysis is ongoing.
Overall, a provincial structure that leverages regional relationships effectively mobilized 46 hospitals across Ontario to collect stroke RI as of April 1, 2015. Stakeholder engagement at a regional level allows for the development of tailored resources to meet local needs. Opportunities for improvement in RI collection relate to enhancing data quality and consistency of data collection across sites. Future work will focus on the development of resources to address issues related to quality assurance and utilization of the data to support stroke system improvement. Additionally, this data is being used to develop resources for clinical implementation of increased RI. Learnings from this work are being used to inform system planning and can be applied to other provinces and diagnostic groups interested in RI in rehabilitation settings.

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