EVERY MINUTE COUNTS
- Stroke Rehabilitation Intensity -

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Intentions

- Provide context about why rehabilitation intensity is important
- Share an overview of the provincial work and resulting definition of rehabilitation intensity
- Briefly highlight how we will be measuring rehabilitation intensity
- Discuss opportunities to increase rehabilitation intensity to align with best practices

Rehab Intensity: Why Should I Care?
Practice, practice, practice

• Practice makes perfect…10 000 hour rule
  • Not just repetitions, but deliberate practice
    • Highly structured activity
    • Designed to stretch individual’s skills and promote growth
    • The goal of deliberate practice is improvement
      • (Ericsson et al, 1993)

Why is Rehabilitation Intensity Important?

• More therapy means better outcomes
  • Daily therapy time by OT, PT, & S-LP is significantly correlated with gains in ADLs, cognition, mobility & overall functional improvement
  • < than 3 hours/day significantly lower total functional gain than > 3 hours per day
• Core therapies more sensitive to intensity
  • OT, PT, S-LP have been shown to be most sensitive to intensity
    • (Wang et al., 2012)
• Therapy is cheap
  • Small proportion of total inpatient rehab hospital budget is spent on core therapies (~20%)
  • Impact on LOS

Minutes Matter...

• Actual direct therapist-patient time and time spent in activation activities is important
• CERISE Trial
  • 4 European Rehab Centres
  • Compared motor and functional recovery after stroke
  • Gross motor and functional recovery was better in centres with more direct therapy time (166 min)
  • Differences in therapy time not attributed to differences in patient/staff ratio (similar staffing)
    • De Wit et al. Stroke 2007:38:2101-2107
Toronto: Intense Stroke Rehab more Efficient than Slow Stream for Severe Stroke (RPG 1100 & 1110)

Earlier access to and greater intensity of rehab is linked with improved functional recovery and reduced LOS

E-stroke data 09/10

Practice Opportunity

- Even though there is evidence that increased activity and environmental stimulation is important to neurological recovery

  - In a therapeutic day
    - >50% time in bed
    - 28% sitting out of bed
    - 13% in therapeutic activities
    - Alone for 60% of the time

  (Bernhardt et al, 2004)

Evaluation Opportunity

- 4 years ago the OSN Stroke Evaluation and Quality Committee
  - Identified rehabilitation intensity as a important indicator of system efficiency and effectiveness
  - Included on the Ontario Stroke Report Card
Quality Based Procedures

- Quality Based Procedures: Clinical Handbook for Stroke included rehab intensity
  - As a recommended best practice, and
  - As an indicator of appropriate rehabilitation stroke care

What has the OSN been up to?

Provincial Review and Stakeholder Engagement

- Stakeholders included:
  - Experts, stroke leaders, clinicians, administrators, decision support and health records, CIHI, MOH, and regional stroke network personnel
- Review encompassed:
  - Rehabilitation Intensity definition
  - Technical Feasibility
- Recommendations made – provincial working group formed
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 Intensity in NRS:
- Number of minutes of rehabilitation intensity (defined above) for OT, PT, S-LP, OTA, PTA, CDA

Further Defining Rehabilitation Intensity

- An individualized treatment plan involving a minimum 3 hours of direct task-specific therapy per day by the core therapies, for at least 6 days a week.
- Includes core therapies – OT, PT, S-LP
- Does not include groups
- Maximum of 33% with therapy assistants
- Documentation of time from the patient perspective
- Co-treatment time split between the treating therapists
- Time for patient should be 3 hours/day
  - If one core therapy is not required, then more time is required in the other core therapies

How Do We Measure Rehabilitation Intensity?

- Technical Feasibility
  - Workload Measurement Systems
  - Requires a culture shift – time PATIENT spends in therapy, not the time the THERAPISTS spend with the patient
  - Implementation for 2015/16
    - Provincial toolkit
    - Regional rehab coordinator
What we heard from stakeholders...

**Experts and Stroke Leaders:**
- "Intensity of therapy is core to success of rehab.
  "Certain intensity should be done by the professional and smaller percentage
done by assistants.
"This new approach is not about the therapist it is about the patient."

**Clinicians:**
- "Everything is doable. Pressure is everywhere. This is important for patient care
  and outcomes."

**Decision Support/Health Records:**
- "Other professions then pick up extra 60 minutes to make 180 min of
  therapy/day."
- "One system only--another data set requirement for rehab staff will/may
  jeopardize quality of the data."
- "Added another category in WMS."

What we heard from stakeholders...

**Clinicians:**
- "Should be easy in current software as long as patient account # and
  # visits/day can be entered."
- "If the goal is to tie FIM efficiency to therapy intensity then the patient
  specific data should go into the NRS system. As a hospital it would
  be to our advantage to link to FIM efficiency."
- "It is feasible if it is made mandatory. The therapists will make it
  happen."

**Managers:**
- "Hospitals will need to develop new service delivery model for 7
days/week versus the reality of 5 days/week."

So...How Do We Increase Rehabilitation Intensity?
Culture Shift

- 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

Freeing Up Therapist Time For Therapy

- Standardize and/or simply 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
- Prioritization of 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, 3x 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
- Organizing morning/ADL support to facilitate timely preparation – case mix, etc.

Adjuncts to Therapist Time – Supporting a Culture of Participation

- Autonomous practice
- Family involvement
- Groups
- Evening and weekend programming
- Trained volunteers

“Thinking outside of the box is difficult for some people. Keep trying.”
Thank You!

Questions?

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Thank You!