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

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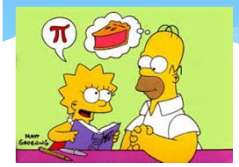
Rehab Intensity: Why Should I Care?



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)

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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 (Wang et al., 2012; Foley et al, 2012)
- 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

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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

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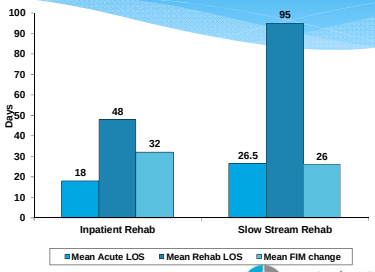
Toronto: Intense Stroke Rehab more Efficient than Slow Stream for Severe Stroke (RPG 1100 & 1110)

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



E-stroke data 09/10

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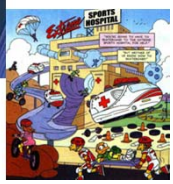
Practice Opportunity

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

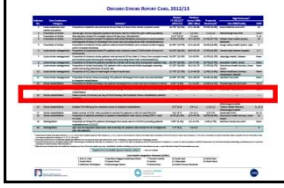


* **In a therapeutic day**
  * **>50% time in bed**
  * **28% sitting out of bed**
  * **13% in therapeutic activities**
  * **Alone for 60% of the time**

(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



***GAP*: Rehab Intensity**

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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

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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

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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:
 # minutes of rehabilitation intensity (defined above) for OT, PT, S-LP, OTA, PTA, CDA

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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

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How Do We Measure Rehabilitation Intensity?

- **Technical Feasibility**
  - Workload Measurement Systems
    - Add a column
  - 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

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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."

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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."

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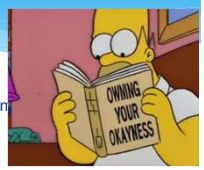
So…How *Do* We Increase Rehabilitation Intensity?

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

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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

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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

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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.

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Adjuncts to Therapist Time – Supporting a Culture of Participation

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

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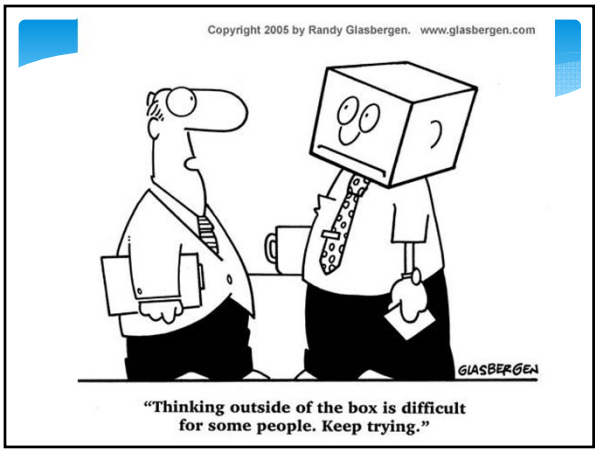

Thank You!

Questions?

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