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Taking the Mystery Out of Mastery in Stroke Rehabilitation Practice

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Objectives

- After this course participants will be able to locate practical sources of evidence to guide their use of available clinical practice guidelines or to help them develop and maintain local clinical practice guidelines in stroke rehabilitation.
- After this course participants will be able to identify barriers and facilitators to translating stroke rehabilitation evidence into clinical practice.
- After this course participants will be able to reflect on their current indicators of clinical mastery and implement a competency-toward-competence professional development model to facilitate the development of mastery in practice.
Experience vs. Mastery: What Does it Mean to be a Master Clinician?

- Experience-based practice:
  - Focus on achieving competencies
  - Focus on developing practical expertise through continued practice over time. Clinicians with a lot of time treating patient’s with stroke.
  - Evidence is based on practical expertise rather than theory and research.
  - Linear approach to clinical reasoning and practice

- **Time-based experience is not indicative of mastery of practice.**
Experience vs. Mastery: What Does it Mean to be a Master Clinician?

- Mastery-based practice:
  - Focus on continual development of competence vs. just competency
  - Focus on integrating theoretical and practical evidence to develop evidence-based practice
  - Metaheuristic approach to clinical reasoning and practice

- Mastery is like an algebraic asymptote. It can’t actually be achieved.

**Characteristics of a Master Clinician**

- Emphasizes value over status or expertise and recognizes the limits of expertise
- Outcomes focused vs. performance focused
- Seeks to be the best “FOR” the world vs. the best “IN” the world
- Practices without defining limits or barriers vs. outside the box thinking; ignore the box altogether
- Demonstrates prospective and reflective thinking “in-action”
- Recognizes and organizes practice around patterns integrating connections between problems vs. focusing on specific problems
- Uses metaheuristic observation, critical thinking and problem-solving. Considers multiple potential solutions
- Consistently operates in a state of “flow” during practice
- Create a “gap” in knowledge, skill or thinking when the challenge of practice decreases
- Focused on learning from their experience rather than relying on it
- Organize professional development around key principles and concepts vs. practice problems
The Master Clinician’s Perspective on Experience, Evidence and Clinical Reasoning in Stroke Rehab

<table>
<thead>
<tr>
<th>Integration of Patterns of Research Evidence; Clinical Practice Guidelines</th>
<th>Clinician’s Reflection on Integration of Patterns of Experience-based Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metaheuristic Clinical Reasoning; Prospection and Reflection-in -Action</td>
<td>Patient-Centered, Outcomes Focus</td>
</tr>
</tbody>
</table>

**Evidence-Based Practice**
The Flow Experience

- A mental state when a person is emerged in an activity with
  - energized focus
  - full involvement
  - enjoyment

Taking the Fork in the Road: Evidence and Clinical Practice in Acute/Inpatient Rehab
Taking the Fork in the Road: Evidence and Clinical Practice in Acute/Inpatient Rehab

- Barriers to translating evidence into practice or evidence abandonment:
  - Clinician’s research values, skills and awareness
    - Limited education/knowledge re: analyzing, evaluating and synthesizing research evidence
    - Decreased willingness to change practice
  - Setting barriers and limitations
    - Lack of time to research and implement evidence
    - Organizational pragmatics: Limited or lack of organizational support, resources, structure to research/implement evidence

Taking the Fork in the Road: Evidence and Clinical Practice in Acute/Inpatient Rehab

- Barriers to translating evidence into practice or evidence abandonment:
  - Qualities of the research
    - Conflicting results or limited evidence
    - Concerns that evidence lacks external validity to individual settings
    - Small N
  - Presentation and accessibility of the research
    - Research not readily available
    - Implications for practice not clear, not evident
    - Amount of research can be overwhelming
Facilitators to translating evidence into practice:
- Development and use of clinical practice guidelines
- Training on evaluating evidence for use in practice
  - Use of tools to simplify and speed the evaluation of evidence (e.g. The Discern Instrument [http://www.discern.org.uk/discern.pdf](http://www.discern.org.uk/discern.pdf))

Facilitators to translating evidence into practice:
- Organizational pragmatic support
  - Translational activities including journal clubs, lunch time case-study/programming groups
  - Inclusion of evaluation of evidence into core work competencies
- Use of 1-minute Preceptor for mentoring and self-guided reflection
Nurse Nancy

Quick Assessment

continued
Motor Priming with Bilateral Isokinematic Training

Working on Washing Dishes?
Barrier Free Thinking

Barrier Free Thinking
Connecting to Occupation

Observing Change in Performance
Emergent Behavioral Changes

Pre-session

Post-session

Next Day...
Oh, I got it...Doing the Dishes
Motor Priming
Bilateral Training

The Big Red Switch
Utilizing a clinical practice guideline for stroke rehabilitation develops a quick and broad reference to treatment options to augment a clinician’s development of characteristics of a master clinician.

- It provides a background for integrating evidence into a clinician’s continuous professional development.
- It is considered by The Joint Commission as a key quality indicator in stroke rehabilitation.

Examples of existing clinical practice guidelines for stroke rehabilitation:

- Occupational Therapy Practice Guidelines for Adults With Stroke
  - From the American Occupational Therapy Association
- Guidelines for Adult Stroke Rehabilitation and Recovery: A Guideline for Healthcare Professionals
  - From the American Heart Association/American Stroke Association
- Evidence-Based Review of Stroke Rehabilitation ([www.ebrsr.com](http://www.ebrsr.com))
  - From the Heart and Stroke Foundation Canadian Partnership for Stroke Recovery
- National Guidelines Clearinghouse
  - From the Agency for Healthcare Research and Quality
Stroke Rehabilitation Clinical Practice Guidelines: Practical Implementation of Evidence

- **Search Options:**
  - PubMed by US National Library of Medicine, NIH
  - Google Scholar
  - Directory of Open Access Journals
  - Open Journal of Occupational Therapy
  - TRIP Database (Turning Research Into Practice)

- Many educational institutions usually have a Guest Access to all their online Journals if you search onsite.

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Developing a Stroke Rehabilitation Professional Development Model for the Master Clinician

- Limited research on continuing professional development

- Healthcare views on models tend to focus on competencies vs. competence

- Educational models describe both competency and competence-based models

- Continuous professional development should be intrinsically motivated
Competence-Competency

It Isn’t a Case of

- Focused on training of related knowledge, skills, abilities and critical thinking practice skills required to provide the foundation for treatment of stroke.
- Behavioral in nature and focused on performance and gaining experience
- Sets the minimum standard of competence
- Competency (performance) = valued behavior + costly errors

Experience=Competency

Competency v. Competence

Mastery=Advanced Competence

- Focused on applying the related knowledge, skills, abilities and critical thinking to perform roles and activities beyond the required standards
- Functional in nature and focused on outcome
- Focused on providing value and outcomes
- Competence (Value) = valued behavior / costly errors
Miller’s Competence Model

**Miller’s PRISM of Clinical Competence (aka Miller’s Pyramid)**

- Performance Integrated into Practice
  - eg through direct observation, workplace-based assessment
- Demonstration of Learning
  - eg via simulations, OSCEs
- Interpretation/Application
  - eg through case presentations, essays, extended matching type MCQs
- Fact Gathering
  - eg traditional true/false MCQs

**Competencies**

- Pedagogical Learning
  - Dependent learning style.
  - Objectives are predetermined and inflexible.
  - It is assumed that the learners are inexperienced and/or uninformed.
  - Passive training methods, such as lecture, are used.
  - Trainer controls timing and pace.
  - Participants contribute little to the experience.
  - Learning is content-centered.
  - Trainer is seen as the primary resource who provides ideas and examples.

- Andragogical Learning
  - Independent learning style.
  - Objectives are flexible.
  - It is assumed that the learners have experience to contribute.
  - Active training methods are used.
  - Learners influence timing and pace.
  - Participant involvement is vital.
  - Learning is real-life problem-centered.
  - Participants are seen as primary resources for ideas and examples.

**KNOWS**

**KNOWS HOW**

**SHOWS**

**DOES**

**Attitudes**

**Skills**

**Knowledge**

Based on work by Miller GF, The Assessment of Clinical Skills/Competence/Performance, Acad. Med. 1990; 65(9): 63-67
Adapted by Drs. H. Mehay & J. Hurria, UK (Jan 2006)

Learning to Learn Again

- Pedagogical Learning
- Andragogical Learning

- Dependent learning style.
- Objectives are predetermined and inflexible.
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Development of Competence

How Can We Facilitate It?
- Motivation
- Reflective Mentoring
- Professional Development Planning

Motivation:
Self-Determination Theory

- People have innate psychological needs that are the basis for self-motivation and personal growth
  - Autonomy
  - Competence/Mastery
  - Relatedness
Developing a Stroke Rehabilitation Professional Development Model for the Master Clinician

- Reflection on competence using intrinsic motivation and flow
  - Intrinsic motivation
    - Self-desire to seek out new things and new challenges, analyze one's capacity, observe and to gain knowledge, driven by an interest or enjoyment in the task itself
  - It exists within the individual rather than relying on external pressures or a desire for reward
  - Flow
    - Reflect on your emotional engagement to help determine need to develop skill (competency) or increase your professional challenge (competence)

Developing a Stroke Rehabilitation Professional Development Model for the Master Clinician

- “Finding Flow” in Practice
  - Treatment activity must have a clear set of goals and progress.
  - Practice activity provides clear and immediate feedback to respond to changing demands and to adjust performance to maintain flow
  - Balance between the perceived challenges of the activity and perceived skill of the clinician
Prospective & Reflective Mentoring: The 1- minute Preceptor

- Get a commitment
- Probe for supporting evidence
- Teach general rules
- Reinforce what is right
- Correct mistakes and plan

Continuing Competence Models

- Training
- Award-bearing
- Deficit
- Cascade
- Standards-based
- Coaching/mentoring
- Community of practice
- Action research
- Transformative

Developing a Stroke Rehabilitation Professional Development Model for the Master Clinician
Clinical pearls

- reflect on their current indicators of clinical mastery and implement a competency-toward-competence professional development model to facilitate the development of mastery in practice.