Movement System Diagnosis in Neurologic Physical Therapy: Where are we?

Session Description:
The American Physical Therapy Association’s (APTA) most recent vision statement is a call to action for physical therapists to transform society by using skills, knowledge, and expertise in the human movement system to optimize movement, promote health and wellness, mitigate the progression of impairments, and prevent additional disability. In 2015, the Academy of Neurologic Physical Therapy appointed a Movement System Task Force to 1) develop expertise in the conversation regarding the human movement system and diagnosis of movement system problems, and 2) develop examples of content that may be used to describe human movement system problems. This session will provide: a summary of this ongoing professional dialog within neurologic physical therapy, a comparison of the movement system diagnoses that have been published for neurologic practice, and examples of movement system diagnoses. We will explore how organizing our professional identity around the movement system can influence practice, education, and research.

Session Learning Objectives:
The participant will be able to:

- Discuss the imperative for developing and adopting movement system diagnoses in neurologic physical therapist practice.
- Describe key attributes of movement system diagnoses for neurologic physical therapist practice.
- Apply selected published movement classification frameworks to video-based patient cases.
- Discuss the implications for developing and adopting movement system diagnoses on neurologic physical therapist practice, education, and research.
- Contribute to recommended next steps for the Academy of Neurologic Physical Therapy towards developing and adopting movement system diagnoses.

Outline:

1. The Movement System and Neurologic Physical Therapy – What is Unique?
2. How Do We Analyze Movement?
3. Is There a Diagnostic Manual for Movement (System) Problems – What is Available?
4. Case Examples
5. What are the Implications of a Focus on the Movement System to Neurologic Physical Therapy Practice, Education, and Research?
6. Discussion
References:


Speaker Information and Bios:

The speakers are members of the Movement System Task Force appointed by the Board of Directors of the Academy of Neurologic Physical Therapy.

David A. Brown, PT, PhD, FAPTA is Professor and Program Director for the Rehabilitation Science PhD Program at University of Alabama at Birmingham. In addition, he is co-Director of the UAB Disability Health and Rehabilitation Science Center. He received his BA in Physics and Astronomy at University of Rochester, MS in Physical Therapy at Duke University, and PhD in Exercise Science at University of Iowa. He has over 50 publications in the area of locomotor control and recovery following stroke and has spoken at numerous APTA Meetings, as well as other national and international Physical Therapy and Neurorehabilitation venues. He is also co-inventor on 5 patents for rehabilitation-related technologies.
Kathleen Gill-Body PT, DPT, NCS, FAPTA is Senior Physical Therapist at Newton-Wellesley Hospital in Newton, MA where her clinical focus is on the management of patients with gait and balance disorders, falls, and vestibular dysfunction. She is also Adjunct Clinical Associate Professor at the MGH Institute of Health Professions, Boston, MA where she has served on the faculty for the last 25 years. Dr. Gill-Body is ABPTS board certified as a Neurologic Clinical Specialist and currently serves on the Editorial Boards of Physical Therapy and the Journal of Neurologic Physical Therapy. She has been a co-investigator in several externally funded collaborative clinical trials investigating the effectiveness of rehabilitation for people with falls or balance disorders. She has over 25 publications, and is a recognized as a clinical expert in the rehabilitation management of adults with balance disorders.

Lois D. Hedman, PT, DScPT is an Associate Professor in the Department of Physical Therapy and Human Movement Sciences, Northwestern University Feinberg School of Medicine where she directs the neurologic curriculum. Dr. Hedman has several years experience implementing a clinical reasoning framework that has movement and movement analysis at its core as the foundation of a DPT curriculum. Dr. Hedman helped develop and taught Neurologic Practice Essentials: Clinical Decision Making as a Foundation for Expert Practice, regional continuing education courses sponsored by the Neurology Section of the American Physical Therapy Association. She is now working to convert that course into an online platform.

Myles Quiben, PT, PhD, DPT, MS, GCS, NCS, CEEAA is a board-certified clinical specialist by the American Board of Physical Therapy Specialties (ABPTS) in both Neurologic and Geriatric Physical Therapy (NCS, GCS). She recently completed her Fellowship in Geriatric Research at the UT Health Science Center in San Antonio, obtaining an MS in Clinical Investigation. She is an Associate Professor at the UNT Health Science Center Department of Physical Therapy, with teaching areas in cardiopulmonary, geriatric, neurologic, and clinical medicine. Her clinical experience has spanned varied settings from acute care, outpatient, to cardiac rehab. She is nationally active, serving on the American Board of Physical Therapy Specialties (ABPTS), Academy of Geriatric Physical Therapy (AGPT), APTA as a Clinical Instructor Trainer, and Federation of State Board of Physical Therapy. She has presented nationally and internationally on aging, neurologic and geriatric differential diagnosis, exercise, balance and falls. Her research interests are in movement and functional outcomes, interprofessional education, aging, specifically in health, wellness and prevention in older adults, osteoporosis, and frailty.

Lori Quinn, EdD, PT is Associate Professor in the Department of Biobehavioral Sciences at Teachers College, Columbia University, and Adjunct Associate Professor in Rehabilitation & Regenerative Medicine at Columbia University Medical Center. Dr. Quinn’s research has focused on developing evidence and clinical guidelines for targeted physical interventions in people with neurodegenerative diseases, specifically Huntington’s disease. She is the co-author, alongside James Gordon, EdD, PT, FAPTA, of the physical therapy textbook Documentation for Rehabilitation: A guide to clinical decision making in physical therapy, currently in its 3rd edition. Dr. Quinn’s clinical and research work spans areas of motor learning and control, goal setting, and functional outcomes measures. Dr. Quinn is a reviewer for Physical Therapy, Journal of Neurologic Physical Therapy and Pediatric Physical Therapy, and she is a member of the APTA Task Force on the Human Movement System. She has experience presenting at national and international conferences, and was a plenary speaker at the IV STEP meeting in July 2016.
Nora Riley is a Professor in the Department of Physical Therapy, St. Ambrose University, where she has served for 13 years directing neurologic content across the curriculum. Dr. Riley is a board certified clinical specialist, working per diem in the outpatient and home health settings primarily with patients with neurologic disorders. In addition, she provides regional education to clinics in the area of Vestibular Rehabilitation. She currently serves as Chair of the Neurologic Specialist Committee through the Academy of Neurologic Physical Therapy.

Patricia L. Scheets, PT, MHS, DPT, NCS, is the Director of Quality and Clinical Outcomes for Infinity Rehab and the current President-Elect of the Academy of Neurologic Physical Therapy. She received her professional and post-professional degrees from Washington University in St. Louis. She is a board certified clinical specialist in neurologic physical therapy and has worked extensively with patients with stroke, neurological disorders, and balance and vestibular disorders. Along with her colleagues, she has developed a set of movement system diagnoses that is used to guide the therapist’s clinical examination and treatment selection for patients with neuromuscular conditions.