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REHABILITATION HOSPITAL -
A COLLABORATIVE RESEARCH PARTNER

THE INSTITUTE FOR KNOWLEDGE TRANSLATION IN REHABILITATION

WALK THE WALK:

High-Intensity Gait Training in Rehabilitation

Includes online education, discussion sessions, group mentoring, a community of practice, and resources to support implementation of high intensity gait training.

Online course start date: January 16, 2023

Q & A Sessions (8:00 PM ET): February 7, March 6, March 27, 2023

Mentoring Sessions (8:00 PM ET): April 10, April 24, May 8, 2023



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**KNOWLEDGE
TRANSLATION**

ABOUT THE INSTITUTE FOR KNOWLEDGE TRANSLATION

Research indicates that traditional methods of providing education, such as in-person and online continuing education courses, may improve knowledge and skill but they do very little to change the care provided in clinical practice. The Institute for Knowledge Translation (iKT) provides an innovative and evidence-based solution to maximize the impact of education and quality improvement efforts. The iKT offers a variety of evidence-based knowledge translation programs, from comprehensive educational packages to help individuals build knowledge to comprehensive solutions to assist healthcare organizations in improving clinical practice.

PROGRAM OVERVIEW

More than 17 years could pass before the evidence that is published today is used in the care of rehabilitation patients. Knowledge translation (KT) is a process to expedite the use of evidence in clinical practice and includes the generation of new knowledge and the clinical implementation of established evidence. Research suggests that use of KT processes, such as the Knowledge-to-Action Framework, may facilitate successful implementation efforts. Multi-component KT interventions that target barriers to evidence-based practices have a greater impact on clinical practice than education courses provided without additional interventions.

When delivering gait interventions to individuals with stroke, specific training parameters, including the amount, intensity, and variability of specific task-specific practice, can profoundly influence motor learning and patient outcomes. In addition, it is critical that clinicians use standardized measures to determine a patient's prognosis and measure change over time.

This training program provides an innovative solution to facilitating implementation of High-Intensity Gait Training into clinical practice. The program uses a variety of evidence-based strategies to maximize the use of high-intensity gait training by the program participants. Knowledge translation strategies included in this program are listed below.

- Online course on high-intensity gait training and measurement related to gait training
- High-Intensity Variable Gait Training knowledge tools (i.e. cheat sheets)
- Three online discussion sessions to answer questions about content (3, 1-hour sessions)
- Three post-course online group mentoring sessions (3, 1-hour sessions)
- Participation in an online community of practice for one year which will offer implementation support from peers and experts. (online group and a 1-hour meeting each month for a year; 12 hours total)

PROGRAM OBJECTIVES

At the conclusion of this program, participants will be able to:

1. explain one reference that provides the rationale for the importance of providing gait training at high aerobic intensities.
2. to explain one reference that provides the rationale for the importance of allowing patients to learn from errors will providing high-intensity gait training.
3. explain one reference that provides the rationale for the importance of providing task-specific gait training to improve gait after stroke.
4. given the findings of an evaluation of a person with stroke, describe 3 high-intensity gait training activities that could be provided.
5. explain how to safely monitor a patient's heart rate during a 30-minute high-intensity gait training session.
6. predict the potential outcome of a patient with stroke based on the results of the Berg Balance Scale.
7. given the findings of an interim assessment that includes 3 standardized measures collected on a person with stroke, justify whether the patient should continue to receive high-intensity training during physical therapy.

REGISTRATION, PRICING, AND CEUS

The intended audience for this course includes physical therapists and physical therapist assistants. Registration is available on knowledgetranslation.org for \$495 per person. The fees cover the online course, 6-hours of online meetings with faculty, 1-year membership to the community of practice, and several tools and resources to help clinicians implement high-intensity gait training in clinical practice. Discounts are available for > 5 registrations from the same organization. Please contact jmoore@knowledgetranslation.org for details.

This course is approved by the Indiana Physical Therapy Association for 35.0 CEUs for each of the following: online course (12.75 CEUs), online discussions (3.0 CEUs), online mentoring (3.0 CEUs), a community of practice (12.0 CEUs), and independent study consisting of reading articles (4.25). (#006987887C2243).

An application for IL CEUs for 12.75 credit hours is pending. This includes CEUs for each of the following: online course (12.75 CEUs) only.

Participants are responsible for transferring CEUs for approval in other states.

FACULTY



T. George Hornby PT, PhD, FAPTA, is a Professor of Physical Medicine and Rehabilitation at Indiana University and the director of the Locomotor Recovery Laboratory at the Rehabilitation Hospital of Indiana. Dr. Hornby's work is focused on optimizing rehabilitation interventions to improve lower extremity function in patients with stroke and spinal cord injury, with a primary focus on restoration of walking ability. By integrating both quantitative and clinical measures of motor function, Dr. Hornby's work aims to understand the biomechanical and physiological impairments underlying limitations in locomotor activity in these populations, and the relative efficacy and mechanistic basis of specific interventions to enhance function. Recently, his activity has focused on direct translation of his research to clinical practice in rehabilitation. Dr. Hornby has co-authored over 90 research publications in scientific journals. He is PI or Co-PI on active R01, DOD, and NIDRR center grants, with both national and international collaborations. He is also the Director of Research for the Academy of Neurologic Physical Therapy.



Jennifer Moore PT, DHSc, NCS is an advisor to the South Eastern Norway Center for Knowledge Translation in Rehabilitation and the founder of The Institute for Knowledge Translation. Her current work and research is focused on the selection and implementation of evidence-based practices within hospital systems and across networks of hospitals in the United States and in Norway. Previously, Dr. Moore was the Clinical Practice Leader of Neurologic Physical Therapy at the Rehabilitation Institute of Chicago where she conducted implementation projects within all levels of care. She also created the Rehabilitation Measures Database (www.rehabmeasures.org), which is a free, online repository of summaries of psychometric properties and clinical utility of over 400 assessments used in rehabilitation. Dr. Moore is an author of the APTA sponsored Clinical Practice Guideline on a core set of outcome measures for neurologic physical therapy, and was the Guest Editor for the Journal of Neurologic Physical Therapy Special Issue on Knowledge Translation.



Chris Henderson, PT, PhD, NCS, GCS is an Assistant Research Professor within the Indiana University School of Medicine's Department of Physical Medicine and the Director of Innovation for the Institute of Knowledge Translation. He has his PhD in Biomechanics and Movement Science, Doctorate of Physical Therapy, and Masters of Mechanical Engineering from the University of Delaware. He has also completed a Neurologic Physical Therapy Residency jointly supported by the Clement J Zablocki Veterans Affairs Hospital and Marquette University. Dr. Henderson's work is focused on optimizing the rehabilitation of individuals following acute onset neurologic injuries and translating evidence-based interventions into routine neurologic physical therapy.

REQUIRED READINGS

Two required readings are included in the program, including a clinical practice guideline on locomotor training and a motor learning framework. After completing the readings, participants will be asked to answer questions about key concepts in the readings. We recommend the clinicians in each organization hold a journal club discussion about the articles to improve understanding about these important documents.

COURSE OUTLINE

Dates	Activity	Description
January 16th, 2024 - February 7th	Survey & part 1 of online course	<p>Course released on January 16, 2024. Participants will complete a 15-minute survey on current knowledge, perspectives, and use of high-intensity variable gait training. Barriers and facilitators to use of this practice will also be collected.</p> <p>Participants will take the first component of the online gait course which will take approximately 6 hours to complete.</p> <p>Topics included in Part 1 provide an overview of high-intensity gait training. The specific topics are: biomechanical subcomponents of gait, errors and variability, intensity, development of the protocol, and clinical decision-making - application to patient cases.</p>
February 7th, 2024 8-9:00 PM ET Wednesday	1-hour Q & A session	1-hour session with the course instructors. Participants will be asked to submit questions prior to the session.
February 7th, 2023 - March 6th, 2024	Parts 2 and 3 of online course	<p>Participants will take the second component of the online gait course which will take approximately 6.0 hours to complete.</p> <p>Parts 2 and 3 includes the following topics: Biomechanical subcomponents of gait review and cases, application of intensity in practice, application in the clinic, myths and barriers, overcoming barriers and tips for success, and the clinical practice guideline on locomotor strategies to improve gait speed and walking distance.</p>
March 6th, 2024 8-9 PM ET Wednesday	1-hour Q & A session	1-hour session with the course instructors. Participants will be asked to submit questions prior to the session.
March 6th - 27, 2024	Part 4 of online course	<p>Participants will take the fourth component of the online gait course which will take approximately 3.5 hours to complete and includes a post-test.</p> <p>Part 4 includes gait related measurement and prediction in stroke and spinal cord injury. The specific topics are: use of measurement results to guide decision-making, standard error of measurement, minimum detectable change, minimum clinical important differences, predicting outcomes and myths and barriers.</p>
March 27th, 2024 8-9 PM ET Wednesday	1-hour Q & A session	1-hour session with the course instructors. Participants will be asked to submit questions prior to the session.
April 10, 2024 April 24th, 2024 May 8, 2024	3 - 1 hour online mentoring sessions (8-9 PM ET)	<p>Participants will attend online discussions about the application of the gait training program in practice (patient-related questions, application to practice, barriers, facilitators, and other participant questions will be addressed).</p> <p>Participants will be asked to submit any challenging cases, questions, or issues for discussion 1-week prior to mentoring meeting.</p>
Meetings, 1st Monday of the month 8-9 PM ET	Online community of practice (CoP)	<p>Participants have access to an online community of practice for one year. This forum provides a location for in-depth discussion about patient cases, barriers, and KT efforts related to gait training. Relevant literature will also be disseminated and discussed.</p> <p>*Participants in the CoP are required to have a Google account to participate in the online forum.</p> <p>*CoP meetings occur online at 8:00 PM ET on the 1st Monday of every month.</p>

This course content is not intended for use by participants outside the scope of their license or regulation.

COMMUNITY OF PRACTICE SESSIONS

The iKT Walk the Walk Community of Practice meets for 1-hour, once a month at 8:00 PM ET. Meetings typically occur on the 1st Monday of the month (10 times per year). The meeting format includes a presentation on research or application of research to clinical practice, followed by a discussion. Participants are asked to submit questions prior to the meeting. The registration for the Walk the Walk course includes a 1-year membership to the Community of Practice. After the first year, clinicians can renew with a paid membership.

CANCELLATION POLICY

Cancellations must be provided in writing and must be provided 30 days prior to the start date for the implementation program. Refunds will be provided, however, a 15% administrative fee may be retained. The Institute for Knowledge Translation (iKT) reserves the right to change programs or cancel for due cause. If the iKT cancels the implementation program, a full refund will be provided.