

Rehabilitation and Research Training Center on Improving Measurement of Medical Rehabilitation Outcomes

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Overview

The purpose of this Rehabilitation Research and Training Center (RRTC) is to provide national leadership on the critical outcome measurement needs of the rehabilitation sciences and medical rehabilitation communities. This RRTC will conduct research; host forums for discussion; publish in the rehabilitation science, health policy, and consumer literature; train new researchers in rehabilitation-focused health services research; and disseminate information to diverse scientific, clinician, consumer and policymaker audiences.

Measurement of the cognitive and environmental factors affecting participation is hampered by instruments that are not tailored appropriately to persons with disabilities or for use in time-pressed clinical settings. In response, this RRTC will combine innovative measurement, data collection and reporting methods with practical concerns for usability, implementation, and multiuser communication.

How will this study help patients and rehabilitation stakeholders?

This study will:

- Increase the accessibility of measures of cognitive function for use in rehabilitation settings so that consumers' needs and outcomes are documented
- Examine the reliability, validity, and sensitivity of measures of cognitive function for persons with disabilities within major item banks including the NIH Toolbox, the Executive Function Performance Test (EFPT), NeuroQOL, TBI-QOL, SCI-QOL and SCI-CAT projects
- Evaluate and refine measures of barriers and facilitators of community participation enabling better evaluation of the outcomes of rehabilitation services
- Utilize the large set of data to examine the validity of the cognitive items on the Continuity and Record Evaluation (CARE) Tool, a standardized patient assessment instrument being developed by the Centers for Medicare and Medicaid Services (CMS)
- Evaluate the extent to which the International Classification of Function, Disability, and Health (ICF) represents disablement characteristics by mapping instruments collected as part of this RRTC's activities to concepts within the ICF

What are the project objectives?

- [**R1: Enhancing the NIH Toolbox's Accessibility and Usability to Support the Inclusion of People with Disabilities in Health Research**](#)
Evaluate and adapt the NIH Toolbox for administration to people with stroke, SCI, and TBI
- [**R2: Validation of New Measures of Cognitive Function and Performance in Individuals with Stroke, SCI, and TBI**](#)
Validate the NIH Toolbox for people with stroke, SCI, and TBI; evaluate multiple methods for measuring cognition
- [**R3: Developing Environmental Factor Measures for Persons with Stroke, SCI, and TBI**](#)
Develop, test and evaluate measures of environmental factors and their influence on participation for persons with stroke, SCI and TBI
- [**R4: Validation of CARE Tool Cognitive Items for Persons with Stroke, SCI and TBI**](#)
Validate the Continuity and Record Evaluation (CARE) tool cognition items in persons with stroke, SCI, and TBI
- [**R5: Mapping and Modeling RRTC Instruments to the ICF**](#)
Describe relationships between the constructs of health condition, body structure/ function, activities/participation and environmental factors, particularly community environments, in people with stroke, SCI, and TBI
- [**Training & Dissemination**](#)
Seven training and five dissemination projects will use knowledge gained from the research projects to meet the targeted needs of rehabilitation stakeholders
- [**Technical Assistance**](#)
To make the expertise of project personnel available to rehabilitation stakeholders

What are the expected outcomes of this RRTC?

The expected outcomes are measures of cognition and environmental factors that better meet the needs of persons with disabilities, increased efficiency of data collection, procedures for including disability populations in federally-funded health studies, and outcome reporting that is responsive to stakeholder needs. Increased knowledge and ability to apply measurement principles and methods by researchers and clinicians is another expected outcome.

What agency funded the project?

[National Institute on Disability and Rehabilitation Research \(NIDRR\)](#) 

NIDRR Grant Number: H133B090024

What is the duration of the project?

October 1, 2009 - September 30, 2014

Primary Project Staff

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