# **Neurologic Outcome Measures CPG**





#### August 2018

The Stroke SIG is taking a break from our monthly clinical topics to help disseminate an important new CPG that provides guidelines for recommended standardized outcome measures for patients with neurologic diagnoses across all rehab settings.

Please see below for the clinical take home with considerations for the application of the CPG to your clinical population. Then follow along with us each week as we go into greater detail for each individual measure.

# A Core Set of Outcome Measures for Adults With Neurologic Conditions Undergoing Rehabilitation

https://journals.lww.com/jnpt/Fulltext/2018/07000/A Core Set of Outcome Measures for Adults With.10.aspx

#### **ABSTRACT:**

Background: Use of outcome measures (OMs) in adult neurologic physical therapy is essential for monitoring changes in a patient's status over time, quantifying observations and patient-reported function, enhancing communication, and increasing the efficiency of patient care. OMs also provide a mechanism to compare patient and organizational outcomes, examine intervention effectiveness, and generate new knowledge. This clinical practice guideline (CPG) examined the literature related to OMs of balance, gait, transfers, and patient-stated goals to identify a core set of OMs for use across adults with neurologic conditions and practice settings.

Methods: To determine the scope of this CPG, surveys were conducted to assess the needs and priorities of consumers and physical therapists. OMs were identified through recommendations of the Academy of Neurologic Physical Therapy's Evidence Database to Guide Effectiveness task forces. A systematic review of the literature on the OMs was conducted and additional OMs were identified; the literature search was repeated on these measures. Articles meeting the inclusion criteria were critically appraised by 2 reviewers using a modified version of the COnsensus-based Standards for the selection of health Measurement INstruments. (COSMIN) checklist. Methodological quality and the strength of statistical results were determined. To be recommended for the core set, the OMs needed to demonstrate excellent psychometric properties in high-quality studies across neurologic conditions. Results/Discussion: Based on survey results, the CPG focuses on OMs that have acceptable clinical utility and can be used to assess change over time in a patient's balance, gait, transfers, and patient-stated goals. Strong, level I evidence supports the use of the Berg Balance Scale to assess changes in static and dynamic sitting and standing balance and the Activities-specific Balance Confidence Scale to assess changes in balance confidence. Strong to moderate evidence supports the use of the Functional Gait Assessment to assess changes in dynamic balance while walking,

the 10 meter Walk Test to assess changes in gait speed, and the 6-Minute Walk Test to assess changes in walking distance. Best practice evidence supports the use of the 5 Times Sit-to-Stand to assess sit to standing transfers. Evidence was insufficient to support use of a specific OM to assess patient-stated goals across adult neurologic conditions. Physical therapists should discuss the OM results with patients and collaboratively decide how the results should inform the plan of care. Disclaimer: The recommendations included in this CPG are intended as a guide for clinicians, patients, educators, and researchers to improve rehabilitation care and its impact on adults with neurologic conditions. The contents of this CPG were developed with support from the APTA and the Academy of Neurologic Physical Therapy (ANPT). The Guideline Development Group (GDG) used a rigorous review process and was able to freely express its findings and recommendations without influence from the APTA or the ANPT. The authors declare no competing interest.

## The specific goals of this CPG are to:

- 1. Standardize the use of a core set of OMs to assess changes over time in neurologic physical therapy within and among facilities.
- 2. Facilitate comparison of outcomes across interventions, providers, and patients within and among diagnostic groups through the use of a common set of measures.
- 3. Facilitate the development of practice-based evidence by standardizing the use of OMs for patients with neurologic conditions to enable the creation and analysis of large data sets.
- 4. Improve quality of care by standardizing data elements to answer important clinical questions (eg, identification of treatment responders vs nonresponders).
- 5. Ensure systematic and standardized documentation of OMs to help justify a patient's need for therapy and to inform policy. Improved documentation of OMs could be used to clarify and improve policies related to reimbursement and access to care.
- 6. Identify gaps in the literature related to OMs in adult neurologic rehabilitation. This may prompt researchers to rigorously study the psychometric properties of untested OMs or develop new measures to meet clinical needs.
- 7. Enhance the education of future rehabilitation providers by informing curricular decisions about the core set of OMs to include in entry-level and residency physical therapy education.

### Clinical Take Home:

The guidelines establish the minimum measures needed to quantify function in the constructs of balance, walking speed, walking endurance/distance and transfer ability. These measures should be performed on all patients with neurologic diagnoses who have goals and the capacity to improve in these areas. The core measures should be utilized across all settings and time points (e.g. acute, inpatient, outpatient, home-health, skilled nursing). The CPG can be applied to track change in mobility for individual or groups of patients.

This week, we provide ways to optimize the application of the CPG by the individual PT.

## Skills to utilize in applying the Core Measures CPG include:

- 1. Movement analysis of your patient as you administer the core measures tests.
- a. Does a pattern of movement lead to your hypotheses of specific impairments to explore and measure?
- 2. Selection of additional objective measures.
- a. Do you see a sign or movement that may lead you do selecting another measure, perhaps from the StrokEDGE recommendations?
- 3. Scoring of the test to draw your conclusions
- a. Don't forget to *interpret*; refer to the <a href="https://www.sralab.org/rehabilitation-measures">https://www.sralab.org/rehabilitation-measures</a> and consider the MDIC, normative data or predictive capability of the measure in the stroke research. Document your conclusion clearly.
- 4. Educate your patient on the conclusion.
- a. What does the score mean to him/her?
- b. How does it inform your plan of care and how he/she will spend time with you?
- c. What can he/she do to improve this score?

- 5. Set a goal.
- a. Directly tie a goal that is meaningful to the client back to a relevant measure. Consider the client's stated, participation-related goals.
- 6. Use the movement you see or the measure criteria to select appropriate interventions.
- a. In what ways is the client most challenged during task performance? What variables are most important to manipulate during task-specific training? Is it speed, surface, or degrees of freedom, for example?

Please follow us this month as we dive in to each measure and provide examples and considerations for implementation! We will proceed with considerations for looking at the Core Measures as a larger rehab department or health system.

Connect with us





