



Module 4: Strategies for Successful Implementation

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Module 4: Objectives



- Describe the need for outcomes planning
- Describe the benefits and challenges with using outcome measures in clinical practice
- Identify strategies to facilitate the use of outcome measures in clinical practice.
- Identify strategies to overcome challenges to implementing outcome measurement in clinical practice.
- Effectively sustain outcome measurement use across his or her practice, and across practice sites or programs.

Benefits of Outcome Measures: Clinicians and Patients



- Recommended for use in various clinical guidelines, and implementation leads to improved patient outcomes and satisfaction
- Identifies and quantifies impairment, activity limitations, participation restrictions and personal factors
- Assists in clinical-decision making
 - Helps determine whether treatment plan is appropriate
 - Identifies whether patient is making meaningful progress
 - Determines whether patient is at risk for falls, impairment levels, prognosis, etc
 - Diagnosis and referrals
- Enhances communication between clinicians, referral sources and insurance companies
- Engages and motivates patients

Benefits of Outcome Measures: Organizations



- Increases accountability
 - Provides mechanism to compare clinician outcomes
- Improves efficiency of clinicians
- Improves care and outcomes of clinical care

The need for outcomes planning



- Policy
 - Centers for Medicare & Medicaid Services
 - Commission on the Accreditation of Rehabilitation Facilities (CARF)
 - Affordable Care Act of 2010
- Client/patient: Feedback on progress identified by standardized measures improves outcomes
 - Individuals that received daily reinforcement of speed had greater walking speed at discharge than those that didn't receive reinforcement (Dobkin et al, 2010)
 - Individuals who received enhanced medical rehabilitation showed higher intensity therapy, more engagement in therapy sessions, improved gait speed, and 6 min walk distance when compared to those who received standard rehabilitation (Lenze et al , 2012)

Clinical Utilization of Standardized Instruments

- 52% of Physical Therapists reported not using standardized measurements, 49% of these indicated no future plans to use standardized assessments
- Mental health practitioners utilize their own intuition more than standardized measures to monitor progress
- Oncologists rely more on their own impressions and informal assessments to make decisions
- Nurses rely on clinical judgment to manage patients



Common Facilitators



Individual

- Positive attitude: to measurement and change, convinced of benefits
- Flexibility: room for personal considerations
- Practicality: immediacy, negotiate with insurers, quality improvement

External

- Access to resources: range of measures, guide to selection
 - Provide summaries of research written in an understandable manner (Bury, 1996)
 - Concisely summarized research (Jette et al, 2003)
 - Free online resources that are available at the point of care (Jette et al, 2003)
- Support: from colleagues (opinion leaders) and organization
- Guidance in selection, administration, scoring, and interpretation

(Swinkels 2011, Jette 2009, Finch 2002, Kay 2001)

Common Challenges



- **Individual**
 - **Time:** to search, administer, score, interpret
 - **Knowledge:** to select, interpret
 - **Resources** too few available, too many to choose, difficult to set up, equipment required, unclear instructions, difficult to interpret
 - **Competence:** education, routine, experience
 - **Attitude:** resist change/set in ways, skeptical, overwhelmed, confidence
 - **Opinion leader** (vs. champion)
- **Organizational**
 - **Time and Cost:** investment required, no compensation
 - **Policy:** no policy, poor adherence/compliance
 - **Culture:** congruence/conflict at micro and macro levels

(Swinkels 2011, Jette 2009, Finch 2002, Kay 2001)

Discuss Solutions to Clinical Challenges



- Documentation
 - Advocate for clinical useful, important measures to be a part of your electronic medical records at your institution.
 - Available test packets
 - Create “cheat sheets” with meaningful change scores
- Equipment
 - Designated testing areas for testing
 - Testing kits for common instruments
 - Have clinical students make testing kits
- Time to administer
 - Instrument checklists for each patient
 - Integrate clinically useful assessments into the treatment process (for example, the kitchen test of the EFPT)

Discuss Solutions to Clinical Barriers



- Training & Service Delivery
 - Develop in-services about potential measures that will address the needs of the populations you serve at your facility
 - Have staff share assessments that they've learned about at workshops that could benefit the team
 - Look for public domain instruments that can be used without cost
 - Share outcome measure data at team meetings
 - Read articles about different measures and what they could contribute to practice strategies
 - Start a journal club or brown bag outcome meeting
 - Work with your quality assurance staffing to relate your data back to those being reported by the entire facility or for accreditation purposes.
 - Share data between disciplines so there is not unnecessary duplication of testing, and that outcome results can be used across the team



Databases and Resources

Outcome Measurement Resources



- Rehabilitation Measures Database:
 - www.rehabmeasures.org
 - ~200 instrument summaries of psychometric properties and clinical utility
 - Includes a link to the testing document whenever possible

- APTA Neurology Section EDGE recommendations
 - www.neuropt.org/professional-resources/neurology-section-outcome-measures-recommendations
 - Review of instruments used in physical therapy that assess patients with Stroke, MS, TBI, SCI (PD and vestibular to come this year)
 - Recommendations instruments to be used in clinical practice



Outcome Measurement Resources



- Stroke Engine Assess

- strokengine.ca/assess/
- Psychometrics and clinical utility information about instruments that can be used with individuals with stroke
- Provides instrument whenever possible

- Center for Outcome Measurement in Brain Injury

- www.tbims.org/combi/
- ~30 instrument reviews of psychometrics and clinical utility
- Specific to measuring individuals with brain injury
- Links to instrument whenever possible



Outcome Measurement Resources



- Acquired Brain Injury Evidence Based Review
 - www.abiebr.com
 - Educational modules and case studies on evidence-based practice in brain injury
 - Includes chapter on psychometrics and clinical utility of instruments
 - Specific to individuals with brain injury

- Evidence-based Review of Stroke Rehabilitation
 - www.ebrsr.com
 - Educational modules and case studies on evidence-based practice in stroke
 - Includes chapter on psychometrics and clinical utility of instruments
 - Specific to individuals with stroke



Outcome Measurement Resources



- Orthopedic Scores

- <http://www.orthopaedicscore.com/>
- Measures that assess musculoskeletal conditions
- No psychometric information, Minimal information about score interpretation
- Can score directly on test forms on website, website scores and produces completed test document

- Physiopedia

- [http://www.physio-pedia.com/Outcome Measures](http://www.physio-pedia.com/Outcome_Measures)
- Measures that assess musculoskeletal, neuro and common geriatric conditions
- Psychometrics, clinical utility
- Some videos to demonstrate test administration

Outcome Measurement Resources



- [Spinal Cord Injury Rehabilitation Evidence](#)
 - www.scireproject.com
 - Educational modules and case studies on evidence-based practice in stroke
 - Includes chapter on psychometrics and clinical utility of instruments
 - Specific to individuals with spinal cord injury

- Other website descriptions with links available at the Rehabilitation Measures Database at www.rehabmeasures.org/rehabweb/links.aspx





Classroom Activities

Overview of Classroom Activities



- 1) Discussion of need for standardized instruments
- 2) Develop a presentation on measurement
- 3) Adapting an evidence-based summary to meet your clinical needs
- 4) Develop a resource binder
- 5) Discuss responses to common reaction to measurement utilization.

Classroom Activity (1)



- Activity: Discuss the need for outcomes at each of these levels:
 - Patient
 - Improvement in outcomes across ICF levels (body structure & function, activity, participation)
 - Length of stay
 - Satisfaction
 - Other?
 - Clinician
 - Changes in decision-making
 - Efficiency and Effectiveness
 - Satisfaction
 - Other?
 - Organizational or process level
 - Overall patient outcomes
 - Reimbursement
 - Planning Discharge
 - Other?

Classroom Activity (2)



- Activity: Develop a presentation with your classmates that you could share at your clinical site or with your clinical instructor
 - How to use an outcome measure
 - The fundamentals of measurement – reliability, validity, indices of change, etc
 - A case description in which measurement was used
 - Include a list of resources that you could share at your clinical site.

Classroom Activity (3)



- Activity: Adapt a summary from a free online website to meet your needs

- Download content from the website
- Adapt with clinically relevant information (examples in next few slides)
- Save to share examples on your clinical



Rehabilitation Measures Database



Title of Assessment	10 Meter Walk Test
Link to instrument	10 Meter Walk Test
Purpose	Assesses walking speed in meters per second over a short duration
Description	<ul style="list-style-type: none">• The individual walks without assistance 10 meters (32.8 feet) and the time is measured for the intermediate 6 meters (19.7 feet) to allow for acceleration and deceleration• Start timing when the toes of the leading foot crosses the 2-meter mark• Stop timing when the toes of the leading foot crosses the 8-meter mark• Assistive devices can be used but should be kept consistent and documented from test to test• If physical assistance is required to walk, this should not be performed• Test can be performed at preferred walking speed or fastest speed possible• Documentation should include the speed tested (preferred vs. fast)• Collect three trials and calculate the average of the three trials
Minimally Clinically Important Difference (MCID)	<p><u>Geriatrics & Stroke:</u> (Perera, 2006)</p> <ul style="list-style-type: none">• MCID: 0.1 m/s <p><u>Acute Stroke:</u> (Tilson, 2010; $n = 283$; mean age = 63.5 (12.5) years; stroke onset < 45 days; gait speed < 0.18 m/s)</p> <ul style="list-style-type: none">• MCID: 0.16 m/s
Cut-Off Scores	<p><u>Stroke:</u> Ambulation ability has been correlated with gait speed (Perry, 1995); changes in gait speed that results in changed classification are meaningful (Schmid, 2007); ambulation ability that is predicted by gait speed is a reliable method of classifying patients (Bowden, 2008)</p> <ul style="list-style-type: none">• <.4 m/s were more likely to be household ambulators• .4 -.8 m/s limited community ambulators• >.8 m/s were community ambulators
Normative Data	<p><u>Comfortable/Fast Gait Speed:</u> (Bohannon, 1997; $n = 230$ healthy volunteers)</p> <p>Comfortable/fast gait speed in meters/second for men by decade (Bohannon, 1997)</p> <ul style="list-style-type: none">• 20s: 1.39 / 2.53• 30s: 1.46 / 2.45• 40s: 1.46 / 2.46



Rehabilitation Measures Database

Title of Assessment	10 M
Link to instrument	10
Purpose	Ass
Description	

Include information relevant to your clinic:

- Similar patient populations
- Brief review of psychometrics
- Indices of change
- Considerations for use at your clinics (recommended in Outpatient vs. inpatient, etc)

Minimally Clinically Important Difference (MCID)

Geria

- MCID: 0.1 m/s

Acute Stroke: (Tilson, 2010; $n = 283$; mean age = 63.5 (12.5) years; stroke onset < 45 days; gait speed < 0.18 m/s)

- MCID: 0.16 m/s

Cut-Off Scores

Stroke: Ambulation ability has been correlated with gait speed (Perry, 1995); changes in gait speed that results in changed classification are meaningful (Schmid, 2007); ambulation ability that is predicted by gait speed is a reliable method of classifying patients (Bowden, 2008)

- <.4 m/s were more likely to be household ambulators
- .4 -.8 m/s limited community ambulators
- >.8 m/s were community ambulators

Normative Data

Comfortable/Fast Gait Speed: (Bohannon, 1997; $n = 230$ healthy volunteers)

Comfortable/fast gait speed in meters/second for men by decade (Bohannon, 1997)



Rehabilitation Measures Database



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Add site specific information:

- Where is the equipment kept?
- Specific area “marked” for 10 meter walk
- When and how often will the measure be taken?
- Recommendations for using in goals
- Where and how is the instrument documented in the POC?
- How are the results transferred to the next level of care?

days; gait speed < 0.18 m/s)

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redicted by gait speed is a

Classroom Activity (4)



- Activity: Develop resource binders
 - Copies of relevant outcome measures
 - Scoring sheets
 - List of website resources
 - One-page summaries of most pertinent information
 - Indications for use
 - Administration and scoring procedures
 - Interpretation information/data
 - Normative data
 - Responsiveness values

Describe how you would respond to the following comments



- We don't have time to collect outcome measures!
- Nobody requires us to collect this information!
- Measurement is unnecessary!
- I want to spend my time treating patients, not measuring patients.
- I already know how to bill using G codes.

Overall Discussion of the Course



Now that you've completed this course, use the following discussion questions to reflect on your learning across the four modules:

1. What is the value of using the ICF to organize your clinical measures?
2. Why is it critical to use a client-centered approach?
3. Why should you use valid and reliable measures?
4. How can you interpret change and know that the patient has made a meaningful improvement?
5. What strategies could you use to introduce measures into your practice?
6. What can you do to overcome barriers you will find in developing an outcome measurement plan in your clinical site?



Questions and Discussion



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