

Module 1: An Introduction to Measurement in Rehabilitation Practice



Course Objectives continued

4. Critically evaluate measurement properties of existing outcome measures for application in clinical practice, including validity, reliability, responsiveness, and clinical utility.
5. Identify strategies to facilitate the use of outcome measures in clinical practice.
6. Identify strategies to overcome common barriers to implementing outcome measurement in clinical practice.
7. Effectively sustain outcome measurement use across his or her practice, and across practice sites or programs.

Course Outline



Module 1

Introduction: Why Measure?

Objective 1: Classification Systems

Module 2

Objective 2: Interpret and document outcomes in clinical practice

Objective 3: Facilitate skills to access web-based databases and to select measures

Module 3

Objective 4: Measurement properties

Module 4

Objective 5: Strategies to facilitate use of measures

Objective 6: Strategies to identify and overcome barriers

Objective 7: Sustaining measurement in practice



Module I: Introduction

1. Definitions
2. Benefits of measurement
3. Barriers to measurement
4. Outcomes classification system (ICF)

1. Definitions

- What is an outcome?
 - A measurable individual, family, or community state, behavior or perception that is measured along a continuum and is responsive to clinical interventions.
- What is an outcome measure?
 -



2. Benefits of Outcome Measurement

Individual

Group/
Organization

Health Professionals	Clinical Decisions & Competence	Accountability
Colleagues/ Referral Sources	Communication	Efficiency
Patients	Communication & Engagement	Effectiveness
Insurers/Payers	Communication & Claim decisions	Value
Scientists		

Facilitators of Outcome Measurement

Individual Practitioners

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

External

- Access to resources about a range of measures
- Support: from colleagues (opinion leaders) and organization
- Guidance in selection, administration, scoring, and interpretation

(Swinkels 2011, Jette 2009, Finch 2002, Kay 2001, Cole 1994)

3. Barriers to Outcome Measurement

- 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: belief that outcome measures are unnecessary, skepticism, feeling overwhelmed, lack confidence in use

- Organizational

- Time and Cost: investment required, no compensation
- Policy: no policy, poor adherence/compliance
- Culture: congruence/conflict at micro and macro levels
- Lack of consensus: No guidance from professional or advocacy groups

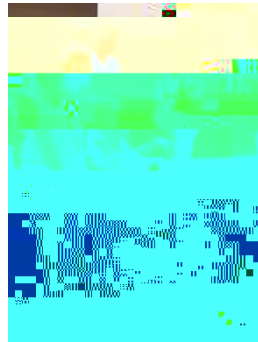
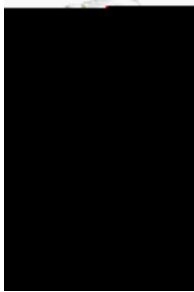
(Swinkels 2011, Jette 2009, Finch 2002, Kay 2001, Cole 1994)

4. Outcomes Classification System

International Classification of Functioning, Disability and Health



International Classification of Functioning Disability and Health



Interactions Among ICE Components



Body Functions and Structures

- Body Functions

- Chapter 1 Mental Functions
- Chapter 2 Sensory Functions and Pain
- Chapter 3 Voice and Speech Functions
- Chapter 4 Functions of the Cardiovascular, Hematological, Immunological and Respiratory Systems
- Chapter 5 Functions of the Digestive, Metabolic, and Endocrine Systems
- Chapter 6 Genitourinary and Reproductive Functions
- Chapter 7 Neuromusculoskeletal and Movement-related Functions
- Chapter 8 Functions of the Skin and Related Structures

- Body Structures

- Chapter 1 Structures of the Nervous System
- Chapter 2 The Eye, Ear and Related Structures
- Chapter 3 Structures Involved in Voice and Speech
- Chapter 4 Structures of the Cardiovascular, Immunological and Respiratory Systems
- Chapter 5 Structures Related to the Digestive, Metabolic, and Endocrine Systems
- Chapter 6 Structures Related to the Genitourinary and Reproductive Systems
- Chapter 7 Structures Related to Movement
- Chapter 8 Skin and Related Structures



Activities and Participation

- Activities and Participation
 - Chapter 1 Learning and Applying Knowledge
 - Chapter 2 General Tasks and Demands
 - Chapter 3 Communication
 - Chapter 4 Mobility
 - Chapter 5 Self-care
 - Chapter 6 Domestic life
 - Chapter 7 Interpersonal Interactions and Relationships
 - Chapter 8 Major Life Areas
 - Chapter 9 Community, Social and Civic Life



Outcome Measures Across the ICF

- Outcome measures exist across the ICF levels
 - This enables health care professionals to quantify the various ways a health condition impacts an individual and assures a comprehensive approach to patient care
- Body function and structure
 - Mini Mental Status Examination: a screening tool for cognition
- Activity
 - Functional Independence Measure: used in inpatient rehabilitation facilities to measure a variety of functional tasks and capabilities

Summary Review

- What is an outcome measure?
- Why measure patient characteristics using standardized outcome instruments?
- What are the benefits of outcome measurement using standardized instruments?
- What are some barriers to outcome measurement?
- What facilitates outcome measurement?
- What classification systems are available to guide thinking about outcomes?

Questions and Discussion



Project Staff

- Allen Heinemann, PhD – Director of CROR, at Rehabilitation Institute of Chicago, Northwestern University PM&R
- Joy Hammel, PhD, OTR/L, FAOTA – Professor, Occupational Therapy and Disability Studies, University of Illinois at Chicago
- Carolyn M. Baum, PhD, OTR/L, FAOTA – Professor, Occupational Therapy, Neurology and Social Work, Washington University School of Medicine
- Jennifer Moore, PT, DHS, NCS – Clinical Practice Leader, Neurological Physical Therapy, Rehabilitation Institute of Chicago
- Jennifer Piatt, PhD, CTRS – Assistant Professor, Recreational Therapy, Public Health, Indiana University
- Kirsten Potter, PT, DPT, MS, NCS – Associate Professor, Physical Therapy, Rockhurst University
- Jillian Bateman, OTD/OTR/L, CCRC – Project Manager, CROR Rehabilitation Institute of Chicago

Project Contributors

- Anne Deutsch, PhD – Clinical Research Scientist, Rehabilitation Institute of Chicago
- Richard Gershon, PhD – Professor and Associate Chair, Medical and Social Sciences, Northwestern University
- Allan Kozlowski, PT, PhD – Clinical Research Scientist, Mt. Sinai School of Medicine
- Jason Raad, PhD – Project Manager, CROR, Rehabilitation Institute of Chicago
- Kathleen Stevens, PhD RN – Nursing Education, Rehabilitation Institute of Chicago, Northwestern University PM&R

References

- Jette DU, Halbert J, Iverson C, Miceli L, Shah P. Use of standardized outcome measures in physical therapist practice: perceptions and applications. *Phys Ther* 2009; 89:125-135.
- Johnson, Maas & Moorhead (Eds). *Nursing Outcomes Classification (NOC)*. 2nd ed. St. Louis: Mosby Kay; 2000.
- Swinkels RA, van Peppen RP, Wittink H, Custers JW, Beurskens

References

- Kay T, Myers A, Huijbregts M. How far have we come since 1992? A comparative survey of physiotherapists' use of outcome measures. *Physiother Can* 2001; 53(4):268-275.
- Cole B, Finch E, Gowland C, Mayo, N. Physical rehabilitation

Copyright Information



© 2013 by the Rehabilitation Institute of Chicago. This work is licensed under a Creative Commons license at http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US. You are free to copy, distribute, and transmit the work, subject to the conditions listed in the license. For permission to modify this work or to use it for commercial purposes, please e-mail Allen Heinemann at aheinemann@ric.org.

