



Module 1: An Introduction to Measurement in Rehabilitation Practice

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Course Objectives



The learner will be able to...

1. Recognize the value and importance of using classification schemes and outcome measures to evaluate of Body Function and Body Structure, Activity, and Personal, and Environmental Factors that influence Participation.
2. Evaluate, interpret, and document client goals and outcomes in clinical practice using a client-centered approach.
3. Increase one's capacity to effectively utilize resources to assist with outcome measure selection, including the use of online databases to find assessment tools and interpret their measurement properties.

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

Course Audience

- Rehabilitation Professional Students/Trainees
 - Physical Therapy
 - Occupational Therapy
 - Speech and Language Pathology
 - Nursing
 - Recreational Therapy
 - Physiatry
 - And other disciplines serving rehabilitation patients





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?
 - A set of items that are used to create scores that are “intended to quantify a patient’s performance or health status based on standardized evaluation protocols or close ended questions.” (Jette, Halbert, Iverson, Miceli, Shah, 2009)
- Why measure patient characteristics using standardized outcome instruments?
 - Documentation in electronic records
 - For use in clinical information systems
 - For the development of clinical knowledge and professional education
 - Resource allocation and accountability

(Johnson, Maas & Moorhead, 2000)

In patient care, outcome measures help:

- Establish a patient's baseline status
- Track a patient's progress to determine the effectiveness of the plan of care
- Inform patients of their progress in a quantifiable manner
- Inform payers of patient progress to enhance reimbursement
- Provide data collected over time to improve care



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	Evaluate clinical trial benefits	Effectiveness

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

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

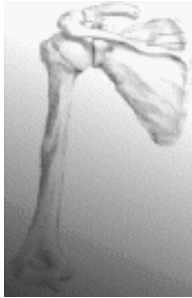


World Health
Organization

International Classification of Functioning Disability and Health



Body Functions & Structures



Functions

Structures

Activities & Participation



Capacity

Performance

Environmental Factors

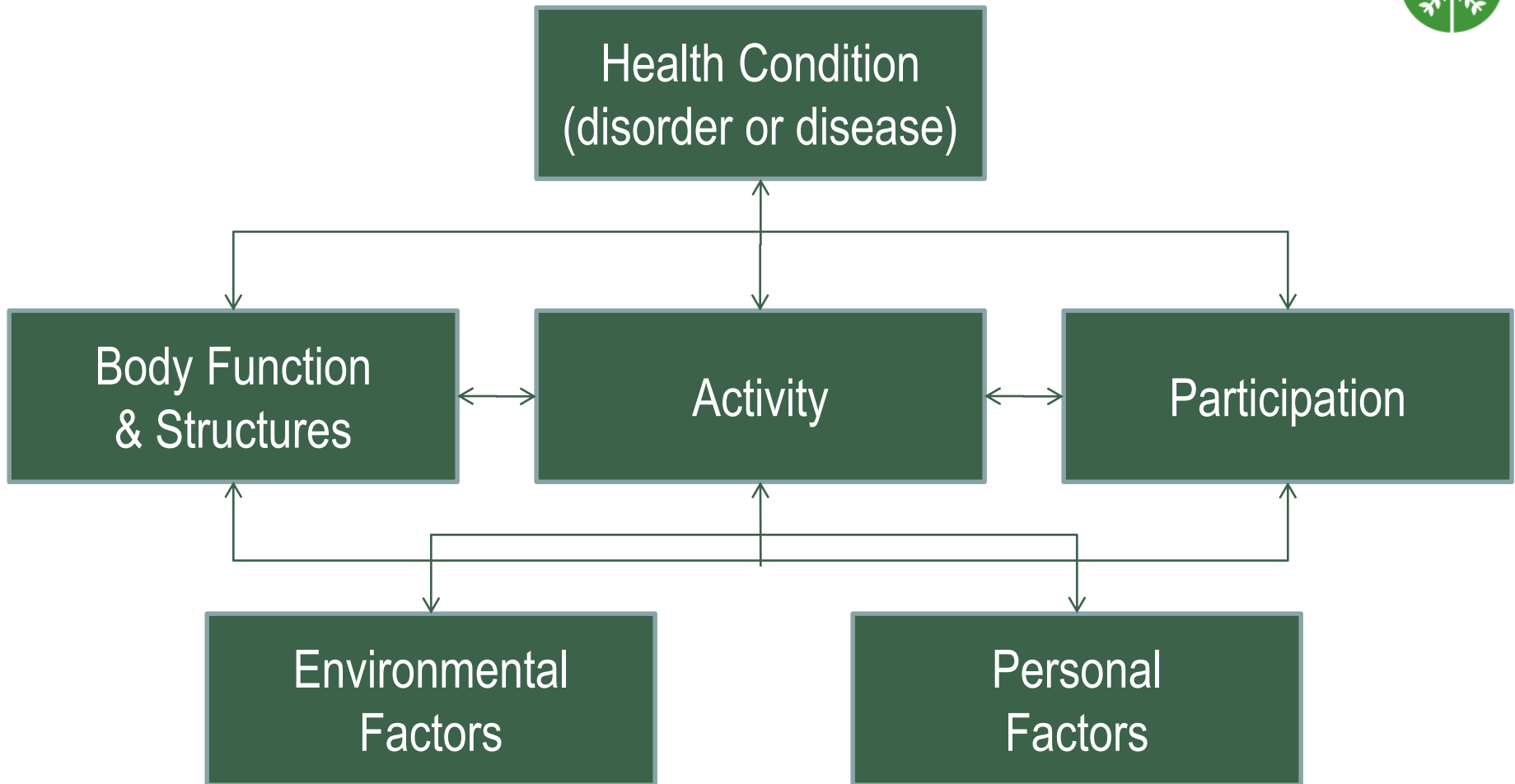


Barriers

Facilitators

<http://apps.who.int/classifications/icfbrowser/>

Interactions Among ICF 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

Environmental Factors



- Chapter 1 Products and Technology
- Chapter 2 Natural Environment and Human-Made Changes to Environment
- Chapter 3 Support and Relationships
- Chapter 4 Attitudes
- Chapter 5 Services, Systems and Policies

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
- Participation
 - Community Integration Questionnaire: a self-report measure of role function and community interaction

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



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