

**Use of the International Classification of Functioning to Develop Evidence-Based Practice Guidelines for Treatment of Common Musculoskeletal Conditions  
2010 Update**

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Sponsored by Orthopaedic Section  
American Physical Therapy Association

February 19, 2010  
Combined Sections Meeting  
San Diego, CA

**Presentation Outline**

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- **Overview: ICF Model**  
**Project Methodology**
- **Guideline Presentations/Discussion:**  
**Low Back Pain**

**Presenters**

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- **Overview of Project Methodology**  
Joseph Godges DPT
- **Low Back Pain Clinical Practice Guidelines**  
Anthony Delitto PT, PhD
- **Advisory Panel Discussion**  
JW Matheson DPT

**Purpose of Project**

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Develop of evidence-based practice guidelines that are based on terminology and health model from the International Classification of Functioning, Disability, and Health (ICF)

**ICF**

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- **Model of disablement developed by WHO in 2001**
- **Classifies function & disability in terms of:**
  - **Body structure**
  - **Body function**
  - **Activity**
  - **Participation**

**ICF-Based Practice Guidelines**

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**Expected Benefits:**

- **Advance orthopaedic physical therapist practice**
- **Guide for professional & post-professional education**
- **Establish framework for future research**

## ICF-Based Practice Guidelines

### **Expected Benefits:**

- Advance orthopaedic physical therapist practice
- Guide for professional & post-professional education
- **Establish framework for future research**

ORTHOPAEDIC SECTION, APTA  
STRATEGIC OBJECTIVES 2010-2014

*Standards of Practice - develop and disseminate outcomes studies*

Objective A: **Create clinical practice guidelines - 15 guidelines by 2015**

Objective B: **Create an Advisory Panel to develop National Outcomes Database - March 2010**

ORTHOPAEDIC SECTION, APTA  
STRATEGIC OBJECTIVES 2010-2014

*Standards of Practice - develop and disseminate outcomes studies*

Objective C: **Create data collection methods - by Fall 2010**

**Critical value of Association-based clinical practice guidelines**

Objective D: **Get Section members to contribute to database - 2011 on**

## ICF-Based Practice Guidelines

### **Develop for 7 Body Regions:**

- Foot & ankle
- Knee
- Hip
- Lumbosacral spine
- Cervicothoracic spine
- Shoulder
- Elbow, wrist & hand

## ICF Project Methodology

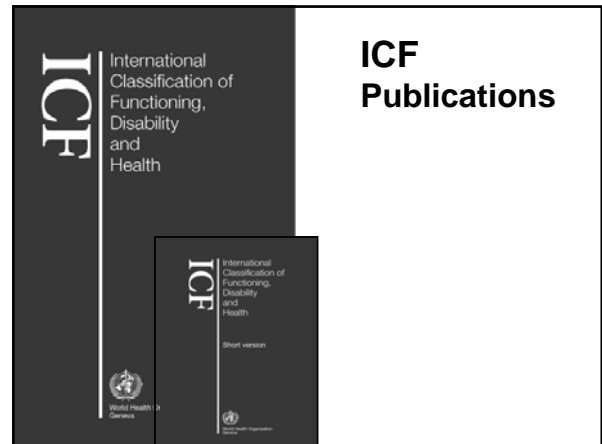
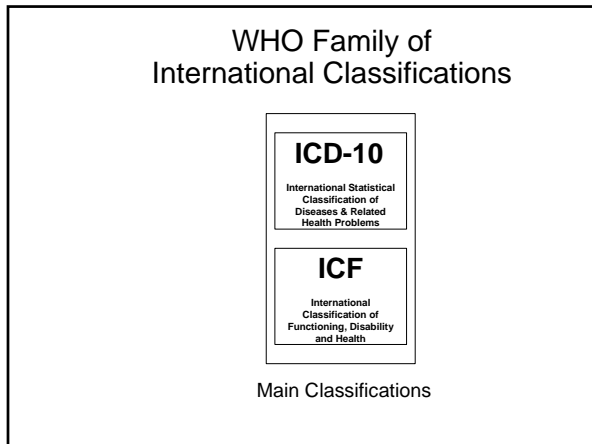
### **7 Workgroups & Leaders:**

- Cervicothoracic spine - J Childs & J Cleland
- Shoulder - Phil McClure
- Elbow, wrist & hand - Joy MacDermid
- Lumbosacral spine - Tony Delitto
- Hip - Michael Cibulka & Doug White
- Knee - Lynn Snyder-Mackler
- Foot & ankle - RobRoy Martin

World Health Organization  
Classification Assessment Surveys & Terminology Group



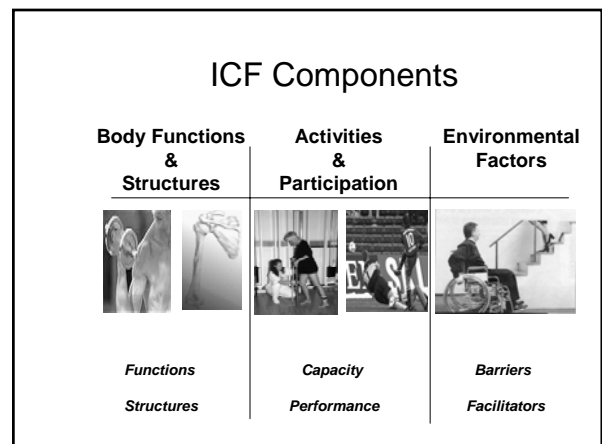
**International Classifications**



- ### Aims of ICF
- to provide a *scientific basis for consequences of health conditions*
  - to establish a *common language to improve communications*

- ### Aims of ICF
- to permit *comparison of data across:*
    - countries
    - health care disciplines
    - services
    - time
  - to provide a *systematic coding scheme for health information systems related to human functioning*

- Human Functioning      not disability alone
- Body functions      **vs impairments**
  - Body structures
  - Activities              **vs activity limitation**
  - Participation         **vs handicap**



### Activities and Participation

- 1 Learning & Applying Knowledge
- 2 General Tasks and Demands
- 3 Communication
- 4 Movement**
- 5 Self Care
- 6 Domestic Life Areas
- 7 Interpersonal Interactions
- 8 Major Life Areas
- 9 Community, Social & Civic Life

### Body Functions

### Structures

|  |   |
|--|---|
| Mental functions   | Structures of the nervous system  |
| <b>Sensory functions and pain</b>  | The eye, ear and related structures                                     |
| Voice and speech functions   | Structures involved in voice and speech                                 |
| Functions of the cardiovascular, haematological, immunological and respiratory systems | Structures of the cardiovascular, immunological and respiratory systems |
| Functions of the digestive, metabolic and endocrine systems                            | Structures related to the digestive, metabolic and endocrine systems    |
| Genitourinary and reproductive functions   | Structures related to the genitourinary and reproductive systems        |
| <b>Neuromusculoskeletal and movement-related functions</b>                             | <b>Structures related to movement</b>                                   |
| Functions of the skin and related structures   | Skin and related structures   |

### **ICF Components with clear Orthopaedic Physical Therapy Implications**

**Activities and Participation: Movement**

**Body Structures: Structures related to movement**

**Body Functions:**

**Sensory functions and pain**

**Neuromusculoskeletal and movement-related functions**

### ICF

**Questions**

**Comments**

**Feedback**

### Overview of Project Methodology

### ICF Project Methodology

#### **Workgroups:**

- 7 workgroups established
- Each group has leader & 4 to 6 members with representation of individuals involved in clinical practice, research & education
- Workgroups are PTs and MDs

### 5 Tasks of Workgroups:

- Identify common musculoskeletal conditions that affect the body region
- Identify common impairments of body structure & function, activity limitations & participation restrictions associated with each condition
- Describe system to classify individuals into homogeneous subsets that will best respond to specific interventions
- Describe interventions with supporting evidence for subsets of patients based upon classification system
- Summarize & disseminate guidelines

### Current Status

#### **Published Clinical Practice Guidelines:**

- Heel Pain - Plantar Fasciitis
- Neck Pain
- Hip Pain and Mobility Deficits / Hip Osteoarthritis
- Knee Stability and Movement Coordination Impairments / Knee Ligament Sprain (April, 2010)

### Current Status

#### **In editing process:**

- Achilles Pain, Stiffness, and Muscle Power Deficits / Achilles Tendinitis
- Knee Pain and Mobility Impairments / Meniscal and Articular Cartilage Lesions
- Low Back Pain

### Future Clinical Practice Guidelines:

- Hip Labral Disorders
- Patellofemoral Pain
- Knee Osteoarthritis
- Shoulder Adhesive Capsulitis
- Shoulder Instability
- Shoulder Rotator Cuff Syndrome
- Elbow Epicondylitis
- Carpal Tunnel Syndrome
- Lateral Ankle Sprain

### Current Status

#### **Published Clinical Practice Guidelines:**

[www.jospt.org](http://www.jospt.org)      Open access

[www.orthopt.org](http://www.orthopt.org)      Feedback requested

### Overview of Project Methodology

Questions

Comments

Feedback

**Potential Benefits of the Project**

**Potential Benefits of the Project**

Classify conditions using  
World Health Organization's  
terminology

**Potential Benefits of the Project**

Identify appropriate  
outcome measures

**Potential Benefits of the Project**

Identify interventions best  
supported by evidence

**Potential Benefits of the Project**

**Guide curriculums:**

- Professional PT programs
- Ortho PT residency programs
- Ortho PT related fellowships

**Potential Benefits of the Project**

Describe best practice for  
common musculoskeletal disorders  
or both physical therapists and  
non-PT stakeholders

[www.guidelines.gov](http://www.guidelines.gov)

**Overview**

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**Questions**

**Comments**

**Feedback**

**Low Back Pain Clinical Guidelines**

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**Anthony Delitto PT, PhD**

**Steven Z. George PT, PhD**

**Linda Van Dillen PT, PhD,**

**Gwendolyn Sowa, MD, Ph.D**

**Low Back Pain Clinical Guidelines**

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**Anthony Delitto PT, PhD**