



# HandART

## Hand Assessment Recommendations for Therapy

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### Research Group

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The aim of this project is to reach consensus on instruments that can be used in Hand Therapy to evaluate body functions (impairments) and activity (limitations).

### **HandART:**

A core set of assessment tools to be used in Hand Therapy that includes *as few instruments as possible to be practical, but as many as necessary* to assess body functions and activities, that are relevant to persons with a hand injury or hand disorder according to the Brief ICF Core Set for Hand conditions.

### **Project HandART, Hand Assessment Recommendations for Therapy**

The project consists of two parts, namely *4 preparatory studies* and a *Delphi study*.

#### \* Preparatory studies

##### **1. Review of the literature.**

We extensively reviewed instruments to assess activity limitations (according to the definition of the ICF) in persons with hand disorders. We selected 23 instruments.(1a) The literature on the clinimetric properties of these 23 instruments for assessing activity limitations is systematically reviewed, to evaluate the clinimetric quality of the instruments.(1b)

- 1a. Ven -Stevens van de L, Munneke M, Spauwen PHM, Linde van der H. Assessment of activities in patients with hand injury: A review of instruments in use. *Br J Hand Ther* 2007;12(1):4-14.
- 1b. Ven-Stevens van de LA, Munneke M, Terwee CB, Spauwen PH, van der Linde H. Clinimetric properties of instruments to assess activities in patients with hand injury: a systematic review of the literature. *Arch Phys Med Rehabil* 2009;90:151-69.

##### **2. A validity study.**

The validity of possibly eligible instruments to measure activities will be evaluated in patients with several hand conditions, including flexor tendon injuries.

Data has been collected in 2010-2012.(data collected, publication in preparation)

### **3. Development of the ICF Core Set for Hand Conditions**

The objective of this study is the determination of which categories of the ICF are relevant for hand conditions. The aim is to identify problems in functioning reported in studies on persons with hand conditions (HC) by analyzing outcome measures and parameters reported in these studies and accordingly to determine which ICF categories are relevant.

- 3a. *Kus S, van de Ven-Stevens L, Coenen M, Berno S, Kollerits B, Cieza A. What is our knowledge of functioning and disability in hand conditions based on? Arch Phys Med Rehabil 2011;92:1326-32*

The aim of the International ICF Consensus Conference was to derive the Brief and the Comprehensive International Classification of Functioning, Disability and Health (ICF) Core Set for Hand Conditions from the subset of ICF categories selected on the basis of the preparatory phase research. Following a multistage decision process, the experts agreed on the ICF categories to be included in the ICF Core Sets for Hand Conditions. The development of the ICF Core Sets for Hand Conditions involved a formal decision-making and consensus process, integrating evidence gathered from preparatory studies including a qualitative study, a systematic literature review, an expert survey and an empirical multicentre study.

- 3b. *Rudolf Klaus-Dieter, Sandra Kus, Michaela Coenen, Caroline Dereskewitz, Lucelle A W van de Ven-Stevens and Alarcos Cieza. Report on the International ICF Consensus Conference on the ICF Core Sets for Hand Conditions. Hand Therapy 2010;15:73-76*

### **4. Content comparison of assessment tools with the categories of the ICF Core Set for Hand Conditions**

The objective of this study is the content comparison of assessment tools to the categories of the ICF Core Set for hand conditions. Based on literature and description of available instruments, the definitions by the WHO of the ICF categories, and the Linking Rules (Cieza 2005), the assessment tools are linked to the categories of the ICF Core Sets for hand conditions,

This project is worked on in 2011-2012 in cooperation with the the ICF Research Branch in cooperation with the WHO Collaborating Center for the Family of International Classifications in Germany (data collected, publication in preparation).

#### \* Delphi study

Because in literature insufficient evidence is available to compile a core set of assessment tools, a method to create consensus should be used to develop a evidence- and consensus-based core set of instruments. The Delphi method is in essence a series of sequential questionnaires or 'rounds', that are performed to reach the most reliable consensus on a subject by a group of experts, whereby it is important to involve different disciplines. Questions and statements for this HandART Delphi study have been developed based on the results of preparatory studies.

Experts of the European federations of societies for Hand Therapy (HT), Hand Surgery (HS), and Physical and Rehabilitation Medicine (PRM) have been requested to participate. Each Delphi round consisted of a questionnaire, an analysis and a feedback report.

It will result in the development of a consensus based coresets of assessment tools, that can be used in the decision making proces and the evaluation of the treatment of patients with hand injuries or hand conditions.

**The Delphi study has been conducted in 2012.**

(publication in preparation)