Comparability of health information: Paper Series in Disability & Rehabilitation on the ICF Linking Rules and their application

8-12 October 2016
Tokyo, Japan

C503

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Abstract In this poster we present the current work on the Paper Series on the ICF Linking Rules and their various fields of application to be published in *Disability and Rehabilitation*.

Background

Evidence derived from timely and comprehensive health information on individuals' and (sub-)population's health has become increasingly important in current health systems at clinical, managerial and policy level to ensure decisions to be made are well-targeted toward the need of (sub-) populations. **Comparability of health information** collected with various methods and approaches, including clinical tests, patient-reported outcomes, and population surveys is essential for utilizing existing information as foundation for decision-making.

World Health Organization's International Classification of Functioning, Disability, and Health (ICF) provides a unified and standard language to describe health. For health information to be comparable, at least two aspects are important: **content or qualitative comparability** and comparability of measurement units or quantitative comparability.

In 2002, **ICF Linking Rules** were published by Cieza et al. to assist clinicians and researchers in establishing content comparability of existing health information by using the ICF as a reference. These linking rules were updated in 2005 (Cieza et al., 2005). The rules were taken up to link health information from various sources, including primary (e.g., various methods and approaches for data collection, data gained from qualitative research) and secondary data including information retrieved from systematic literature reviews. These linking rules have been updated in 2005 . The ICF Linking Rules were used by researchers across the globe in more than 100 articles, and published in more than 55 peer-reviewed journals across more than 50 topic areas. Given our experience in linking, we have identified some further challenges that have not been properly dealt with in the existing ICF Linking Rules.

Aim

In 2015 we started working on the conceptualization of a **Paper Series** to be published in **Disability and Rehabilitation** (Taylor & Francis). Guest Editors of this Paper Series are Alarcos Cieza (WHO), Michaela Coenen (Ludwig-Maximilians-Universität München) and Birgit Prodinger (Swiss Paraplegic Research).
The aim of the Papier Series ***"Comparability of health and related information"*** is to outline the various areas and fields of practice where the ICF Linking Rules are of particular value.

Conceptualization & Content

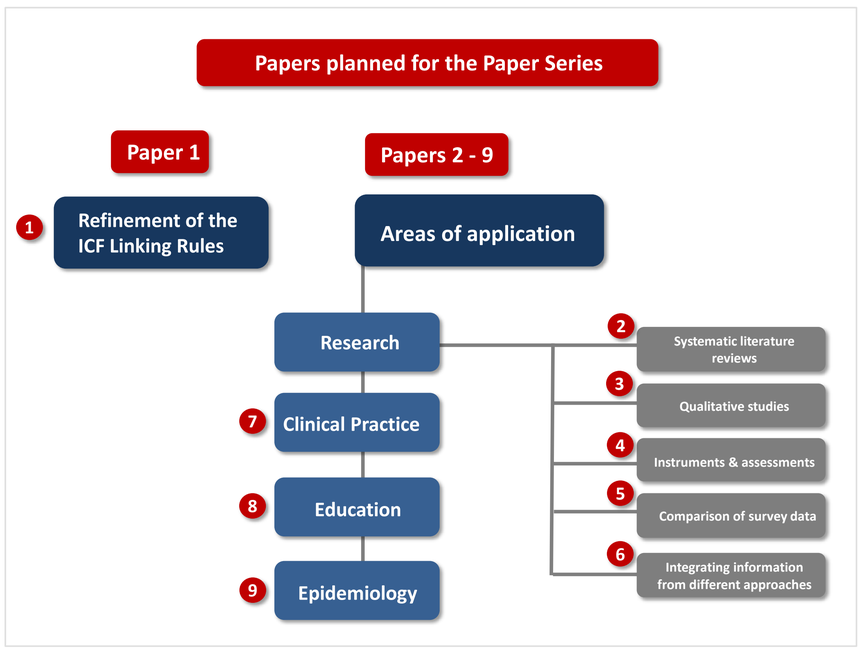


Figure 1: Fields of application for the papers planned for Disability and Rehabilitation.

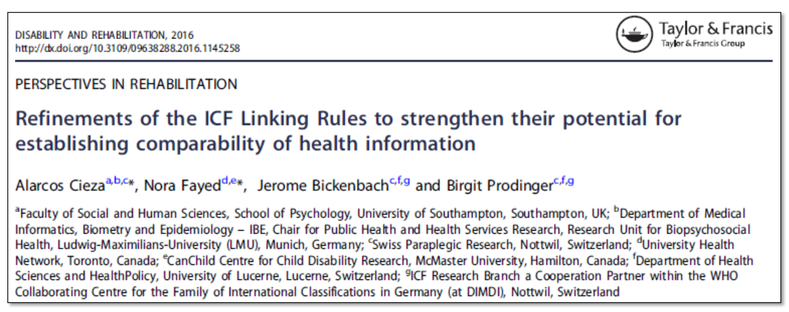
Nine papers have been planned for publication in the Paper Series. The first and core paper informs on the refinements of the ICF Linking Rules (see also *poster 66*). Papers 2 to 9 aims to highlight selected areas of application, namely research, clinical practice, education and epidemiology (see Fig. 1). These papers provide detailed information on the use of the refined ICF Linking Rules stressing advantages and challenges. Table 1 shows the working titles and responsible persons of the planned papers.

	Area of application	Specification of application	Working title of paper	Responsible person
Paper 1	Refinements of the ICF Linking Rules		Refinements of the ICF Linking Rules to strengthen their potential for establishing comparability of health information	Alarcos Cieza
Paper 2	Research	Instruments & assessments	Using the refined ICF Linking Rules to compare the content of existing instruments and assessments: a systematic review and exemplary analysis of instruments measuring participation	Birgit Prodinger
Paper 3	Research	Qualitative studies	Applying the ICF Linking Rules to analyse qualitative data	Michaela Coenen
Paper 4	Research	Systematic literature reviews	Applying ICF Linking Rules in systematic literature reviews: What are the barriers to access to primary health care services faced by the elderly?	Carla Sabariego
Paper 5	Research	Comparison of survey data	Applying the ICF Linking Rules to compare population-based data: An exemplary analysis of instruments used to collect data on disability	Carla Sabariego
Paper 6	Research	Integrating information from different approaches	Compiling and comparing data sources providing outcomes in patients with dementia using the ICF Linking Rules	Michaela Coenen
Paper 7	Clinical practice		Compiling standardised information from clinical practice: Using content analyses and ICF Linking Rules in goal-oriented youth rehabilitation	Anke Scheel-Sailer
Paper 8	Education		ICF Linking Rules in the context of education: Addressing ontological and conceptual issues	Judith Hollenweger
Paper 9	Epidemiology		Applying the ICF Linking Rules in linking health condition-specific surveys to general health and disability surveys: Advantages and challenges	Jerome Bickenbach

Table 1: Papers planned for the Paper Series "Comparability of health and related information": Areas of application, working titles and responsible persons.

Current State

Up to now Paper 1 (Cieza et al., 2016) and Paper 2 (Ballert et al., 2016) have been published. The Paper Series is planned to be completed by the end of 2016.


DISABILITY AND REHABILITATION, 2016
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PERSPECTIVES IN REHABILITATION

Refinements of the ICF Linking Rules to strengthen their potential for establishing comparability of health information

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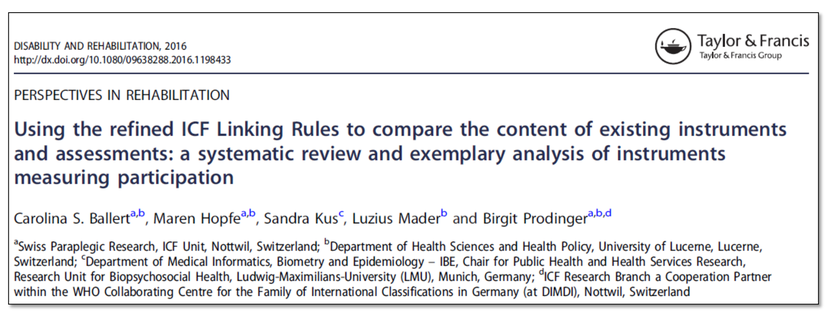
DISABILITY AND REHABILITATION, 2016
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PERSPECTIVES IN REHABILITATION

Using the refined ICF Linking Rules to compare the content of existing instruments and assessments: a systematic review and exemplary analysis of instruments measuring participation

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Cieza A, Brockow T, Ewert T, Amman E, Kollerits B, Chatterji S, Ustun TB, Stucki G. Linking health-status measurements to the international classification of functioning, disability and health. J Rehabil Med 2002; 34(5): 205-210.

Cieza A, Fayed N, Bickenbach J, Prodinger B. Refinements of the ICF linking rules to strengthen their potential for establishing comparability of health information. Disabil Rehabil 2016 Mar 17:1-10. [Epub ahead of print].

Cieza A, Geyh S, Chatterji S, Kostanjsek N, Ustun B, Stucki G. ICF linking rules: an update based on lessons learned. J Rehabil Med 2005; 37(4):212-218.

WHO - FAMILY OF INTERNATIONAL CLASSIFICATIONS NETWORK ANNUAL MEETING 2016

ICF INFO – An update on the methodology: Refinements of the ICF Linking Rules

8-12 October 2016
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C505

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Abstract In this poster we present the refined ICF Linking Rules to be applied in ICF INFO to ensure qualitative comparability of information retrieved from various instruments. In applying the ICF Linking Rules the principles of harmonizing routinely collected health information based on the ICF will be established.

Background

The ICF Linking Rules, first published in 2002 and revised in 2005 by Cieza and colleagues, have now been further refined to strengthen transparency in the linking process, thus enhancing the comparability of health information based on the ICF (Cieza et al., 2016). These refined ICF Linking Rules are used in ICF INFO, an international collaborative project which aims to establish the principles of harmonizing routinely collected health information. Application of the ICF Linking Rules allow for the examination of content comparability of various instruments within ICF INFO.

Refinement of ICF Linking Rules

The ICF Linking Rules have been refined with respect to the following aspects:

1 - 4 Identification of the **purpose of information** to be linked: differentiation between main and additional concepts;
5 Documentation of the **perspective** from which **health information** is collected (see Tab. 1);
6 - 7 Documentation and **categorization of response options** (see Tab. 2);
8 Use of **other specified** [8] and **unspecified** [9] ICF categories; documentation of additional information as annotation.

Decision Tree & Documentation Form

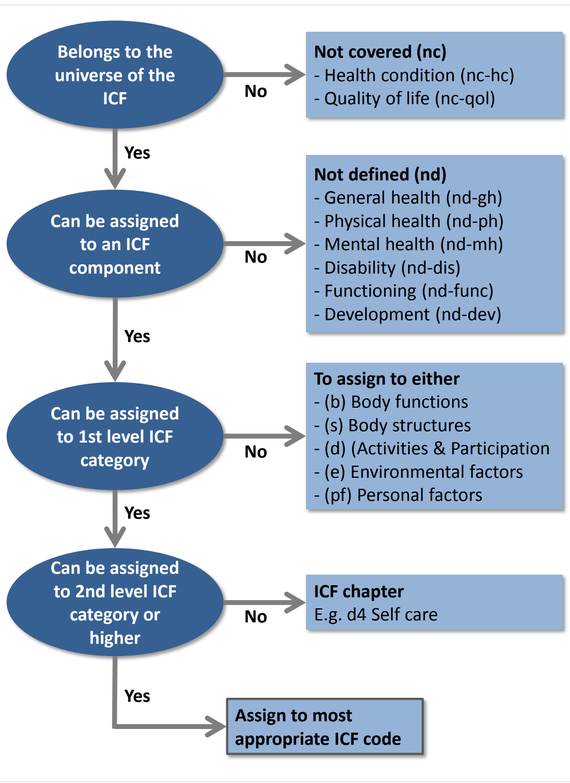

Fig 1: Decision tree to be applied in the linking process

The refined ICF Linking Rules provide a **decision tree** that facilitates and guides the linking process (Fig. 1). Information extracted from measures as well as linked ICF categories can be reported in a **documentation form**. Table 3 provides an example of this form using selected items of the Health Assessment Questionnaire (HAQ).

Descriptive perspective		
Describes a person's functions of the body, ability to perform or actual performance of certain activities or tasks, or their interaction with the environment		
- Performance	Describes what an individual does in his/her given environment. It includes all aspects of the environment (physical, social, attitudinal) and can also refer to the person's lived experience	How difficult is it for you to turn the pages of the newspaper? (*Score for assessment and quantification of chronic rheumatic affections of the hands (SACRAH); item 14)*
- Capacity	Describes an individual's ability to execute a task or an action and represents the highest probable level of a person in a given moment. A "standardized" environment (the same for all persons in all countries) is taken as the frame of reference	Can you walk 500 metres on a flat terrain without a stick or other walking aid or assistance? (*European Health Interview Survey (EHIS), item PL.6)*
Appraisal		
Appraisal refers to the extent to which a person's expectations have been satisfied		How satisfied are you with your sleep? *(WHOQoL-BREF, item F3.3)*
Need or dependency		
The kind and levels of needs an individual requires as a consequence of the problem or difficulty. It includes the extent of a person's dependence on any environmental factor		What was your level of need for help with not sleeping well? *(Supportive Care Needs Survey, item 3)*

Tab. 1: Perspectives adopted in health information with examples

Categorization*	Example
Intensity	Think about how you go places, using any help or means of transportation available. How much are you currently limited in getting around? **Response options**: Not at all - a little - some - quite a lot – completely *(Participation Measure for Post-Acute Care (PM-PAC), item 1)*
Frequency	In the last 3 months how often have you undertaken Preparing main meals? **Response options**: Never - less than once a week - 1-2 times per week - most days *(Frenchay Activity Index (FAI), item 1)*
Duration	Speak with your neighbors **Response option**: How long? *(Participation Objective, Participation Subjective (POPS), item 15)*
Confirmation or agreement	I'm waking up in the early hours of the morning. **Response options:** Yes – No *(Nottingham Health Profile (NHP), item 13)*
Qualitative attributes	What does your pain feel like? **Response options**: 1: flickering, quivering, pulsing, throbbing, beating; […]; 20: nagging, nauseating, agonizing, dreadful, torturing *(McGill-Melzack Pain Questionnaire item 2)*

* applicable for measures that contain response options)

Tab. 2: Categorization of response options: Information in health instruments with examples

Health Assessment Questionnaire (HAQ)
Fries JF, Spitz P, Kraines RG, Holman HR. Measurement of patient outcome in arthritis. Arthritis Rheum 1980;23:137-45.
MC; 05.06.2016

	5	6	7	1	2	3	4	8	
Verbatim health information	**Perspective adopted in information**	**Response options**	**Classification of response options**	**Main concept**	**Additional concept(s) contained in information**	**ICF category of main concept**	**ICF category of additional concept(s)**	**Annotation**	
(e.g., wording of item/linking unit or instruction)	* Descriptive - capacity; * Descriptive - performance * Appraisal * Need or dependency		* Intensity * Frequency * Duration * Confirmation or agreement * Qualitative attributes	What is the information about?		ICF code	ICF code(s)		
Please tick the one response which best describes your usual abilities over the past week									
DRESSING AND GROOMING: Are you able to:									
Dress yourself, including tying shoelaces and doing buttons?	Descriptive - performance	Possible without any difficulty; Possible with some difficulty; Possible with much difficulty; Unable to do	Intensity	Dressing	(tying shoelaces and doing buttons)	d540	(d5402; d540)		
Shampoo your hair?	Descriptive - performance	ditto	Intensity	Shampooing hair		d5202			
ARISING: Are you able to:			Intensity						
Stand up from a straight chair?	Descriptive - performance	ditto	Intensity	Standing up from a straight		d4103			
Get in and out of bed?	Descriptive - performance	ditto	Intensity	Getting in and out of bed		d4100			
…	…	…	…	…	…	…	…		

Table 3: Linking items of the Health Assessment Questionnaire (HAQ): Exemplary use of the documentation form to be applied in the linking process.

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Cieza A, Brockow T, Ewert T, Amman E, Kollerits B, Chatterji S, Ustun TB, Stucki G. Linking health-status measurements to the international classification of functioning, disability and health. J Rehabil Med 2002; 34(5): 205-210.
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A new dynamic tool for *m*ICF content development – the FunctionMapper

8-12 October 2016
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C512

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Abstract With mobile ICanFunction (*m*ICF) individuals can describe their life situation in natural language or by using patient-reported outcome measures (PROM), and the *m*ICF will convert that to a structured output using ICF categories. To create and use these linkages we developed a dynamic tool, the FunctionMapper using THL Term editor. This tool enables the *m*ICF content experts to work with terms in different languages collaboratively in one place. It also provides the selected terms to *m*ICF interfaces.

Introduction

People with disability and professionals working with them use different language when talking about functioning and disability. The Term Editor is open source software, developed by Jussi Kurki in National Institute of Health and Welfare (THL), suited for developing and maintaining terminologies, ontologies and information structures.

The mICF collaborative work-plan needed a tool to link natural language, instruments, and user goals to the ICF (International Classification of Functioning, Disability and Health). Thus we developed the Function Mapper using the Term Editor software to work with the mICF content in different languages. We developed 1) a user manual for the *m*ICF content experts, and 2) the content of the *FunctionMapper*.

Methods & Materials

Non-commercial license to apply ICF in different languages for global use in FunctionMapper was applied from WHO by THL. Natural languages linkages to ICF in Danish, Dutch, English, Finnish, German, Portuguese were prepared in *m*ICF content group in excel and converted to the Term editor. The *m*ICF content in FunctionMapper was agreed to include (in different languages)

1) the ICF
2) natural language terms (i.e. related terms and synonyms to the ICF categories),
3) items from instruments to measure functioning, and
4) user goals.

A user manual on the content, views and use instructions was prepared, discussed and revised in *m*ICF content development group.

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Results

The FunctionMapper was taken in *m*ICF content expert use in June 2016. Its content is multilingual, but the interface is bilingual (Finnish and English). The tool allows terminology experts to work simultaneously worldwide and add content to one single database.

The FunctionMapper contains three schemes that are linked together: 1) ICF categories (including fields for natural language terms and synonyms), 2) Instruments and 3) User goals.
For each scheme, there are 4 separate views (pages) to the content:

1) **Main view** listing all concepts to search,
2) **Tree view** of hierarchical structure of a selected concept (Fig 1),
3) **Preview** showing all the added data fields of a single concept (Fig 1), and the default connections (parents, inclusions and exclusions) and created connections (groups, instruments) (Fig 2), and
4) **Editing view**, where the *m*ICF content expert can enter data in the data fields.

The *m*ICF content experts can now work on natural language concepts and instrument items and link them to ICF categories according to the updated linking rules. Its search function and automatic referrers (connections) help recognizing existing linkages and thus provide useful aid when adding new information (Fig 2).

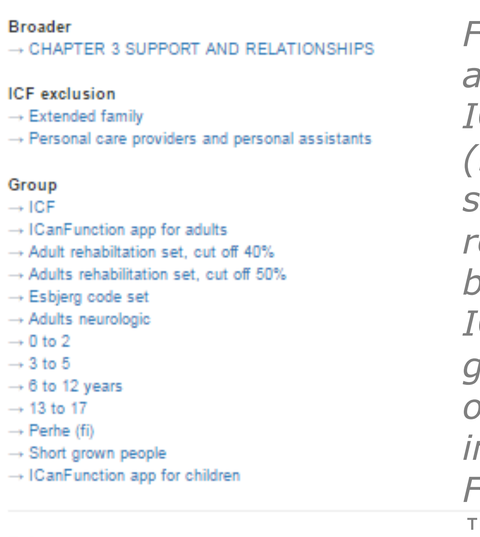
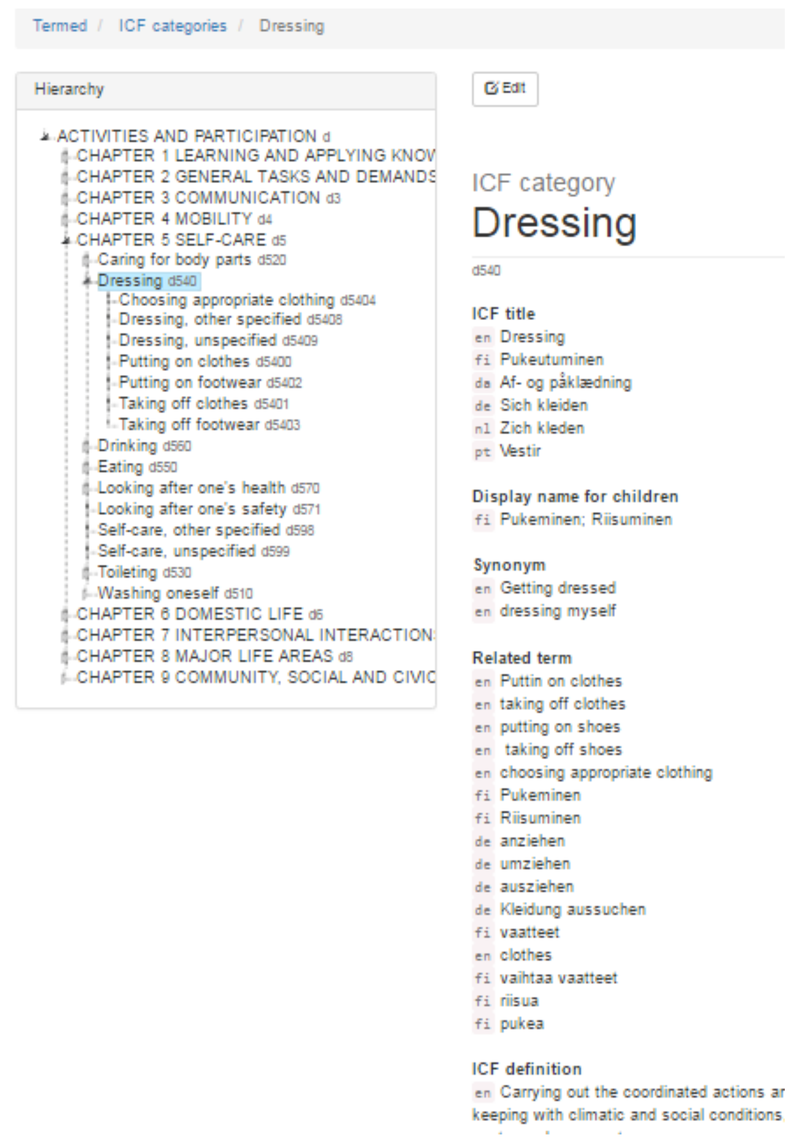


Fig 2: Excerpt of a Preview of one ICF category (Dressing) showing active referrers to broader term, ICF exclusions, groups and other referrers in the FunctionMapper™

Conclusions

Fig 1: Excerpt of a Tree view and Preview of one ICF category (Dressing) in the FunctionMapper™.



The FunctionMapper in the THL Term editor is at early development phase. Its development plan focuses on stabilizing the infrastructure of the software and enriching the functionalities needed.
The FunctionMapper a useful and easy to use tool for expert use. The *m*ICF content experts will connect the natural language terms to ICF categories using the FunctionMapper. It will provide terms and collect user-relevant terminology on functioning and environmental factors from the user inputs in the *m*ICF application. As the *m*ICF content work continues, the accumulating content enriches the classification and its use possibilities. The related terms will also help building better search possibilities in software applications using ICF classification, such as the *m*ICF.

Acknowledgements or Notes

We thank Jussi Kurki, THL for technical advice and Virpi Kalliokuusi, THL for terminological advice in developing the FunctionMapper™ using the Term editor.

WHO - FAMILY OF INTERNATIONAL CLASSIFICATIONS NETWORK ANNUAL MEETING 2016

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C525

Development of a metric for tracking and comparing population health based on the ICF Generic Set

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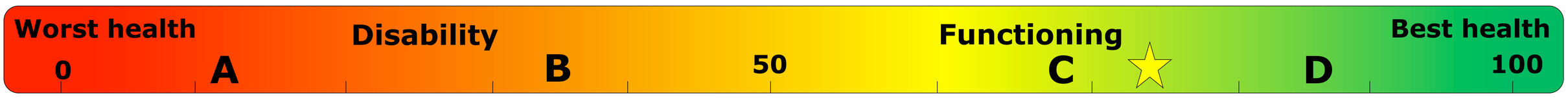
Abstract In this poster we address the question, how data on the functioning domains of the ICF Generic Set can be used – based on a metric of health – to adequately assess, compare and monitor the health of individuals and populations.

Chart 1: Health metric with expected values for five exemplary persons

	Health Score	Gender	Age (years)	Education	Income	Health conditions
★ **Reference person**	74	male	60	low	low	no health conditions
A	12	female	70	low	low	diverse health conditions
B	35	male	90	low	low	arthritis and dementia
C	68	male	60	low	low	diabetes
D	86	male	65	high	high	no health conditions



Introduction

The World Health Organization (WHO) has argued that functioning, and more concretely **functioning domains**, constitute the operationalization that best captures our intuitive notion of health. A great deal of data about functioning is already available. Nonetheless, this data is very diverse and, therefore, it is not possible to directly compare it.

The **ICF Generic Set** has been proposed as an (agreed on) minimal set of valid health domains for tracking the health of **both clinical and general populations**. It consists of seven domains:

- energy and drive functions,
- emotional functions,
- sensation of pain,
- carrying out daily routine,
- walking and moving around, and
- remunerative employment.

We demonstrate in this study how data on these domains – from any survey or study – can be integrated into a **sound psychometric measure** to adequate-ly assess, compare, and monitor the health of individuals and populations.

Methods & Materials

Data from waves 3 and 4 of the **English Longitudinal Study of Ageing** (ELSA) were analyzed (N = 9779 and 11050). The **Partial Credit Model** (PCM) – an Item Response Theory (IRT) model – was applied to create a psychometrically sound health metric. For each person, a value of the health metric was obtained. We then calculated a **regression model** to investigate the effect of sociodemo-graphic characteristics and 18 health conditions on the health metric.

Results

Chart 1 visualizes **the metric as a ruler**, with five exemplary persons located on it.

Chart 2 displays (a selection of) the **regression coefficients** from the model.

All well-known gradients of health – age, education, and income levels – are captured by the health metric.

Different populations or subgroups of persons, e.g. persons with different health conditions, can be compared based on the metric. For example, compared to persons without any health condition, persons with high blood pressure are expected to have only slightly worse health, while persons with stroke or psychiatric conditions are expected to have noticeably worse health and those with dementia have the worst health.

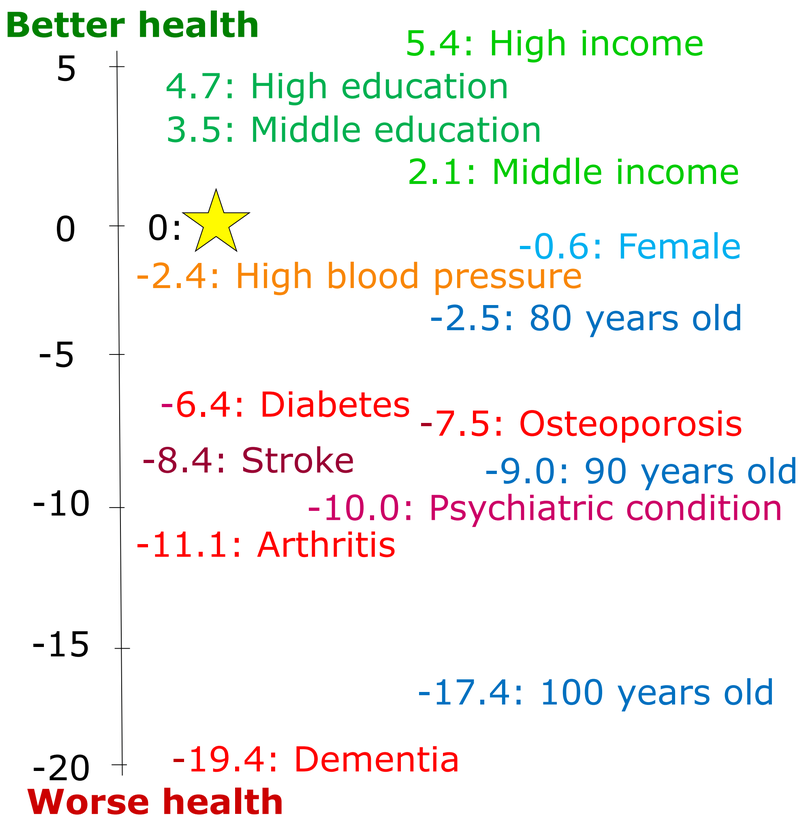


Chart 2: Expected differences in health by sociodemographic characteristics and (a selection of) health conditions compared to the reference person ★ (male, 60 years old, low education, low income, no health conditions)

Discussion

We developed a **sound psychometric measure** useful to **track and compare population health** based on the ICF Generic Set – using an exemplary dataset.

As a value of the health metric is obtained for each person in the dataset, individuals or groups of persons – or even populations – can be **cross-sectionally** compared.

Additionally, when a person is scored at different time points, change in health status can be examined **over time**, thereby e.g. assessing the effect of aging and the incidence of new health conditions on overall health state.

The developed health metric offers a wide range of applications, including comparisons of levels of health among different groups in the general population, clinical populations, and even populations within and **across different countries**.

The **same strategy** can be applied to **any other dataset** containing information on the domains of the ICF Generic Set, independently of how these domains have been operationalized into questions.

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What are the Swedish Quality Registries about? Content comparison using WHO's International Classification of Functioning, Disability and Health

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C527

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Abstract With this poster we provide information on the content comparability of the Swedish Quality Registers focusing on musculoskeletal disorders. We performed a mapping exercise by comparing the Quality Registers to selected ICF Core Sets and the ICF Generic Set using the refined ICF Linking Rules to facilitate the harmonization of the Quality Registers.

Background

The 116 Swedish Quality Registries (QRs) contain individual-based clinical data, such as data on patient problems, medical interventions and outcomes. It is envisioned to use the QRs in an integrated way for continuous learning, improvement, research and management to create the best possible health and social care in Sweden. There are several challenges that have to be overcome to increase the impact of the QRs for quality improvement, namely to facilitate their use and practicability for health and social care staff and stakeholders and to coordinate them with the national electronic health record (EHR) system. To facilitate the synchronization of QRs the comparison of their content is of utmost importance. For comparison the International Classification of Functioning, Disability and Health (ICF) can be used which is part of the Swedish strategy to organize the documentation of health and social care with a common structure and terminology to be implemented in the EHR system.

Aim

The objective of this project is to provide information on the mapping exercise of the Swedish QRs focusing on musculoskeletal disorders to the ICF Core Sets and the ICF Generic Set (Cieza et al., 2014) using the refined ICF Linking Rules (Cieza et al., 2016).

Methods & Materials

The following QRs were used to examine content comparability:
- SWEDAMP (Swedish National Register for Amputations)
- BOA (Better Management of Patients with Osteoarthritis)
- SKAR (Swedish Knee Arthroplasty Register)
- RIKSHÖFT (Swedish National Hip Fracture Register)
- SHPR (Swedish Hip Arthroplasty Register)
- SRQ (Swedish Rheumatology Quality Register)
- SSAR (Swedish Shoulder and Elbow Register)
- SFR (Swedish Fracture Register)
- XBASE (Swedish National Anterior Cruciate Ligament Register)

We applied the following procedure:
① Variables of QRs were mapped to Donabedian's quality criteria - structure, process and outcome quality - (Donabedian, 1966) (results are not shown);
② Variables covering outcome quality were linked to the ICF using the refined ICF Linking Rules;
③ Linked variables of the QRs were mapped to the Comprehensive ICF Core Sets for Osteoarthritis (OA) (Dreinhofer et al., 2004), Low Back Pain (LBP) (Cieza et al., 2004), Ankylosing spondylitis (AS) (Boonen et al., 2010), and Rheumatoid Arthritis (RA) (Stucki et al., 2004), as well as the ICF Generic Set.

Results

Results of the mapping of variables included in the QRs, that cover outcome quality, with ICF Core Sets and the ICF Generic Set are shown in Tables 1 and 2.

ICF codes	ICF titles	OA	LBP	RA	AS	SWEDAMP	BOA	SKAR	RIKSHÖFT	SHPR	SRQ	SSAR	SFR	XBASE
b126	Temperament and personality functions		✓								○		○	
b130 *	**Energy and drive functions**	✓	✓	✓	✓						○		○	
b134	Sleep functions	✓	✓	✓	✓								○	
b140	Attention functions												○	
b144	Memory functions								★					
b152	**Emotional functions**	✓	✓	✓	✓	○	○			○	○		○	
b160	Thought functions								★					
b180	Experience of self and time functions		✓	✓										
b210	Seeing functions				✓									
b260	Proprioceptive function		✓											
b280	**Sensation of pain**	✓	✓	✓	✓	○	○		○	○	★○		○	○
b410	Heart functions										★			
b420	Blood pressure functions										★			
b430	Haematological system functions			✓							★			
b435	Immunological system functions								★	★	★			
b440	Respiration functions				✓						★			
b445	Respiratory muscle functions					★					○			
b455	Exercise tolerance functions		✓	✓	✓						★○			
b460	Sensations associated with cardiovascular and respiratory functions										○		○	
b510	Ingestion functions			✓										
b530	Weight maintenance functions										★			
b540	General metabolic functions										★			
b610	Urinary excretory functions										★			
b620	Urination functions		✓						★					
b640	Sexual functions		✓		✓									
b710	Mobility of joint functions	✓	✓	✓	✓	★					★○			○
b715	Stability of joint functions	✓	✓	✓										
b720	Mobility of bone functions	✓	✓											
b730	Muscle power functions	✓	✓	✓							★			
b735	Muscle tone functions	✓	✓											
b740	Muscle endurance functions	✓	✓	✓	✓									
b760	Control of voluntary movement functions	✓											○	
b780	Sensations related to muscles and movement functions	✓	✓	✓	✓								○	○
b810	Protective functions of the skin					★			★					

✓ ICF categories included in the respective ICF Core Sets
★ Data retrieved from medical examinations, clinical tests, HP rating scales
○ Data retrieved from patient-reported outcomes
* ICF categories included in the ICF Generic Set

Table 1: Content comparison of QRs with selected ICF Core Sets and the ICF Generic Set: Body functions.

ICF codes	ICF titles	OA	LBP	RA	AS	SWEDAMP	BOA	SKAR	RIKSHÖFT	SHPR	SRQ	SSAR	SFR	XBASE
d160	Focusing attention												○	
d163	Thinking												○	
d170	Writing			✓									○	
d230 *	**Carrying out daily routine**			✓	✓								○	
d240	Handling stress and other psychological demands		✓		✓									
d360	Using communication devices and techniques			✓									○	
d410	Changing basic body position	✓	✓	✓	✓	○					○		○	○
d415	Maintaining a body position	✓	✓	✓	✓								○	○
d420	Transferring oneself		✓											
d430	Lifting and carrying objects	✓	✓	✓	✓						○			
d440	Fine hand use	✓		✓			○				○		○	
d445	Hand and arm use	✓	✓	✓							○		○	
d449	Carrying, moving and handling objects, other specified and unspecified			✓										
d450	**Walking**	✓	✓	✓	✓	★○	○		★	○	○		○	○
d455	**Moving around**	✓	✓	✓	✓	○					○		○	○
d460	Moving around in different locations		✓	✓		○							○	
d465	Moving around using equipment		✓	✓										
d469	Walking and moving, other specified and unspecified					○								
d470	Using transportation	✓	✓	✓	✓								○	
d475	Driving	✓	✓	✓	✓								○	
d510	Washing oneself	✓	✓	✓	✓						○		○	
d530	Toileting	✓	✓	✓	✓								○	
d540	Dressing	✓	✓	✓	✓						○		○	○
d550	Eating										○			
d560	Drinking			✓										
d570	Looking after one's health		✓	✓	✓		○						○	
d598	Self-care, other specified					○								
d620	Acquisition of goods and services	✓	✓	✓	✓						○		○	○
d630	Preparing meals		✓	✓							○			○
d640	Doing housework	✓	✓	✓	✓						○		○	○
d650	Caring for household objects		✓											
d660	Assisting others	✓	✓	✓	✓									
d710	Basic interpersonal interactions		✓											
d760	Family relationships		✓	✓	✓								○	
d770	Intimate relationships	✓	✓	✓	✓								○	
d845	Acquiring, keeping and terminating a job				✓									
d850	**Remunerative employment**	✓	✓	✓	✓		○				○			○
d859	Work and employment, other specified and unspecified		✓	✓										
d870	Economic self-sufficiency				✓									
d910	Community life	✓	✓	✓	✓									
d920	Recreation and leisure	✓	✓	✓	✓						○			○

Table 2: Content comparison of QRs with selected ICF Core Sets and the ICF Generic Set: Activities & Participation.

Conclusion

With this mapping exercise we compared the Swedish QRs to stress the content com parability of health-related information using the ICF as a reference. There is a need to synchronize content across QRs to establish a standard set of individual- based data necessary for quality assurance in health and social care.

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WHO - FAMILY OF ICLASSIFICATIONS NETWORK ANNUAL MEETING 2016

Launching the ICF-based assessment - the ICF Hand$_A$ - by using the online presence of the Lighthouse Project Hand

8-12 October 2016
Tokyo, Japan

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C532

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Abstract Data of functioning and environmental factors can be collected in patients with hand hand injuries and hand disorders by using the ICF Hand$_A$, an assessment set covering the aspects of the Brief ICF Core Set for Hand Conditions. We provide on the website of the Lighthouse Project Hand detailed information including image and video material to illustrate how to apply the specific outcome measures and clinical tests of the ICF Hand$_A$. This will improve standardized data collection on functioning in clinical practice.

Introduction

Implementing the Brief ICF Core Set for Hand Conditions in the treatment and rehabilitation of persons with hand injuries and hand disorders is the overall aim of the Lighthouse Project Hand. Therefore, the ICF Hand$_A$, an assessment set covering the aspects of the Brief ICF Core Set for Hand Conditions, has been established within the Lighthouse Project Hand. Using the ICF Hand$_A$ would facilitate the assessment of functioning and the comparability of functioning-related information among subgroups of patients and institutions.
This, however, requires knowledge and correct use of all outcome measures and clinical tests included in the ICF Hand$_A$. We report on the dissemination of the ICF Hand$_A$ and its application using the website of the Lighthouse Project Hand.

Methods & Materials

We set up an overview page on the website of the Lighthouse project Hand, visualizing the aspects covered by the ICF Hand$_A$ at a glance. This page also serves as a starting point to navigate to the assessment pages of the website, created for all aspects included in the ICF Hand$_A$. On the assessment pages the specific outcome measures and clinical tests assigned to a certain aspect are presented.
We used images and video material for illustration which has been created by physicians, hand therapists and occupational therapists of the hand trauma centre of the BG Trauma Hospital Hamburg, Germany.

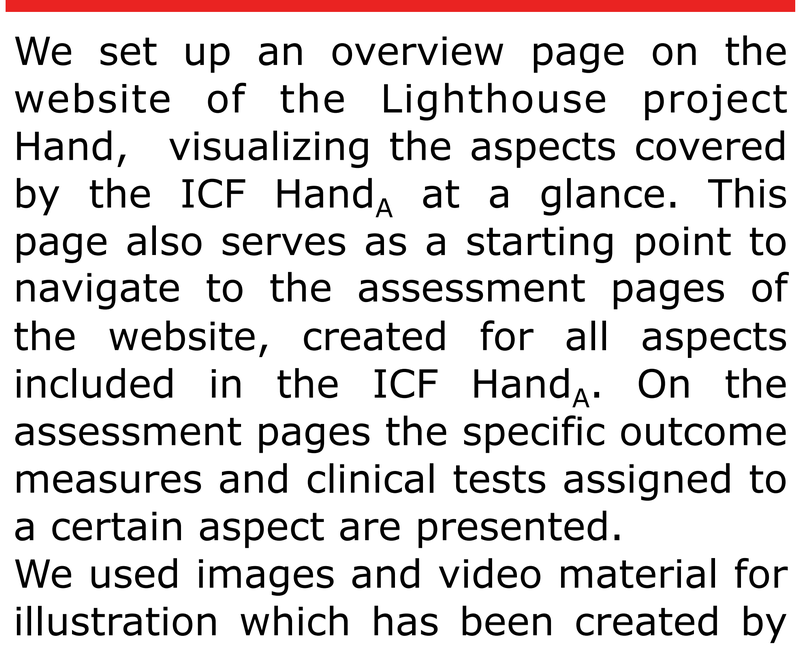

Figure 1: Part of the overview page visualizing the body functions covered by the ICF Hand$_A$.

Results

On the website of the Lighthouse Project Hand comprehensive material has been made available to inform about the entire assessment procedure and to illustrate how to apply the specific outcome measures and clinical tests included in the ICF Hand$_A$.

Figure 2: Part of the of the overview page visualizing activities and participation aspects and environmental factors included in the ICF Hand$_A$.

The assessment pages of the project website provide for all aspects of the ICF Hand$_A$ images and videos on which

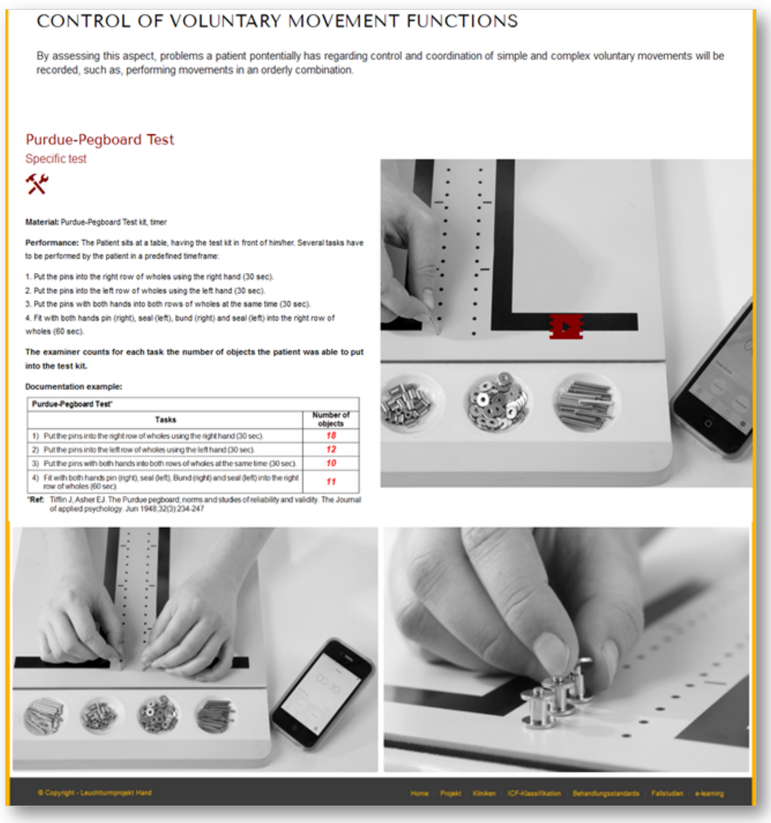

Figure 3: Assessment page showing an outcome measure included in the ICF Hand$_A$ to assess control of voluntary movement functions (b765).

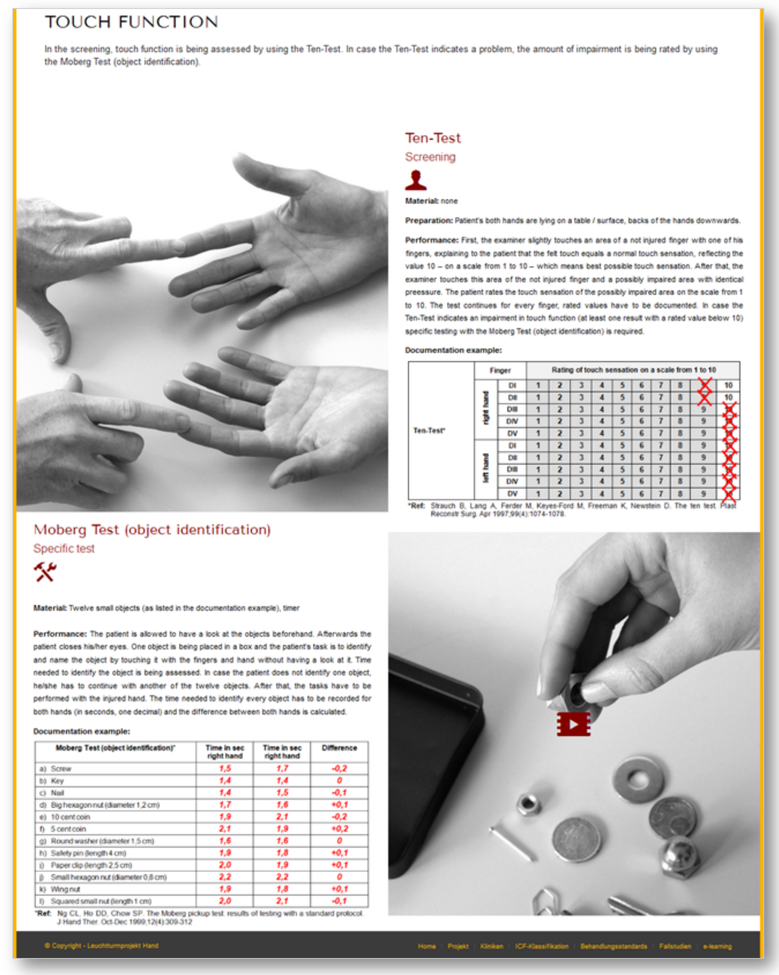

Figure 4: Assessment page showing the outcome measures included in the ICF Hand$_A$ to assess touch functions (b265).

Conclusion

Dissemination of the ICF Hand$_A$, using the online presence of the Lighthouse Project Hand is considered to be an effective way of spreading information about how to assess functioning in persons with hand injuries or hand disorders. Providing a clear description of the assessments will improve standardized data collection on functioning in clinical practice.

Acknowledgements or Notes

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