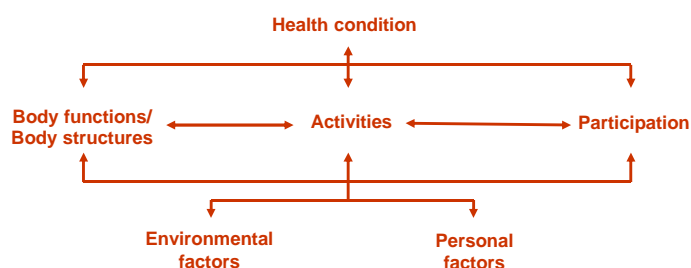


Linking Health Information to the ICF



ICF Research Branch

After completing this section, you will be able to...

- Link various types of health information to the ICF
- Understand and follow the linking decision tree
- Identify the perspectives adopted in health information according to the ICF linking rules
- Categorize response items of health-related instruments according to the ICF linking rules

ICF Research Branch

As a trainer, you will be able to..

- teach the participants how to link health and health-related information to the ICF according to the established (refined) ICF Linking Rules
- guide participants through ICF linking exercises

ICF Research Branch

Linking health and health related information to the ICF

Method for translating health and health related information to the ICF

LINKING HEALTH-STATUS MEASUREMENTS TO THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH

J Rehabil Med 2002; 34: 205-210
Alarcos Cieza,¹ Thomas Brockow,² Thomas Ewert,¹ Edda Amman,¹ Barbara Kollerits,¹ Somnath Chatterji,³ T. Berdihan Üstün³ and Gerold Stucki¹

ICF LINKING RULES: AN UPDATE BASED ON LESSONS LEARNED

J Rehabil Med 2005; 37: 212-218
Alarcos Cieza,¹ Szilvia Geyh,¹ Somnath Chatterji,² Nenad Kostanisek,² Berdihan Üstün² and Gerold Stucki^{1,3}

PERSPECTIVES IN REHABILITATION

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

Alarcos Cieza^{a,b,c,*}, Nora Fayed^{d,e*}, Jerome Bickenbach^{c,f,g} and Birgit Prodinger^{c,f,g}

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Linking health and health related information to the ICF

ICF Linking Rules

- Identify any meaningful concepts contained in the piece of information to be linked.
- Identify and document the perspective adopted in the information.

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Perspective adopted in health information

<i>Descriptive perspective</i>	
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.	Score for assessment and quantification of chronic rheumatic affections of the hands (SACRAH)_Item 14: How difficult is it for you to turn the pages of the newspaper?
Performance Describes what an individual does in his/her given environment. It includes all aspects of the environment (physical, social, attitudinal) and can be also referred to the person's lived experience.	Nottingham Health Profile (NHP)_Item 13: I am waking up in the early hours of the morning.
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.	European Health Interview Survey (EHIS)_Item PL.6: Can you walk 500 metres on a flat terrain without a stick or other walking aid or assistance?
<i>Appraisal</i>	
Appraisal refers to the extent to which a person's expectations have been satisfied.	WHOQoL-BREF_Item F3.3: How satisfied are you with your sleep? Multiple Sclerosis Impact Scale (MSIS-29)_Item 12: In the past two weeks, how much have you been bothered by having to depend on others to do things for you?
<i>Need or dependency</i>	
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.	Supportive Care Needs Survey _Item 3: What was your level of need for help with not sleeping well? Spinal Cord Injury Independence Measure_Item 1: Feeding (cutting, opening containers, pouring, bringing food to mouth, holding cup with fluid) 1. Needs parenteral, gastronomy, or fully assisted oral feeding 2. Needs partial assistance for eating and/or drinking, or for wearing adaptive devices 3. Eats independently, needs adaptive devices or assistance only for cutting food and/or pouring and/or opening containers 4. Eats and drinks independently; does not acquire assistance or adaptive devices

Linking health and health related information to the ICF

ICF Linking Rules

- Identify any meaningful concepts contained in the piece of information to be linked.
- Identify and document the perspective adopted in the information.
- [Identify the approaches taken on in the response options.]

7

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Approaches for quantification in instruments

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

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ICF Research Branch

Linking health and health related information to the ICF

ICF Linking Rules

- Identify any meaningful concepts contained in the piece of information to be linked.
- Identify and document the perspective adopted in the information.
- [Identify the approaches taken on in the response options.]
- Link all meaningful concepts to the most precise ICF category.

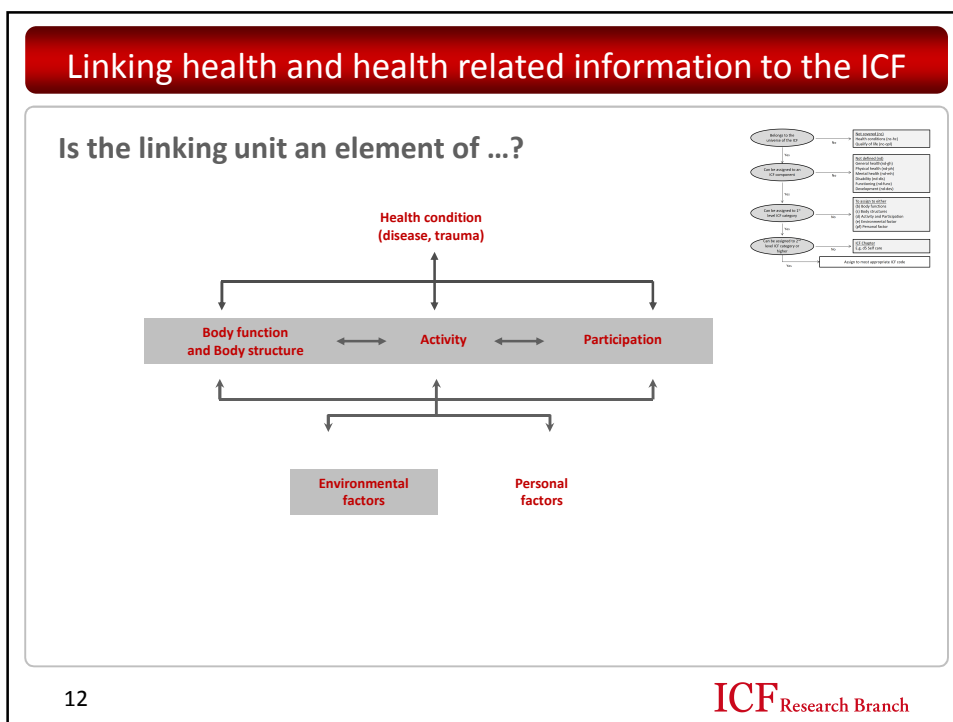
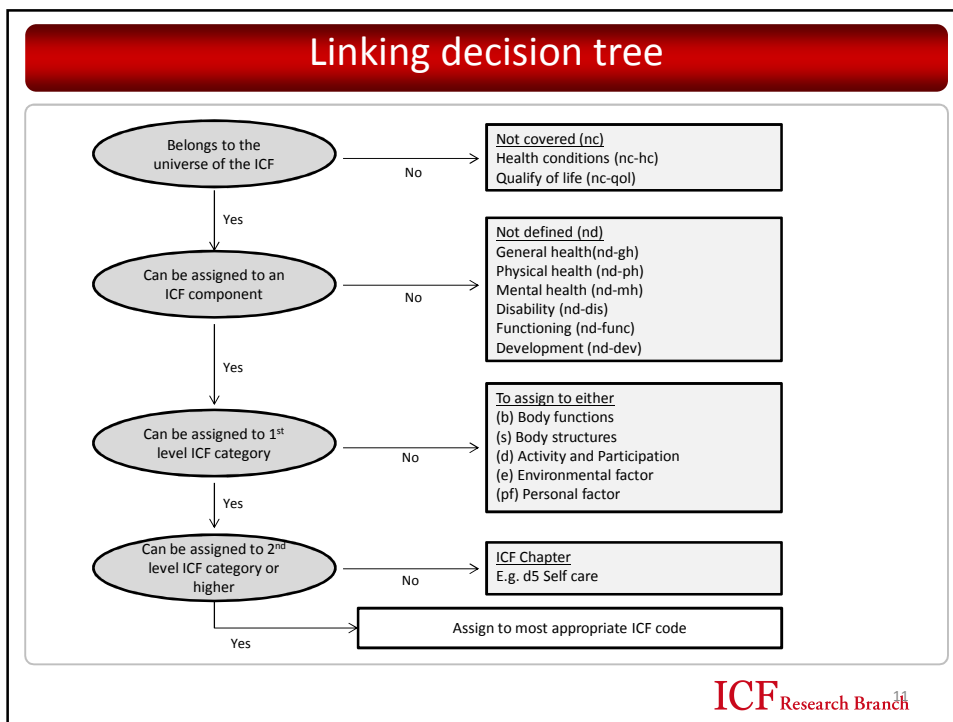
9

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ANY QUESTIONS?



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Linking health and health related information to the ICF

WHODAS 2.0 – D4:3

Getting along with **people who are close to you?**

d799 Interpersonal interactions and relationships,
unspecified_people who are close to you

Nordic mobility-related participation outcome evaluation of assistive device intervention (NOMO)

Are you dependent on other persons in order **to get out of or into
your home?**

d4608 Moving around in different locations, **other specified_**get
out of or into home

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Consensus Process

Linking health and health related information to the ICF

ICF Blocks

- The chapters are often subdivided into “blocks” of categories.
Example: Activities and Participation, Chapter 3 Communication:
 - Communicating-Receiving (d310–d329)
 - Communicating-Producing (d330–d349)
 - Conversation and using communication devices
and techniques (d350–d369)

- Are provided as a convenience to the user
- But normally not used for coding purposes

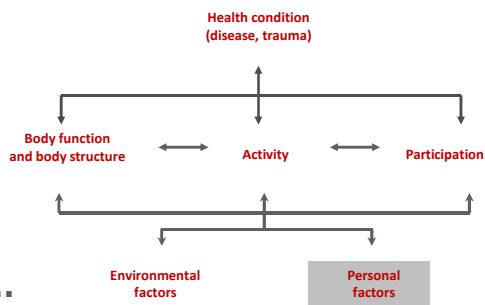
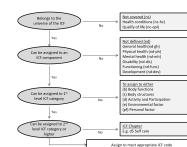
At the end of the block there are also other specified categories

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Linking health and health related information to the ICF

Is the linking unit an element of ...?



If yes...

PF = Personal Factor

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Personal Factor or Chapter 1 Mental Functions?

If to assess a mental health disorder e.g. depression or anxiety OR addresses organic/bodily/brain processes

Mental Function

If intrinsic to the person OR will not change or minimally change

Personal Factor

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ANY QUESTIONS?

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ICF Linking template

Instru- ment	Verbatim health information (e.g. wording of item or instruction)	Response options	Concepts / Linking Units	ICF category	Annotation

Instru- ment	Verbatim health information (e.g. wording of item or instruction)	Response options	Perspective adopted in information	Quantification of the information	Main concept: What is this information about?	Other concepts contained in information	ICF category of main concept	ICF category of other concepts	Annotation

Descriptive perspectives

- Performance
- Capacity

Appraisal
Need or dependency

Intensity
Frequency
Duration
Confirmation/Agreement
Qualitative attributes

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ICF Linking template

Instru- ment	Verbatim health information (e.g. wording of item or instruction)	Response options	Concepts / Linking Units	ICF category	Annotation

Instru- ment	Verbatim health information (e.g. wording of item or instruction)	Response options	Perspective adopted in information	Quantification of the information	Main concept: What is this information about?	Other concepts contained in information	ICF category of main concept	ICF category of other concepts	Annotation

19 **ICF** Research Branch

Linking health and health related information to the ICF

Translating linking units
to the ICF

Instruments and assessments

20 **ICF** Research Branch

Linking health and health related information to the ICF

Linking steps for instruments and assessments



1 Preparation of the information → **2** Identification of linking units → **3** Identification of perspective → **4** Linking of linking unit to the ICF

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Linking health and health related information to the ICF



1 Preparation of the information → **2** Identification of linking units → **3** Identification of perspective → **4** Linking of linking unit to the ICF

	Verbatim health information (e.g. wording of item or instruction)	Response options	What is this piece of information	Perspective adopted in information	Operationalization of the perspective	ICF Category
USER-P Item 4	Housekeeping (preparing meals, cleaning, shopping, caring for children, housework, gardening, etc.)	Number of hours spent per week: 0 hours; 1-8 hours; 9-16 hours; 17-24 hours; 25-35 hours; 36 hours or more	Housekeeping	Descriptive	Duration	0649 Household tasks, other specified or unspecified (0630 Preparing meals; 06401 Cleaning cooking area and utensils; 06402 Cleaning living area; 06200 Shopping; 0660 Assisting others; 06505 Taking care of plants, indoors and outdoors);
USER-P Item 13	Housekeeping (preparing meals, cleaning, shopping, caring for children, housework, gardening, etc.)	Not applicable; not possible at all; with help from others; with difficulty; no difficulty at all	Housekeeping	Descriptive	Intensity	0649 Household tasks, other specified or unspecified (0630 Preparing meals; 06401 Cleaning cooking area and utensils; 06402 Cleaning living area; 06200 Shopping; 0660 Assisting others; 06505 Taking care of plants, indoors and outdoors) 0230 Carrying out daily routine
USER-P Item 24	Housekeeping (preparing meals, cleaning, shopping, caring for children, housework, gardening, etc.)	Very dissatisfied, dissatisfied, neutral, satisfied, very satisfied	Housekeeping	Appraisal	Intensity	0649 Household tasks, other specified or unspecified (0630 Preparing meals; 06401 Cleaning cooking area and utensils; 06402 Cleaning living area; 06200 Shopping; 0660 Assisting others; 06505 Taking care of plants, indoors and outdoors)

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Linking health and health related information to the ICF

Translating linking units to the ICF

Clinical/diagnostic tests

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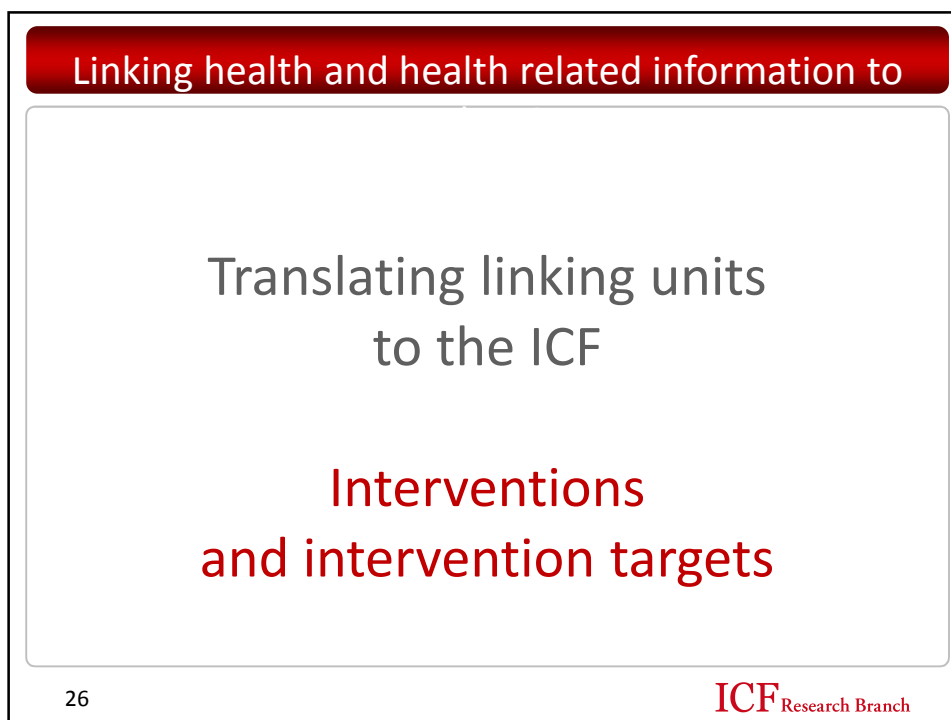
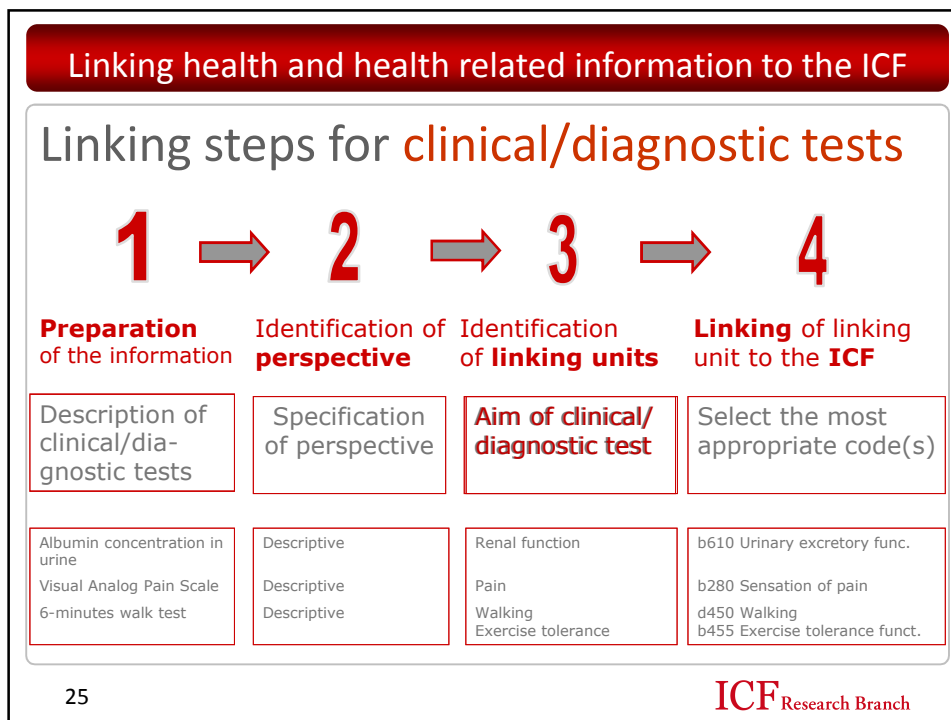
Linking health and health related information to the ICF

When identifying the linking units of clinical/ diagnostic tests, please consider:

- The linking unit may change depending on the context in which the clinical/ diagnostic test is performed
- When describing the clinical/ diagnostic test, it may be necessary to describe the context in which the assessment is performed

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Linking health and health related information to

When linking an **intervention**, first its intervention targets (the linking units) must be identified. Please consider:

- The linking unit may change depending on the context in which the intervention is applied
- When describing the intervention, it may be necessary to describe the context in which the intervention is applied

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Linking health and health related information to the ICF

Linking steps for **interventions targets**



Preparation
of the information

Identification
of **linking units**

Identification of
perspective

Linking of linking
unit to the **ICF**

Description of
the
intervention

**Target of the
intervention**

Specification
of
perspective

Most appropriate
code(s)

Thermotherapy

Influence of muscle
tone

???

???

Cryotherapy

Influence inflammation
of joints

???

???

Mobilisation

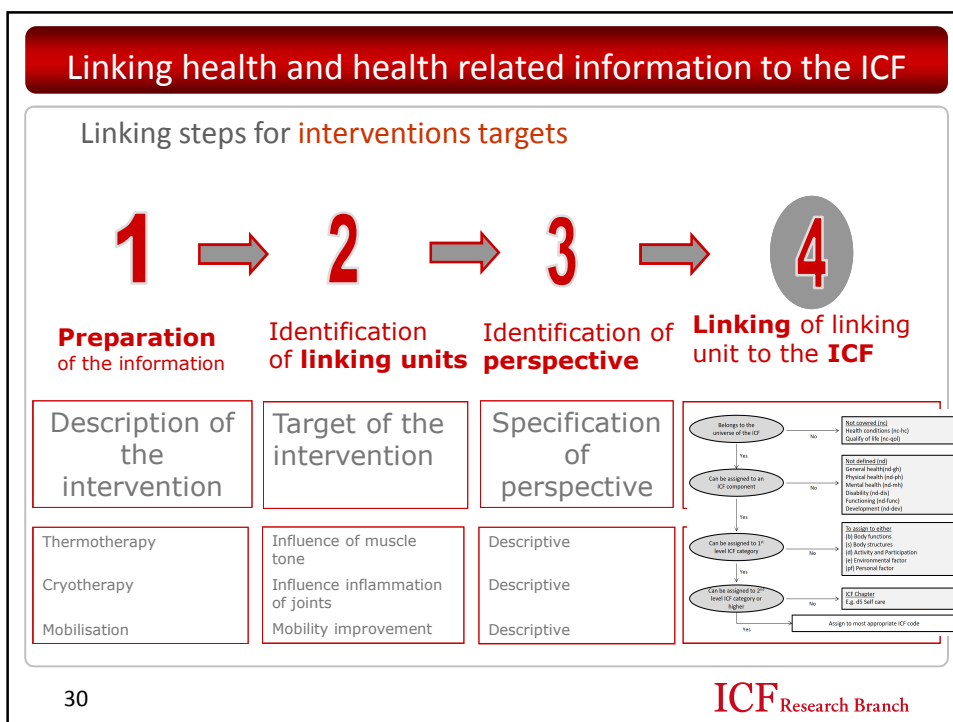
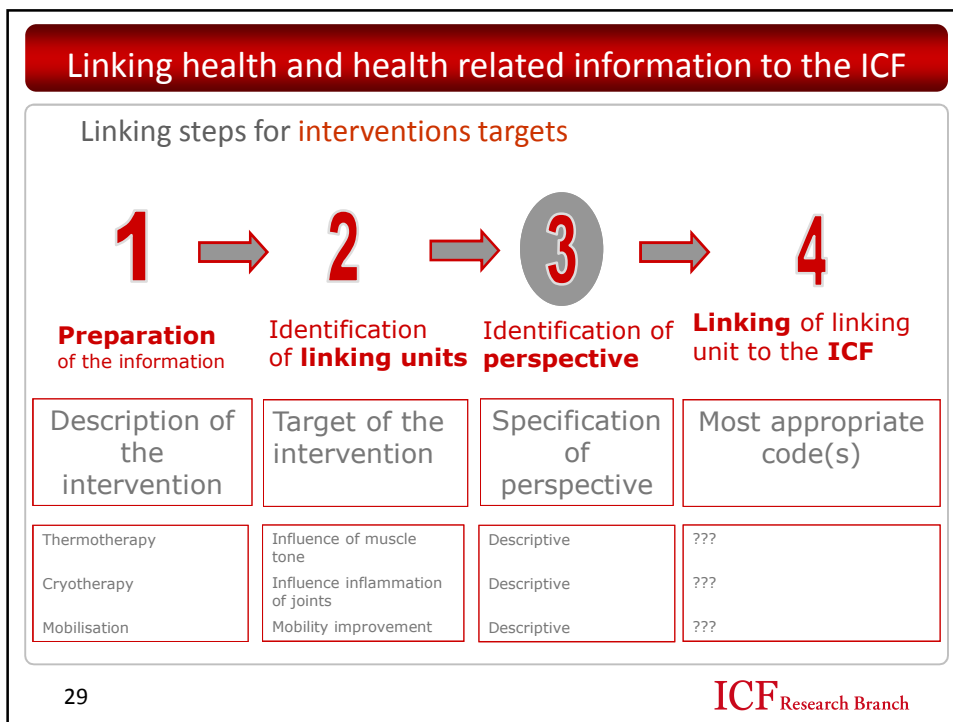
Mobility improvement

???

???

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Linking health and health related information to the ICF

Translating linking units to the ICF

Qualitative data

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Linking health and health related information to the ICF

Data from a qualitative interview:

“Sometimes I s-s-stutter and can’t find the right word to use, but only when I am around strangers for the first time. Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance. But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks. Right now, though, I feel sad most of the day.”

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Linking health and health related information to the ICF

Linking steps for qualitative data



Preparation
of the information

Identification
of **linking units**

Identification of
perspective

Linking of linking
unit to the **ICF**

Divide the
text where
a change in
meaning is
discerned

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ICF Research Branch

Linking health and health related information to the ICF

Data from a qualitative interview:

“Sometimes I s-s-stutter and can’t find the right word to use, but only when I am around strangers for the first time. Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance. But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks. Right now, though, I feel sad most of the day.”

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Linking health and health related information to the ICF

Data from a qualitative interview:

“Sometimes I s-s-stutter and can’t find the right word to use, but only when I am around strangers for the first time. Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.

But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks. Right now, though, I feel sad most of the day.”

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Linking health and health related information to the ICF

Linking steps for qualitative data

1 → 2 → 3 → 4

Preparation
of the information

Identification
of **linking units**

Identification of
perspective

Linking of linking
unit to the **ICF**

Divide the text where a change in meaning is discerned

What is the perspective adopted in this text?

What is this text about? (in the person’s own words)

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Linking health and health related information to the ICF

1	2	3	4
Division of text when a change in meaning is discerned	Perspective	Linking unit	ICF Code
Sometimes I s-s-stutter and can't find the right word to use, but only when I am around strangers for the first time.			
Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.			
But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks.			
Right now, though, I feel sad most of the day			

ICF Research Branch ³⁷

Linking health and health related information to the ICF

1	2	3	4
Division of text when a change in meaning is discerned	Perspective	Linking unit	ICF Code
Sometimes I s-s-stutter and can't find the right word to use, but only when I am around strangers for the first time.	Descriptive		
Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.			
But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks.			
Right now, though, I feel sad most of the day			

ICF Research Branch ³⁸

Linking health and health related information to the ICF

1	2	3	4
Division of text when a change in meaning is discerned	Perspective	Linking unit	ICF Code
Sometimes I s-s-stutter and can't find the right word to use, but only when I am around strangers for the first time.	Descriptive	-Sometimes I s-s-stutter -can't find the right word to use -only when I am around strangers for the first time	
Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.			
But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks.			
Right now, though, I feel sad most of the day			

ICF Research Branch ³⁸

Linking health and health related information to the ICF

1	2	3	4
Division of text when a change in meaning is discerned	Perspective	Linking unit	ICF Code
Sometimes I s-s-stutter and can't find the right word to use, but only when I am around strangers for the first time.	Descriptive	-Sometimes I s-s-stutter -can't find the right word to use -only when I am around strangers for the first time	b3300 Fluency of speech b16710 Expression of spoken language d730 Relating with strangers/ e345 Strangers
Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.			
But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks.			
Right now, though, I feel sad most of the day			

ICF Research Branch ⁴⁰

Linking health and health related information to the ICF

1	2	3	4
Division of text when a change in meaning is discerned	Perspective	Linking unit	ICF Code
Sometimes I s-s-stutter and can't find the right word to use, but only when I am around strangers for the first time.	Descriptive	-Sometimes I s-s-stutter -can't find the right word to use -only when I am around strangers for the first time	b3300 Fluency of speech b16710 Expression of spoken language d730 Relating with strangers/ e345 Strangers
Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.	Descriptive Appraisal	⇒ Divide the participants into 2 groups ⇒ Give each group one of the themes + the last theme "Right now..." ⇒ Ask them to identify the perspective, linking units and corresponding ICF codes	Give approx. 7-10 min. to do the exercise
But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks.			
Right now, though, I feel sad most of the day	Descriptive	- I feel sad most of the day	PF_Feeling sad/ b152 Emotional functions

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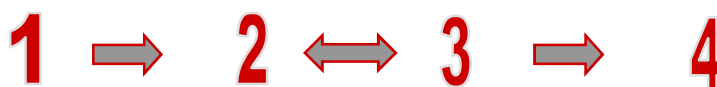
Linking health and health related information to the ICF

1	2	3	4
Division of text when a change in meaning is discerned	Perspective	Linking unit	ICF Code
Sometimes I s-s-stutter and can't find the right word to use, but only when I am around strangers for the first time.	Descriptive	-Sometimes I s-s-stutter -can't find the right word to use -only when I am around strangers for the first time	b3300 Fluency of speech b16710 Expression of spoken language d730 Relating with strangers/ e345 Strangers
Because of this I have a hard time making friends, since they make fun of me. Also, it bothers me that they keep their distance.	Descriptive Appraisal	-Hard time making friends -since they make fun of me -(they)keep their distance	d7500 Informal relationships with friends -e425 Individual attitudes of acquaintances, peers, colleagues, neighbours and community members
But recently things have been looking up for me because my parents have gotten me a dog as a new friend and they say that as soon as I turn 11 I can take the dog for long walks.	Descriptive	-my parents have given me a dog -they say that as soon as I turn 11 I can take the dog for long walks -dog as a new friend	e310 Immediate family, e350 Domesticated animals/e320 Friends PF_Age d6506 Taking care of animal d4602 Moving around outside the home and other building
Right now, though, I feel sad most of the day	Descriptive	- I feel sad most of the day	PF_Feeling sad/ b152 Emotional functions

ICF Research Branch ⁴²

Linking health and health related information to the ICF

Steps



Preparation
of the information

Identification
of **linking units**

Identification of
perspective

Linking of linking
unit to the **ICF**

Different, depending
on the type of
information to be
linked

The same for all types
of information

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ANY QUESTIONS?



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Linking health and health related information to the ICF



HEALTH ASSESSMENT QUESTIONNAIRE® Stanford University School of Medicine Division of Immunology & Rheumatology

Name _____ Date _____

In this section we are interested in learning how your illness affects your ability to function in daily life. Please feel free to add any comments on the back of this page.

Please check the response which best describes your usual abilities OVER THE PAST WEEK:

Exercise: "Translating health and health related information to the ICF"

	Without AN ¹ difficulty ²	With SOME difficulty ¹	With MUCH difficulty ²	UNABLE to do ³
DRESSING & GROOMING				
Are you able to:				
-Dress yourself, including tying shoelaces and doing buttons?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-Shampoo your hair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ARISING				
Are you able to:				
-Stand up from a straight chair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-Get in and out of bed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EATING				
Are you able to:				
-Cut your meat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-Use a full size glass to pour a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Linking health and health related information to the ICF

Uses and advantages

- identifying patients' needs and for comparing these needs among different groups of patients
- evaluating the content of instrument and comparing the content of instruments with each other
- comparing the content of interventions

Linking health and health related information to the ICF



Take home message *(for your workshop participants)*

- Irrespective of the type of health or health-related information, consider the context in which it is being applied
- Linking clinical/ diagnostic tests and intervention requires the identification of the aim test or target of the intervention
- With qualitative data, it helps to divide the statements into common unifying themes before linking
- Ultimately, linking is subjective. However, linking becomes less subjective the more information is considered, e.g. context, intended purpose of questionnaire

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Frequently Asked Questions in this Module

1. What is the difference between the performance and the need/dependency perspective?
2. Is it possible to “link” the scoring of existing assessment instruments to qualifiers?
3. How many persons do I need to conduct ICF Linking?
4. Which assessments tools have already been linked to the ICF?

ICF Research Branch

Tips & Tricks on Training Methodology

- Adapt the exercises to your audience and context
- Make sure that there is enough space on the tables for the material to perform the exercises (ICF book, A3 template, Laptop for using the browser,...)
- Calculate enough time for linking exercises and discussions, they can be very time-intensive
- Create different subgroups who work together on different parts of the linking exercises, make sure that you pass by each subgroup
- Discuss the solutions and struggles of the different subgroups in plenary
- Be transparent about the subjective nature of linking. Important to emphasize the need to consider purpose of the linking, context and background of the linkers, as well as to define project-specific linking decision rules.