

The International Classification of Functioning Disability and Health

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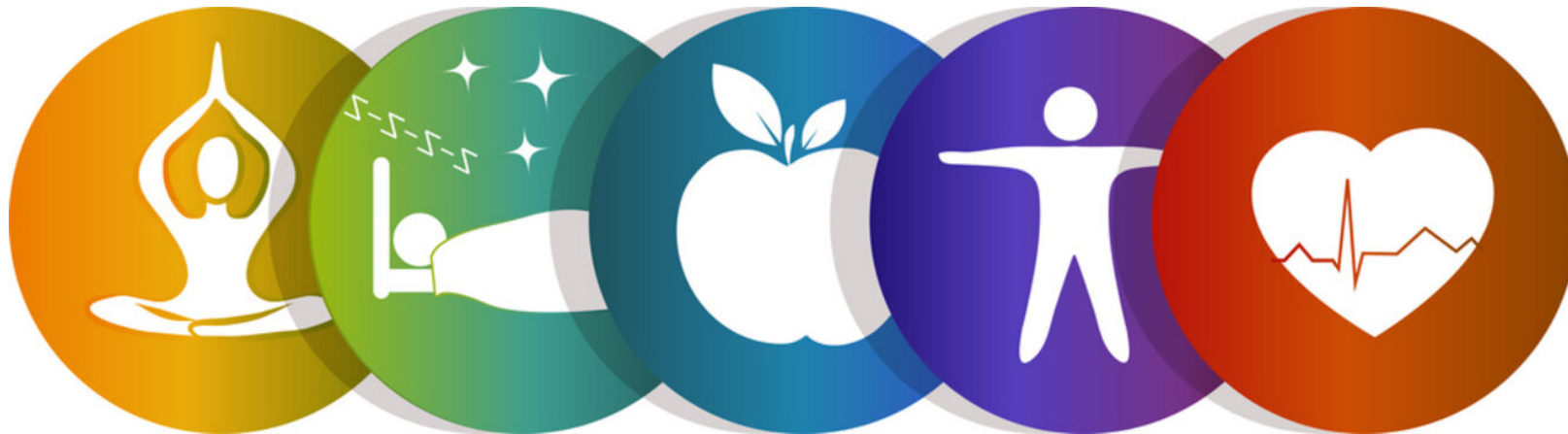
World Rehabilitation Alliance, member of the External Relations Workstream

International Society of Physical and Rehabilitation Medicine, Past-President



Health

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity



International Statistical Classification of Diseases and Related Health Problems (ICD)

Disease: definite pathologic process with a characteristic set of signs and symptoms. It may affect the whole body or any of its parts, and its etiology, pathology, and prognosis may be known or unknown



ICD Revision	ICD Adoption	ICD coming into effect
6th revision	1948 (WHA1.36)	1948
7th revision	1956 (WHA9.29)	1958
8th revision	1966 (WHA19.44)	1968
9th revision	1976 (WHA29.34)	1979
10th revision	1990 (WHA43.24)	1993
11th revision	1919 (WHA72.15)	2022



Bio-psycho-social model of functioning and disability



International classification of functioning, disability and health



ICF

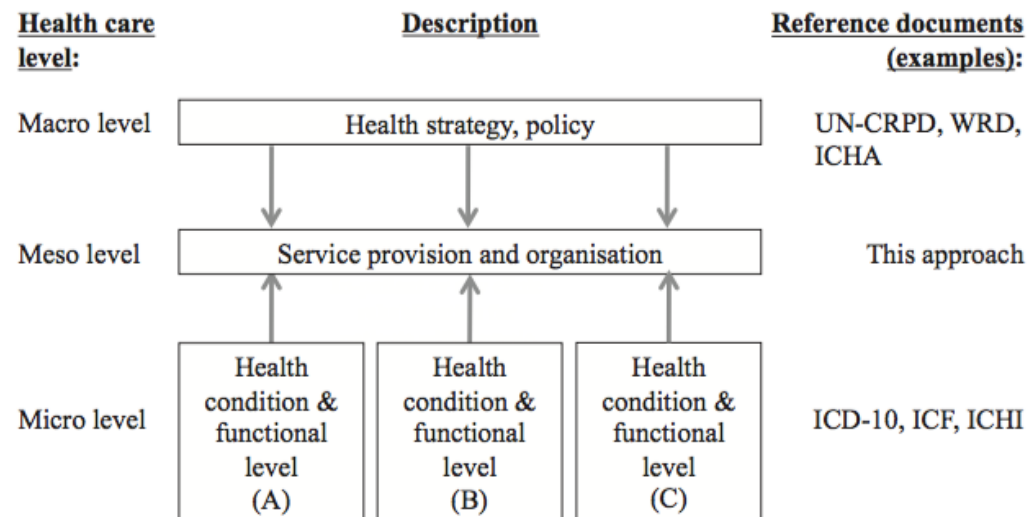
The Fifty-fourth World Health Assembly,

1. ENDORSES the second edition of the International Classification of Impairments, Disabilities and Handicaps (ICIDH), with the title International Classification of Functioning, Disability and Health, henceforth referred to in short as ICF;
2. URGES Member States to use the ICF in their research, surveillance and reporting as appropriate, taking into account specific situations in Member States and, in particular, in view of possible future revisions;
3. REQUESTS the Director-General to provide support to Member States, at their request, in making use of ICF.

Ninth plenary meeting, 22 May 2001
A54/VR/9

WHO-FIC Family of International Classifications

International Classification of Diseases (ICD)	
International Classification of Functioning, Disability and Health (ICF)	
International Classification of Health Interventions (ICHI) (Under development)	





https://apps.who.int/gb/ebwha/pdf_files/WHA76/A76_R6-en.pdf

V: Università
degli Studi
della Campania
Luigi Vanvitelli

Cochrane
Rehabilitation, Functioning,
and Disability

WRA
WHO hosted network

World
Rehabilitation
Alliance

ISPRM
INTERNATIONAL
SOCIETY OF PHYSICAL
AND REHABILITATION
MEDICINE

WHA 176.6

Urges...
Invites...
Requests...

Recalling resolution WHA54.21 (2001) and the International Classification of Functioning, Disability and Health, which provides a standard language and a conceptual basis for the definition and measurement of health, functioning and disability;

Member states

to **enhance health information systems to collect information relevant to rehabilitation**, including system level rehabilitation data, and information on functioning, utilizing the International Classification of Functioning, Disability and Health (ICF)

https://apps.who.int/gb/ebwha/pdf_files/WHA76/A76_R6-en.pdf, adapted from A. Cieza

WHO
Director-General

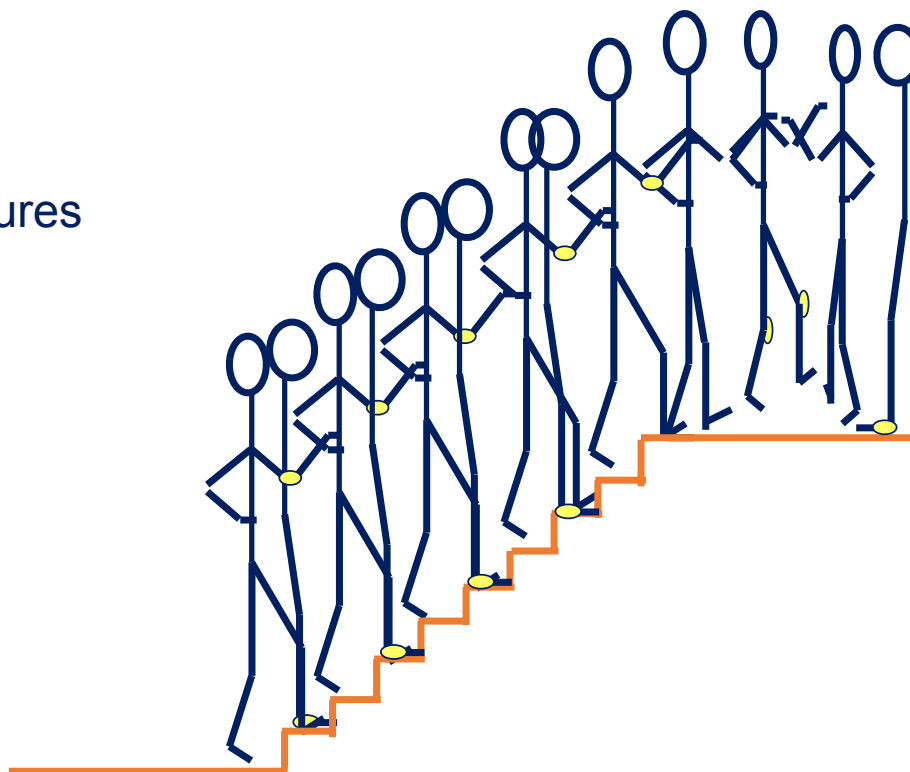
WHA 176.6

Civil society

Functioning

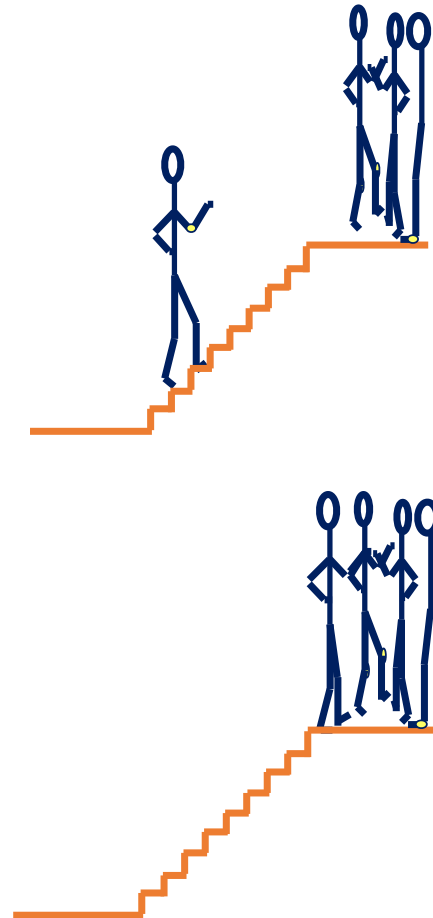
Activity & Participation

Body functions & structures



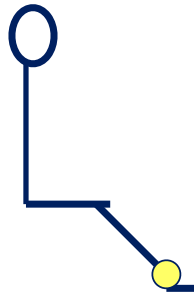
Functioning

- **Activity** is the execution of a task or action by an individual. It represents the individual perspective of functioning.
- **Participation** is the involvement in a life situation. It represents the societal perspective of functioning.

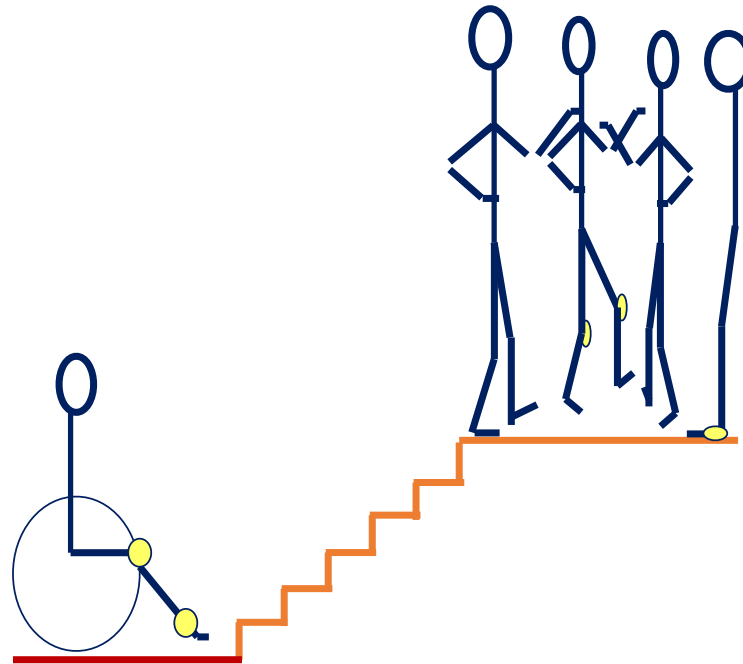


Disability

Impaired body
functions & structures



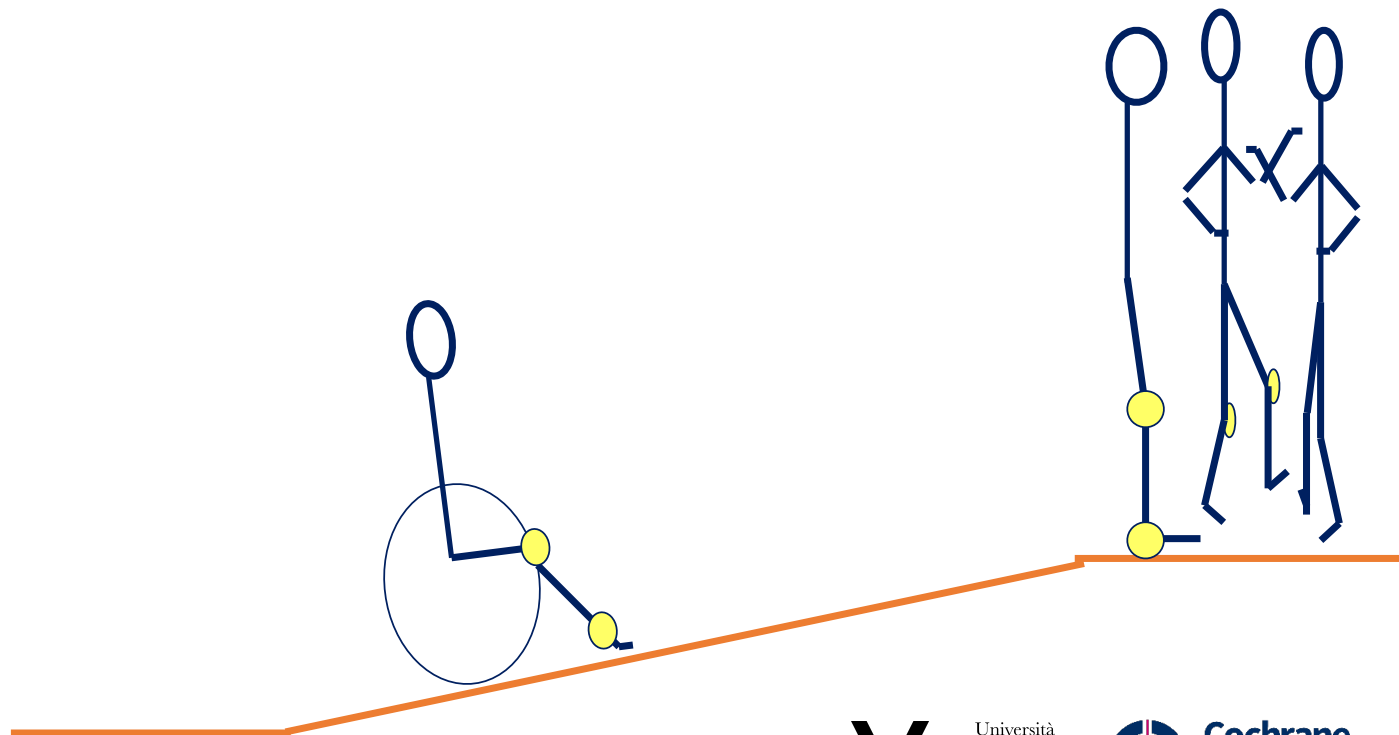
Limitation in activity
Restriction in participation

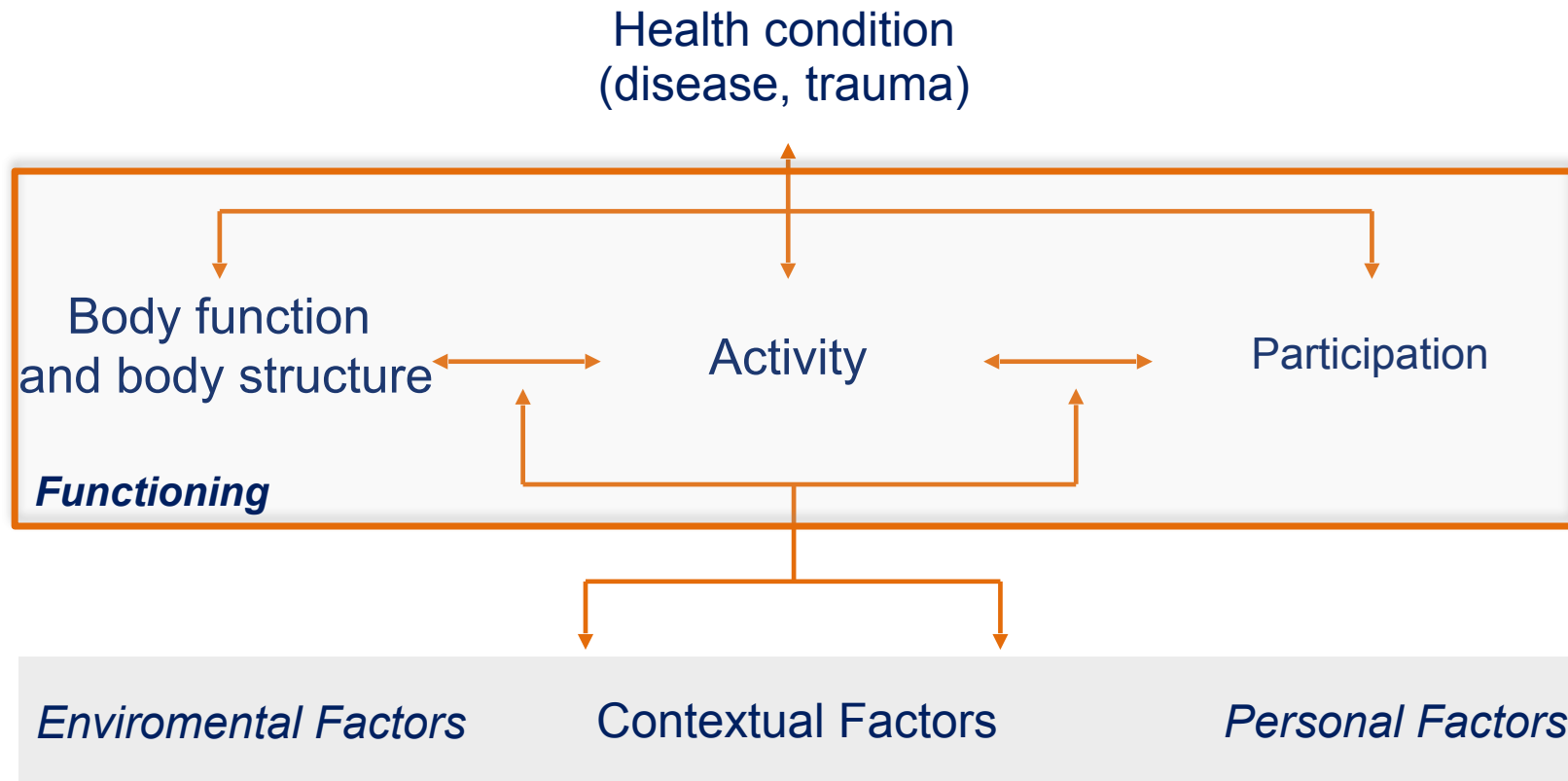


Functioning

Impaired body
functions & structures

Limitation in activity
~~Restriction in participation~~





Environmental factors make up the physical, social and attitudinal environment in which people live and conduct their lives.

These factors are external to individuals and can have a positive or negative influence on the individual's performance as a member of society, on the individual's capacity to execute actions or tasks, or on individual's body function or structure

Personal factors are the particular background of an individual's life and living, and comprises features of the individual that are not part of a health condition or health state.

These factors may include gender, race, age, other health conditions, fitness, lifestyle, habits, coping styles, social background, education, profession, past and current experience,...

Principles of the ICF

Human Functioning
Universal Model
Integrative Model
Interactive Model
Parity
Context - inclusive
Cultural applicability
Operational
Life span coverage

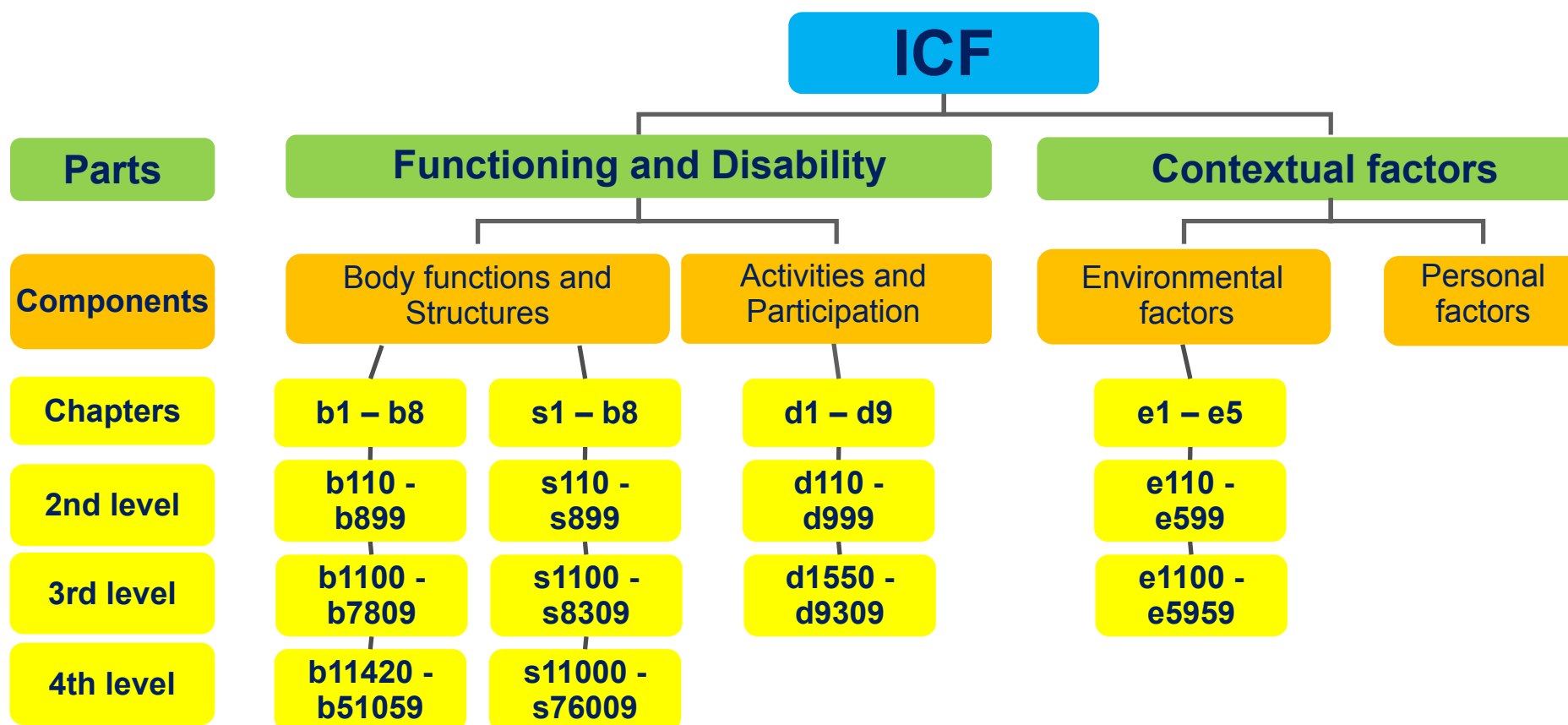
NOT

Disability
Minority model
Medical or social
Linear progressive
Etiological causality
Person alone
Western concepts
Theory driven alone
Adult driven

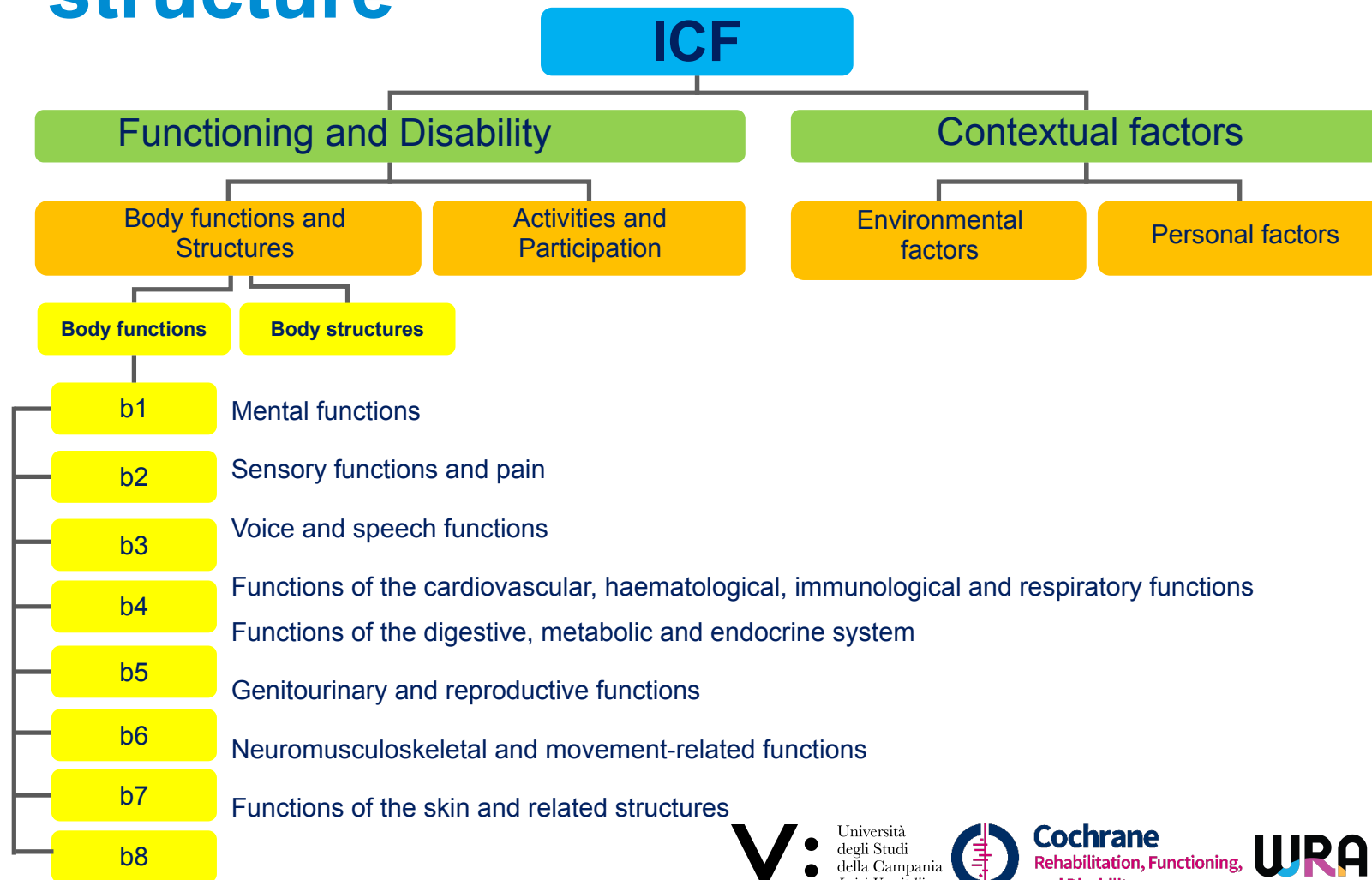
ICF aims to...

- establish a common language
- provide a scientific basis for understanding health
- provide a systematic coding scheme
- ensure data comparison
- stimulate the development of services based on a comprehensive understanding of functioning, disability, and health

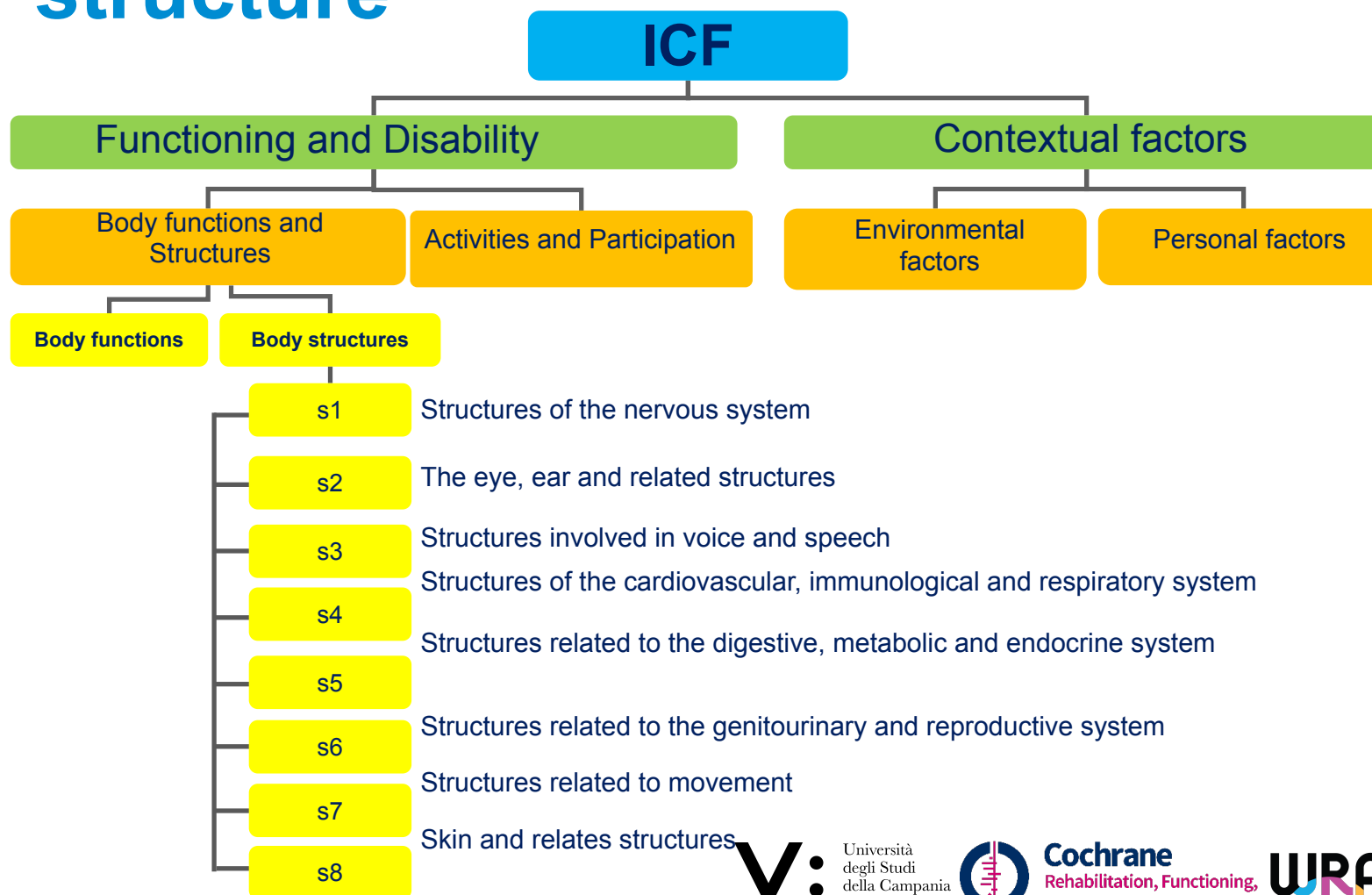
ICF structure



ICF structure



ICF structure



Università
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della Campania
Luigi Vanvitelli



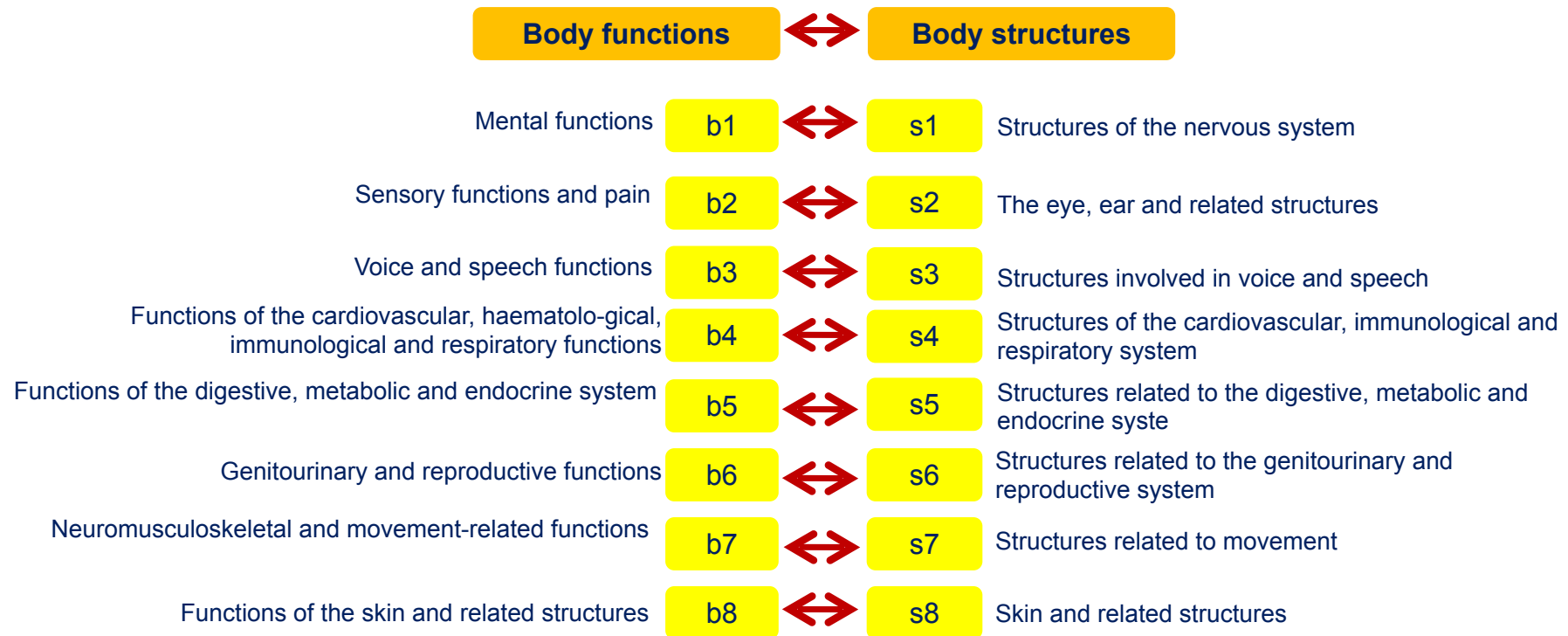
Cochrane
Rehabilitation, Functioning,
and Disability



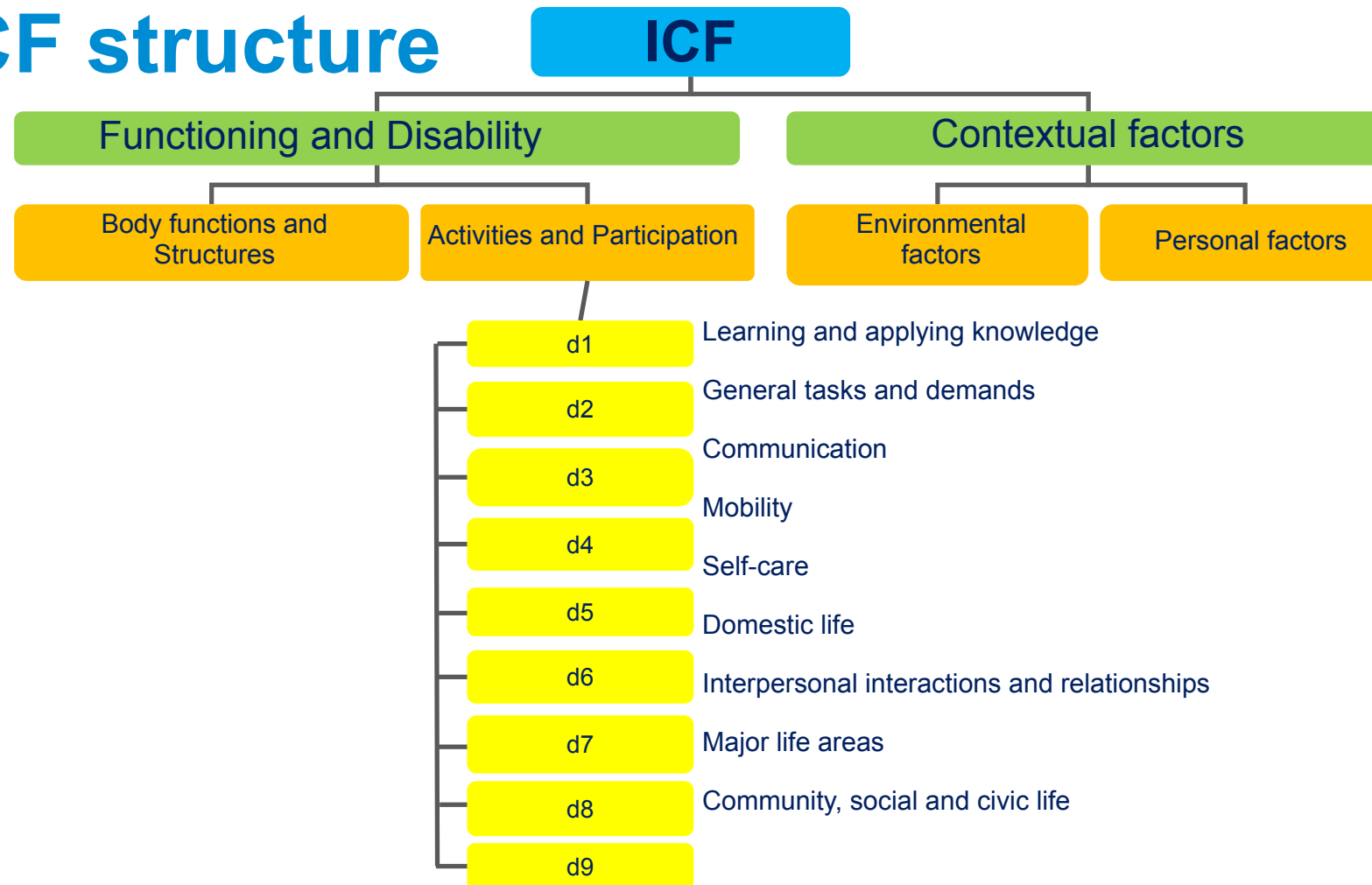
**World
Rehabilitation
Alliance**



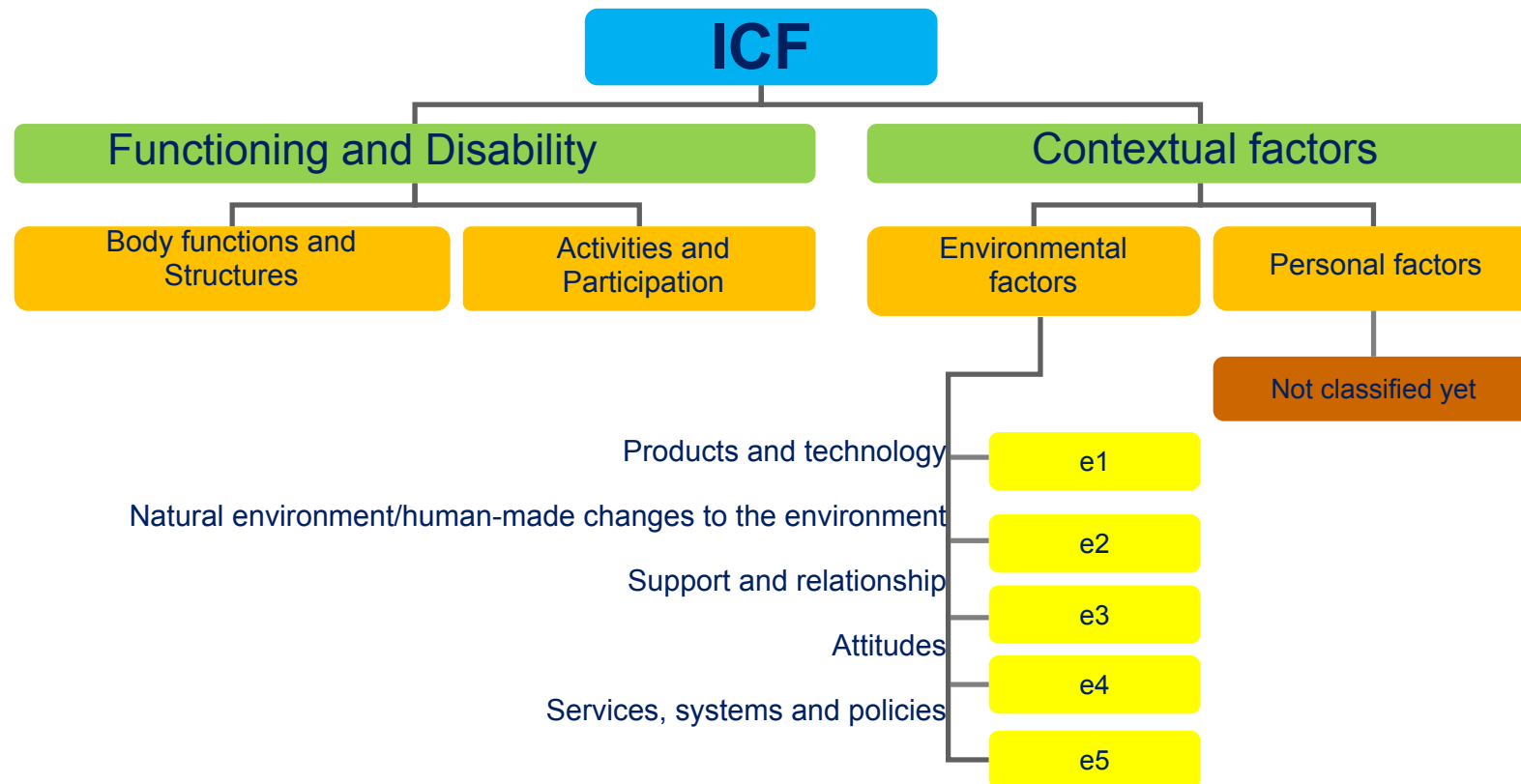
ICF structure



ICF structure



ICF structure



Chapter 2

Sensory functions and pain

This chapter is about the functions of the senses, seeing, hearing, tasting and so on, as well as the sensation of pain.

Seeing and related functions (b210-b229)

b210

Seeing functions

Sensory functions relating to sensing the presence of light and sensing the form, size, shape and colour of the visual stimuli.

Inclusions: visual acuity functions; visual field functions; quality of vision; functions of sensing light and colour, visual acuity of distant and near vision, monocular and binocular vision; visual picture quality; impairments such as myopia, hypermetropia, astigmatism, hemianopia, colour-blindness, tunnel vision, central and peripheral scotoma, diplopia, night blindness and impaired adaptability to light

Exclusion: perceptual functions (b156)

b2100 Visual acuity functions

Seeing functions of sensing form and contour, both binocular and monocular, for both distant and near vision.

b21000 Binocular acuity of distant vision

Seeing functions of sensing size, form and contour, using both eyes, for objects distant from the eye.

b21001 Monocular acuity of distant vision

Seeing functions of sensing size, form and contour, using either right or left eye alone, for objects distant from the eye.

b21002 Binocular acuity of near vision

Seeing functions of sensing size, form and contour, using both eyes, for objects close to the eye.

b21003 Monocular acuity of near vision

Seeing functions of sensing size, form and contour, using either right or left eye alone, for objects close to the eye.

Component

b 2 10 0 2

Chapter

2nd level

3rd level

4th level

ICF qualifiers

Component	First qualifier	Second qualifier	Third qualifier
Body Function (b)	Extent or magnitude of impairment		
Body Structure (s)	Extent or magnitude of impairment	Indicates nature of body structure change, e.g. absence, deviating position	Indicates location of body structure change, e.g. right, left
Activity and Participation (d)	Performance - extent of problem in current environment	Capacity - limitation without assistance	
Environmental Factors (e)	Extent of barriers or facilitators		

ICF qualifier – Body Functions

Extent of Impairments

0	No impairment	The person has no problem
1	Mild impairment	A problem is present less than 25% of the time, with an intensity a person can tolerate and which happens rarely over the last 30 days
2	Moderate impairment	A problem is present less than 50% of the time, with an intensity, which is interfering in the persons day to day life and which happens occasionally over the last 30 days
3	Severe Impairment	A problem is present more than 50% of the time, with an intensity, which is partially disrupting the persons day to day life and which happens frequently over the last 30 days
4	Complete impairment	A problem is present more than 95% of the time, with an intensity, which is totally disrupting the persons day to day life and which happens every day over the last 30 days
8	Not specified	There is insufficient information to specify the severity of the impairment
9	Not applicable	It is inappropriate to apply a particular code (e.g. b650 Menstruation functions for woman in pre-menarche or post-menopause age)

b3100.2 indicates a moderate voice production impairment

b2300.4 indicates a complete earing impairment

ICF qualifiers – Body Structures

First qualifier: Extent or magnitude of impairment	Second qualifier: Indicates nature of body structure change	Third qualifier: Indicates location of body structure change
0 No impairment	0 No change in structure	0 More than a region
1 Mild impairment	1 Total absence	1 Right
2 Moderate impairment	2 Partial absence	2 Left
3 Severe Impairment	3 Additional part	3 Both sides
4 Complete impairment	4 Aberrant dimensions	4 Frontal
8 Not specified	5 Discontinuity	5 Dorsal
9 Not applicable	6 Deviating position	6 Proximal
	7 Qualitative changes in structure, including accumulation of fluid	7 Distal
	8 Not specified	8 Not specified
	9 Not applicable	9 Not applicable

s730.321 indicates the severe partial absence of the right upper limb

ICF qualifiers – Activity and Participation

Performance

Describes what an individual does in his current environment. This context includes the environmental factors – all aspects of the physical, social and attitudinal world which can be coded using the environmental factors component.



Capacity

Describes an individual's intrinsic ability to execute a task or an action. This construct indicates the highest probable level of functioning that a person can achieve in a given domain at a given time.

d9201.04
Sports



ICF qualifiers – Activity and Participation

First Qualifier: Performance - Extent of Participation Restriction		Second Qualifier: Capacity - Extent of Activity limitation
0	No difficult	The person has no problem
1	Mild difficult	A problem is present less than 25% of the time, with an intensity a person can tolerate and which happens rarely over the last 30 days
2	Moderate difficult	A problem is present less than 50% of the time, with an intensity, which is interfering in the persons day to day life and which happens occasionally over the last 30 days
3	Severe difficult	A problem is present more than 50% of the time, with an intensity, which is partially disrupting the persons day to day life and which happens frequently over the last 30 days
4	Complete difficult	A problem is present more than 95% of the time, with an intensity, which is totally disrupting the persons day to day life and which happens every day over the last 30 days
8	Not specified	There is insufficient information to specify the severity of the impairment
9	Not applicable	It is inappropriate to apply a particular code

d5101.1_ indicates mild difficulty in washing the whole body with the help of a caregiver in his/her house

d5101._2 indicates moderate difficulty in washing the whole body without assistance in a standard environment

ICF qualifier – Environmental factors

Barrier	Facilitator
0 No barrier	+0 No facilitator
1 Mild barrier	+1 Mild facilitator
2 Moderate barrier	+2 Moderate facilitator
3 Severe barrier	+3 Severe facilitator
4 Complete barrier	+4 Complete facilitator
8 Not specified	+8 Not specified
9 Not applicable	+9 Not applicable

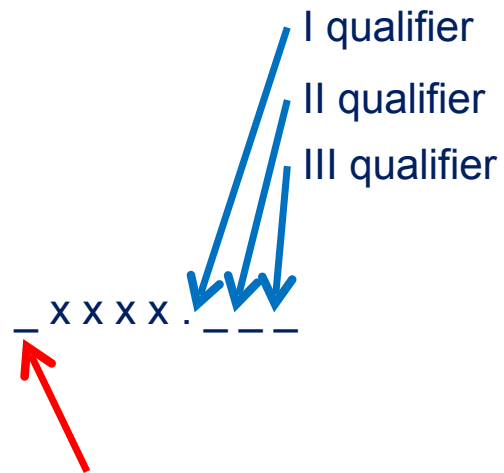
e1250.+3 can indicate a smartphone as a substantial facilitator

e1200.1 can indicate a wheelchair as a mild barrier

e320.+2 can indicate friends as a moderate facilitator

e225.4 can indicate warm weather as a complete barrier

Coding rules



Domain

hc= health condition

b = body functions

s = body structures

d = activity & participation

e = environment

pf = personal factors

b x x x . _

s x x x . _ _ _

d x x x . _ _

e x x x . _ _

Functioning: the third health indicator in the health system and the key indicator for rehabilitation



Health Strategy	Health goals	Health indicator	Data coding
Preventive	Prevent the occurrence of health conditions	Morbidity	ICD ICD11
	Prevent mortality related to the occurrence of health conditions	Mortality	
Promotive	Optimal health	Biological Health (intrinsic health capacity)	ICF
Curative	Cure (full recovery)	Mortality	ICD
	Remission	Morbidity	
Rehabilitative	Disease control	Functioning (intrinsic health capacity)	ICD11
	Optimal functioning	Functioning	
Palliative	Optimize wellbeing	Appraised functioning (quality of life)	ICF

Adapted from Table I in Stucki G, Bickenbach J. Functioning: the third health indicator in the health system and the key indicator for rehabilitation. Eur J Phys Rehabil Med 2017;53:134-8.

Rehabilitation is...

...a set of interventions designed to **optimize functioning and reduce disability** in individuals with **health conditions in interaction with their environment**

Integrity in
Body functions
Body structures
Activities and
Participation

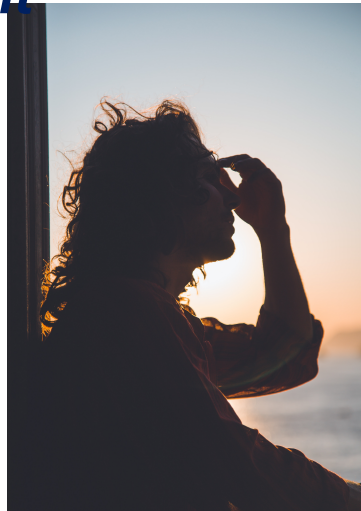


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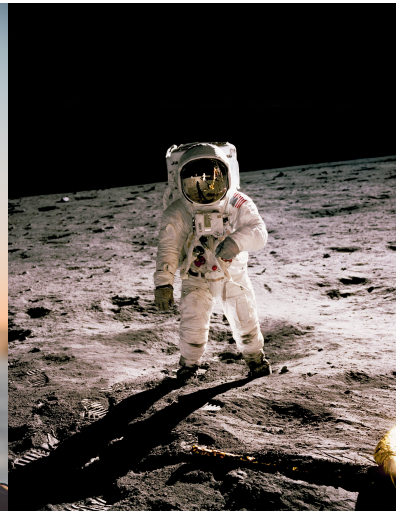
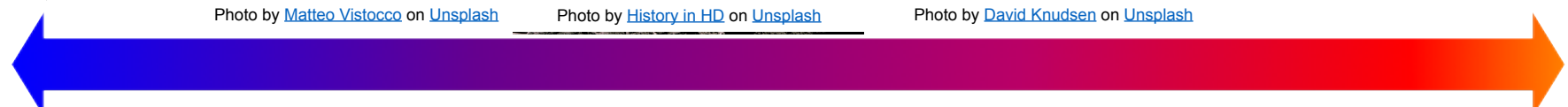


Photo by [History in HD](#) on [Unsplash](#)



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Impairments in
Body functions and
Body structures
Limitations in activities and
Restrictions in participation



Complete **functioning**

Complete **disability**

Rehabilitation is...

The definition (PICO + ICF)

In a health care context rehabilitation is a

(intervention - general)

multimodal person-centered collaborative process

(intervention - specific)

including interventions targeting a person's capacity (by addressing body structures, functions, and activities/ participation) and/or contextual factors related to performance

(outcome)

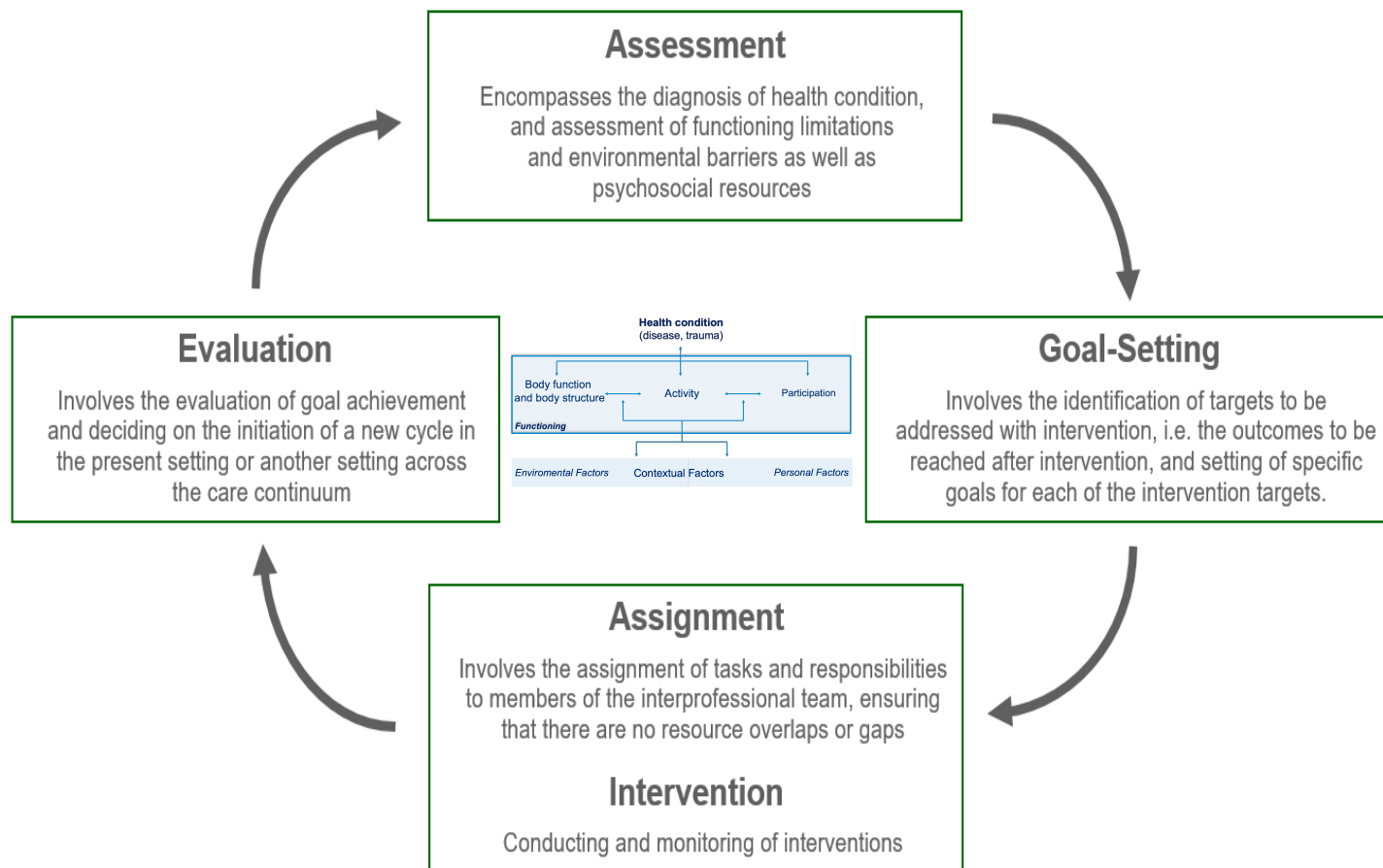
with the goal of optimizing functioning

(population)

of persons with health conditions currently experiencing disability or likely to experience disability, or persons with disability

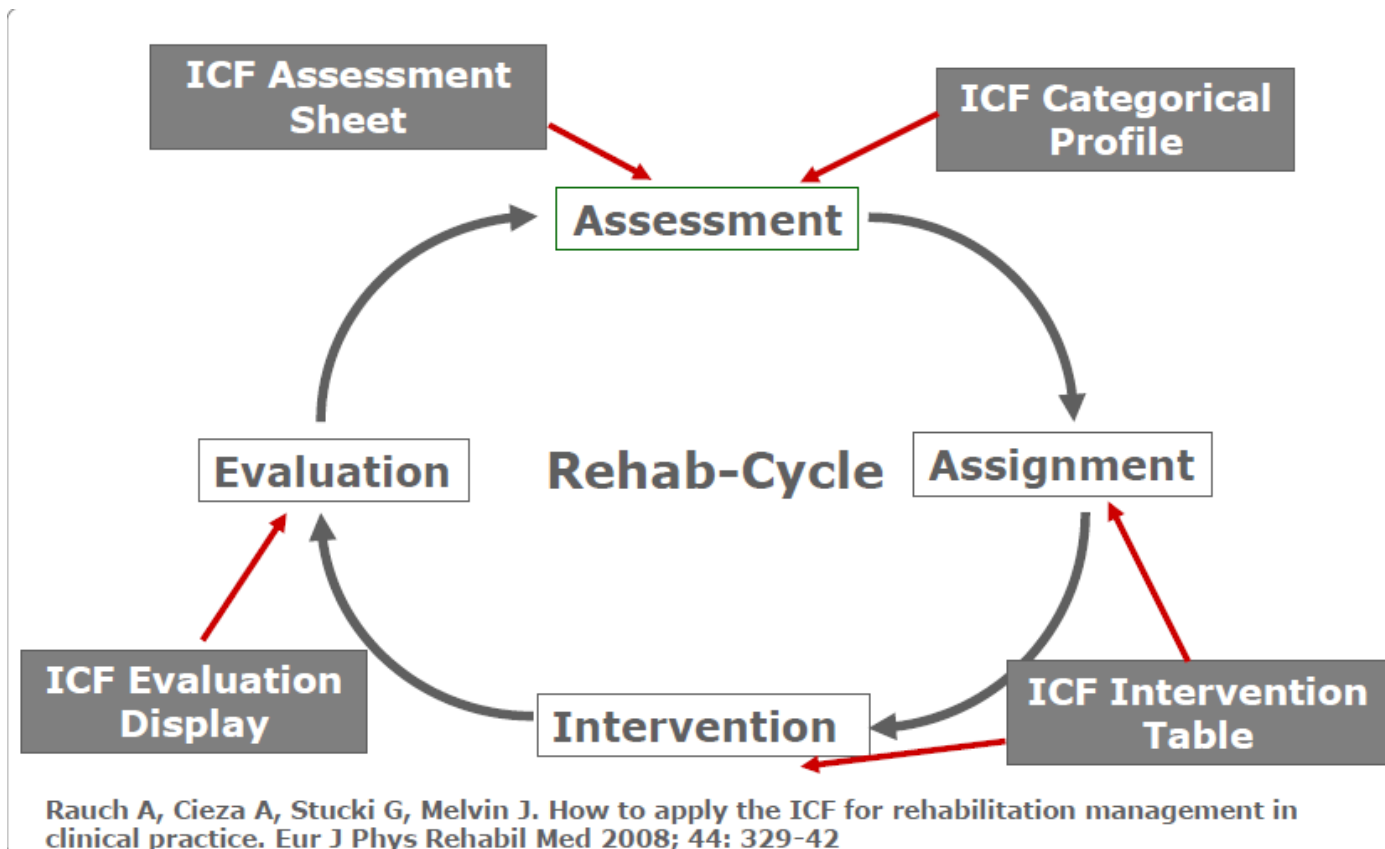


Individual Rehabilitation Project



Zampolini M, Selb M, Boldrini P, Branco CA, Golyk V, Hu X, Kiekens C, Negrini S, Nulle A, Oral A, Sgantzios M, Shmonin A, Treger I, Stucki G; UEMS-PRM Section and Board. The Individual Rehabilitation Project as the core of person-centered rehabilitation: the Physical and Rehabilitation Medicine Section and Board of the European Union of Medical Specialists Framework for Rehabilitation in Europe. *Eur J Phys Rehabil Med.* 2022 Aug;58(4):503-510. doi: 10.23736/S1973-9087.22.07402-0. Epub 2022 Feb 11. PMID: 35148044.

ICF in the context of rehabilitation



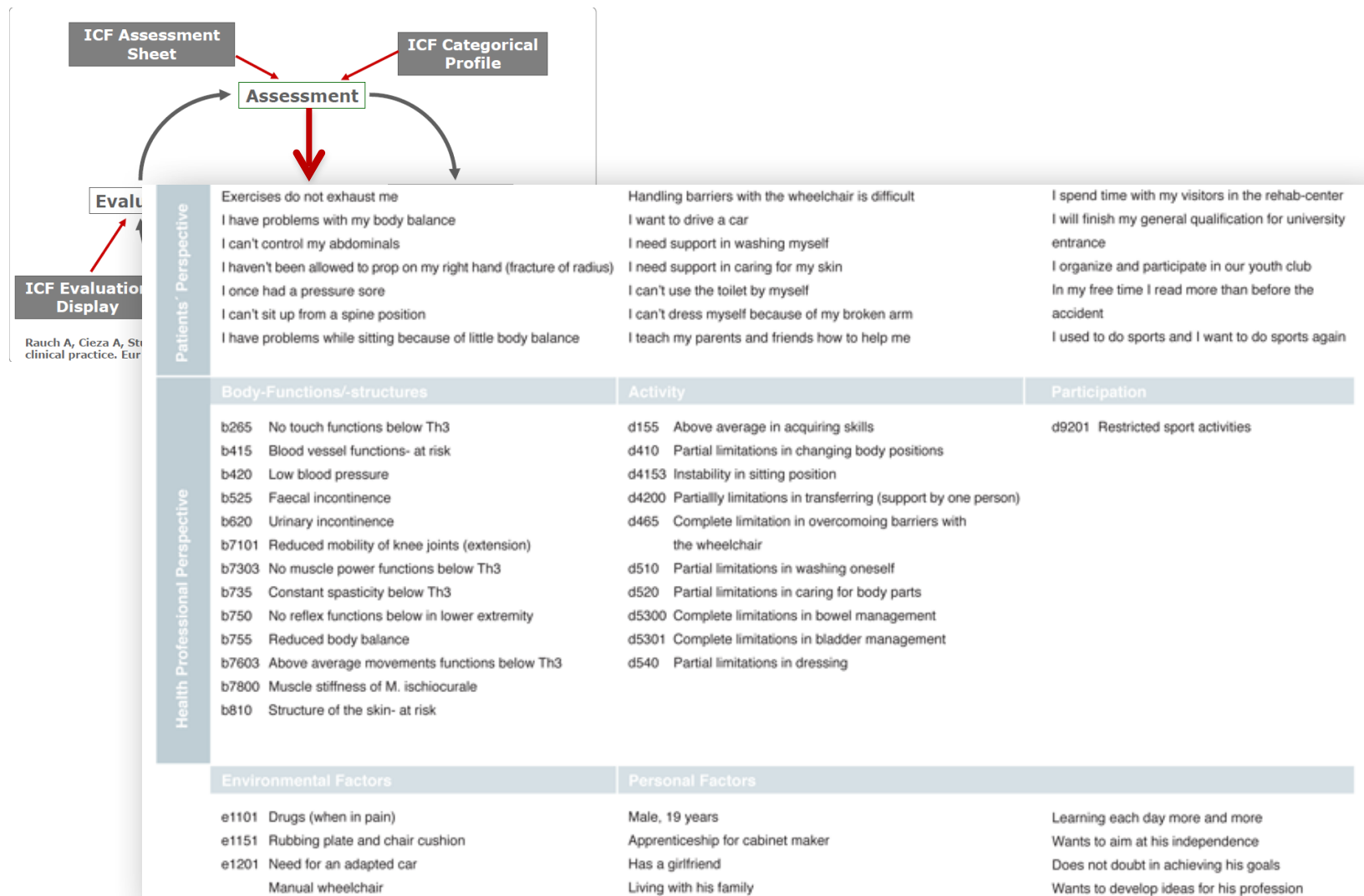
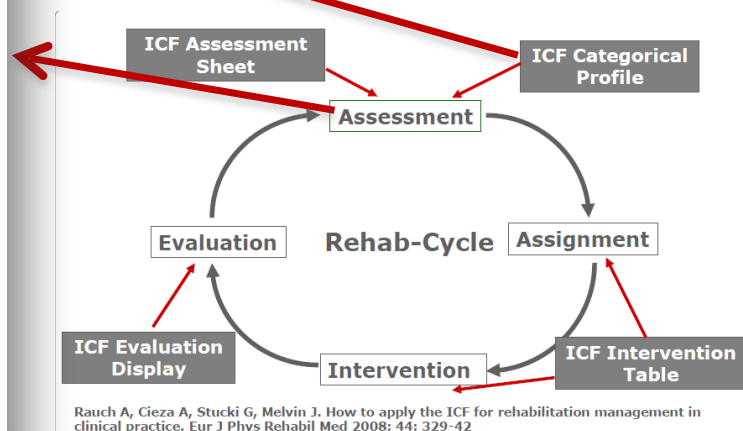


Figure 4: ICF Categorial Profile: (extraction): Illustrates the relevant aspects of the functioning status for each patient (Spinal cord Injury, ASIA A Th 3).*ICF Qualifier range from 0 = no problem to 4 = complete problem in the components of body functions (b), body structures (s), activity and participation (d) and from -4 = complete barrier to +4 = complete facilitator in the environmental factors. In personal factors, the sign + and - indicates ti what extent a determined pf has a positive or negative influence on the individual's functioning. C1, 2, 3 mark the relation to Cycle goals 1, 2, 3; SG is related to Service Program Goal, G related to the Global goal.

Assessment (12 week post-trauma)									
Global Goal: Complete independence, university entrance,						0			
Service-Program-Goal: Independence in activities of daily living						0			
Cycle goal 1: d4 Mobility						1			
Cycle goal 2: d5 Self-care						0			
Cycle goal 3: d9201 Sport						2			
ICF categories - Intervention targets									
		problems	ICF Qualifier* 0 1 2 3 4				Goal relation	Goal Value*	
b260	Proprioceptive functions						-	-	
b265	Touch functions						-	-	
b279	Sensory functions related to temperature and other stimulants						-	-	
b28013	Pain in back						C1	0	
b415	Blood vessel functions - at risk						G	0	
b420	Blood pressure functions						C1	0	
b525	Defecation functions						-	-	
b620	Urination functions						-	-	
b640	Sexual functions						-	-	
b7101	Mobility of several joints						C1.2	0	
b7303	Muscle power functions in lower half of the body						-	-	
b735	Muscle tone functions						C1	0	
b750	Motoneuron functions								
d540	Dressing						C2	0	
d9201	Sport						C3	2	
		facilitator 4+3+ 2+ 1+ 0			barrier 1 2 3 4				
e1101	Drugs						C1.2	2+	
e1151	Assistive products...for personal use in daily living						C1	0	
e1201	Assistive products...for personal mobility						C1	0	
e155	Design, construction...of buildings for private use						SP	2	
e1602	Products...of urban land development						-	-	
e310	Immediate family						-	-	
e320	Friends						-	-	
e355	Health professionals						-	-	
e5700	Social security services						SP.G	4+	
e575	General social support services						SP.G	3+	
		positiv	influence neutral		negative				
pf	Sportive person						-	-	
pf	Knowledge						SP	+	
pf	Acceptance of disease						G	0	



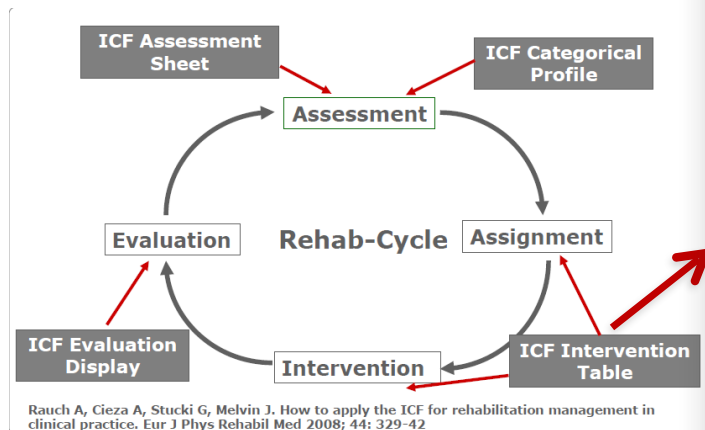


Figure 4: Intervention Table

Phys: Physician, PT: Physiotherapist, Spo: Sport therapist, Psych: Psychologist, SW: Social worker, Arch: Architect (Spinal Cord Injury, ASIA A Th 3, 12 weeks after trauma).

	Intervention target	Intervention	Phys	Nurse	PT/ Spo	OT	Psych	SW	Arch	First value	Goal value	End value
Body functions/structures	b28013 Pain in the back	Body posture training	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Adaptation of wheelchair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
		Control of sitting position	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	0	1
		Medication	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	b415 Blood vessel functions at risk	Compression hosery, drugs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0
	b420 Blood pressure function	Compression hosery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	0
	b7101 Mobility of several joints	Passive movement	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	1
	b755 Involuntary movement funtions	Body balance training	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	0
	b7800 Sensation of muscle stiffness	Detonisation, Stretching	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	0
	b810 Structure of the skin - at risk	Daily inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0
Activities and Participation	d410 Changing basic body positions	Sit up-training	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	0
	d4153 Maintaining a sitting position	Body balance training	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	0
	d4200 Transferring oneself while sitting	Transfer training	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	1	1
	d465 Moving around with wheelchair	Wheelchair training outdoor	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	1	1
	d510 Washing oneself	Assistance/Instruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	0
	d520 Caring for body parts	Assistance/Instruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	1
	d5300 Regulating urination	Assistance/Instruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	0
	d5301 Regulating defecation	Assistance/Instruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	0
	d540 Dressing	Assistance/Instruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	0	0
	d9201 Sport	Exercising different sports	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	2
EF	e1151 Assistive products: Chair cushion	Control of chair cushion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-2	0	0
	e1201 Assistive products for personal mobility: Wheelchair and adapted car	Testing of different wheelchairs, reconstruction of car	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-3	-2	-2
	e155 Design, construction and building products and technology of buildings for private use: farm house	Planning and reconstruction of private building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-3	-2	-2
	e5700 Social security services	Clarification, Organization of payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	4+	2+
PF	Knowledge	Teaching, consulting and lectures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2+	2+
	Acceptance/Coping of disease	Behavioral training approaches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	0	1+

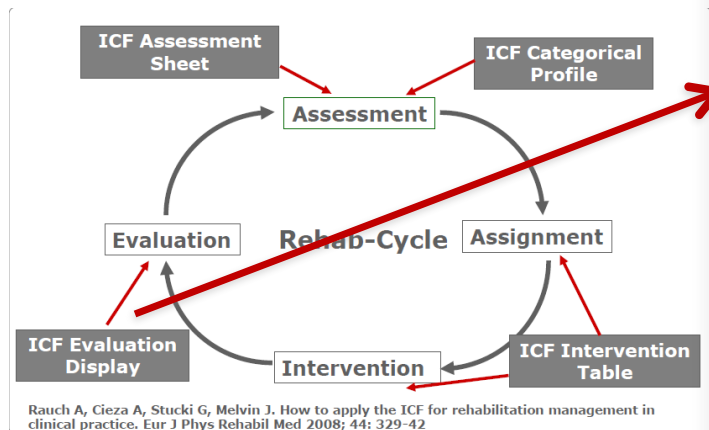
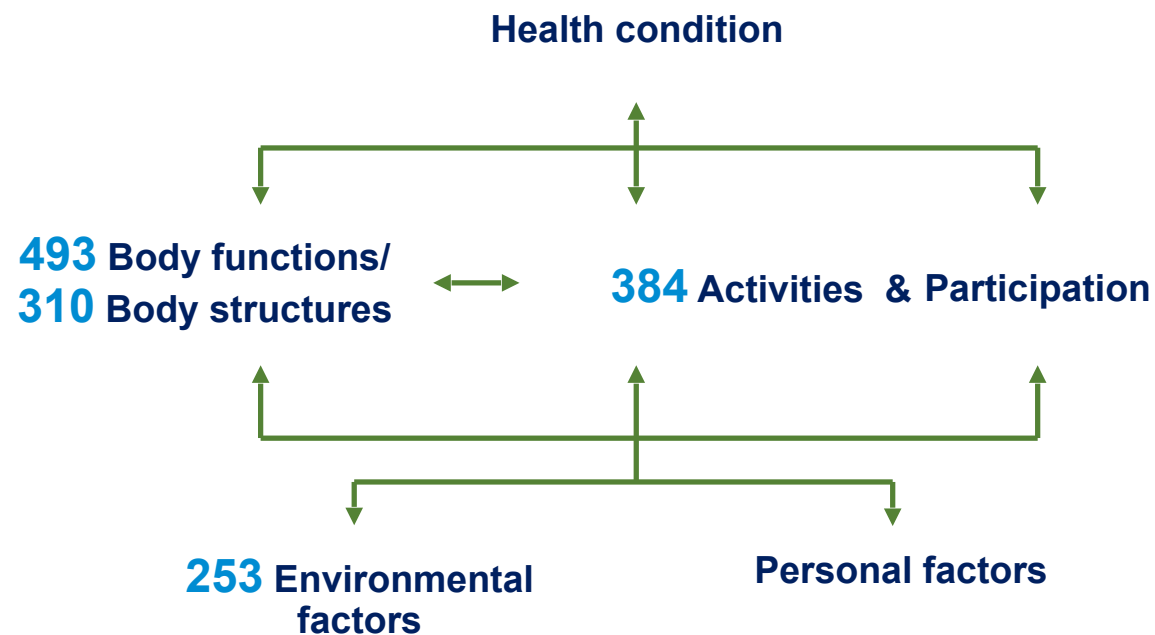


Figure 5: ICF Evaluation display: Illustrates the change of the functioning status over the course of one cycle (Spinal Cord Injury, ASIA A Th 3, 12 and 16 weeks after trauma. * ICF Qualifier range from 0=no problem to 4 = complete problem in the components of body functions (b), body structures (s), activity and participation (d) and from -4 = complete barrier to +4 =complete facilitator in the environmental factors. In personal factors, the sign + and -indicates to what extent a determined pf has a positive or negative influence on the individual's functioning. 1,2,3 show the relation to cycle goals 1,2,3; SG is related to Service Program Goal, G related to the Global goal.

Assessment (12 weeks post-trauma)					Evaluation (16 weeks post-trauma)				
Global Goal: Complete Independence					0	not evaluated yet			
Service-Program-Goal: Independence in ADLs					0	not evaluated yet			
Cycle goal 1: d4 Independence in mobility					1				
Cycle goal 2: d5 Independence in self-care					0				
Cycle goal 3: d9201 Sport					2				
ICF categories - Intervention Targets					ICF Qualifier*	Goal relation	Goal Value*	ICF Qualifier	Goal achievement
					problems			problems	
					0 1 2 3 4			0 1 2 3 4	
b28013	Pain in back				1	0			-
b415	Blood vessel functions - at risk				G	0			+
b420	Blood pressure functions				1	0			+
b7101	Mobility of several joints				1.2	0			-
b735	Muscle tone functions				1	1			+
b755	Involuntary movement reaction functions				1.2	0			+
b7603	Supportive functions of the arms				1.2	0			+
b7800	Sensation of muscle stiffness (M. ischioculure)				1.2	0			+
s810	Structure of areas of skin - at risk				G	0			+
d410	Changing basic body positions				1	0			+
d4153	Maintaining a sitting position				1.2	1			+
d4200	Transferring oneself while sitting				1	1			+
d465	Moving around using equipment				1	0			-
b4751	Driving a car				1	0			+
d510	Washing oneself				2	0			+
d520	Caring for body parts				2	0			-
d5300	Regulating urination				2	0			+
d5301	Regulating defecation				2	0			+
d540	Dressing				2	0			+
d9201	Sport				3	2			+
					facilitator	barrier		facilitator	barrier
					4+ 3+ 2+ 1+ 0	0 1 2 3 4		4+ 3+ 2+ 1+ 0	0 1 2 3 4
e1101	Drugs				1.2	2+			+
e1151	Assistive products: Chair cushion				1	0			+
e1201	Assistive products mobility: Wheelchair, car				1	0			+
e155	Design and construction of private building				SP	2			+
e5700	Social security services				SPG	4+			-
e5750	General social supportservice				SPG	3+			-
					positive	influence neutral negative		positive	influence neutral negative
pf	Knowledge				SP	+			+
pf	Acceptance of disease				G	0			+

The structure of the ICF



Tot: 1454

ICF

J Rehabil Med 2004; Suppl. 44: 7–8

Taylor & Francis
healthsciences

COMMENTS FROM WHO FOR THE *JOURNAL OF REHABILITATION MEDICINE* SPECIAL SUPPLEMENT ON ICF CORE SETS

B. Üstün, S. Chatterji and N. Kostanjsek

From the Classification, Assessment, Surveys and Terminology Team, World Health Organization, Geneva, Switzerland

*"A clinician cannot easily take the main volume of the ICF
and consistently apply it to his or her patients. In daily
practice, clinicians will only need a fraction of the
categories found in the ICF"*



Tot: 1454

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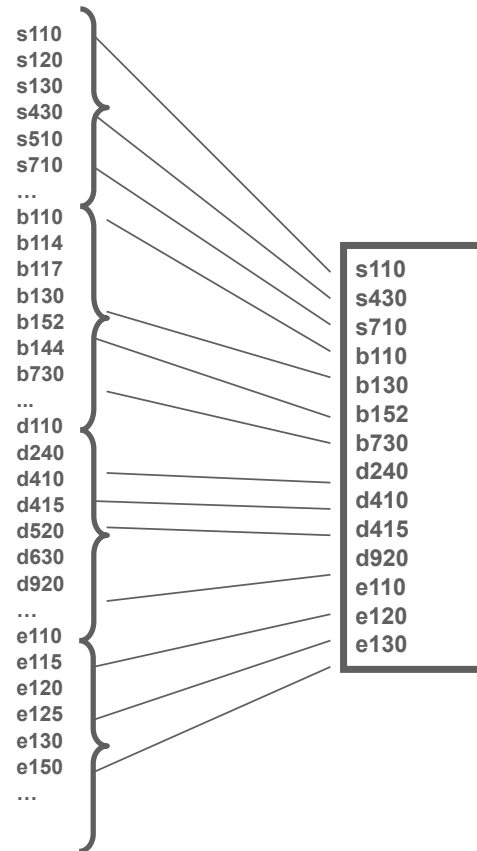
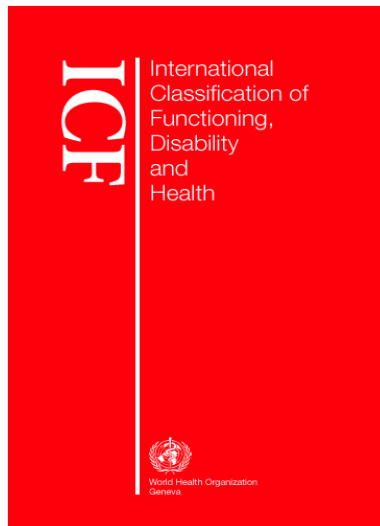
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ICF tools



ICF Core Sets



ICF Core Sets

• Neurological Conditions

- Multiple Sclerosis
- Spinal Cord Injury
- Traumatic Brain Injury
- Cerebral Palsy

• Cardiovascular and Respiratory Conditions

- Obstructive Pulmonary Diseases
- Obesity
- Diabetes Mellitus
- Stroke
- Chronic Ischaemic Heart Disease

• Cancer

- Head and Neck Cancer
- Breast Cancer

• Mental Health

- Depression
- Bipolar disorders
- Schizophrenia

• Musculoskeletal Conditions

- Ankylosing Spondylitis
- Chronic Widespread Pain
- Osteoporosis
- Osteoarthritis
- Low Back Pain
- Rheumatoid Arthritis

• Diverse Situations

- Minimal Generic Set
- Vocational Rehabilitation

• Other Health Conditions

- Autism Spectrum
- ADHD
- Hearing Loss
- Vertigo
- Inflammatory Bowel Diseases

Minimal Generic Set & Disability Set ICF Generic 7 & 23 Set

Cieza et al. BMC Public Health 2014, 14:218
http://www.biomedcentral.com/1471-2458/14/218



RESEARCH ARTICLE

Open Access

Towards a minimal generic set of domains of functioning and health

Alarcos Cieza^{1,2,3,4*}, Cornelia Oberhauser^{2,4}, Jerome Bickenbach^{3,4,6}, Somnath Chatterji⁵ and Gerold Stucki^{3,4,6}

Minimal Generic Set	
b130	Energy and drive functions
b152	Emotional functions
b280	Sensation of pain
d230	Carrying out daily routine
d450	Walking
d455	Moving around
d850	Remunerative employment

Disability Set	
b130	Energy and drive functions
b134	Sleep functions
b152	Emotional functions
b280	Sensation of pain
b455	Exercise tolerance functions
b640	Sexual functions
b710	Mobility of joint functions
b730	Muscle power functions
d230	Carrying out daily routine
d240	Handling stress and other psychological demands
d450	Walking
d455	Moving around
d470	Using transportation
d510	Washing oneself
d540	Dressing
d570	Looking after one's health
d640	Doing housework
d660	Assisting others
d710	Basic interpersonal interactions
d770	Intimate relationships
d850	Remunerative employment
d920	Recreation and leisure

ICF Generic 7 Set

ICF Generic 30 Set

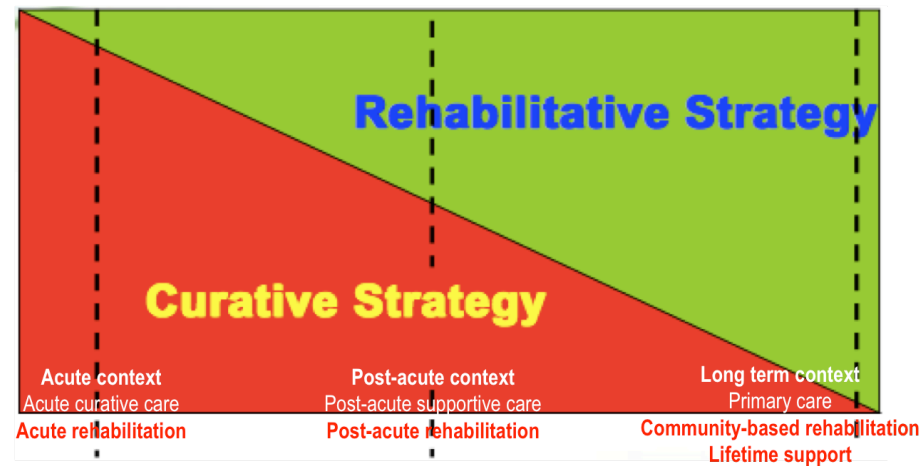
Generic 7		Generic 30	
b130	Energy and drive functions	b130	Energy and drive functions
		b134	Sleep functions
b152	Emotional functions	b152	Emotional functions
b280	Sensation of pain	b280	Sensation of pain
		b455	Exercise tolerance functions
		b620	Urination functions
		b640	Sexual functions
		b710	Mobility of joint functions
		b730	Muscle power functions
d230	Carrying out daily routine	d230	Carrying out daily routine
		d240	Handling stress and other psychological demands
		d410	Changing basic body position
		d415	Maintaining a body position
		d420	Transferring oneself
d450	Walking	d450	Walking
d455	Moving around	d455	Moving around
		d465	Moving around using equipment
		d470	Using transportation
		d510	Washing oneself
		d520	Caring for body parts
		d530	Toileting
		d540	Dressing
		d550	Eating
		d570	Looking after one's health
		d640	Doing housework
		d660	Assisting others
		d710	Basic interpersonal interactions
		d770	Intimate relationships
d850	Remunerative employment	d850	Remunerative employment
		d920	Recreation and leisure

Generic-7 Set (G) or Generic-6 Set excl. d850

⇒ minimum set to document functioning

Generic-30 Set (Rehabilitation Set)

⇒ for documenting functioning in a clinical context



Cieza A, et al. Towards a minimal generic set of domains of functioning and health. *BMC Public Health*. 2014 Mar 3;14:218. Proding B, et al. Toward the International Classification of Functioning, Disability and Health (ICF) Rehabilitation Set: A Minimal Generic Set of Domains for Rehabilitation as a Health Strategy. *Arch Phys Med Rehabil*. 2016;97(6):875-84.

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World Rehabilitation Alliance

ISPRM INTERNATIONAL SOCIETY OF PHYSICAL AND REHABILITATION MEDICINE

Frontera W, Gimigliano F, Melvin J, Li J, Li L, Lains J, Stucki G. ClinFIT: ISPRM's Universal Functioning Information Tool based on the WHO's ICF. *J Int Soc Phys Rehabil Med* 2019.

Special Report

ClinFIT: ISPRM's Universal Functioning Information Tool based on the WHO's ICF

Rehabilitation is the health strategy that aims to optimize functioning of persons with a health condition experiencing or likely to experience disability.^[1,2] Accordingly, physical and rehabilitation medicine (PRM) can be defined as the “medicine of functioning.”^[3] The assessment of functioning that involves taking a patient's history, conducting a clinical examination, and interpreting clinical tests, imaging, and laboratory

rehabilitation and health care at large.^[11] An overview of the most recent efforts worldwide has been published in *JISPRM*, the new electronic journal of *ISPRM* (<http://www.jisprm.org>).^[11] In light of these efforts, ISPRM's leadership sees a unique opportunity to embark upon an initiative to develop, implement, and maintain an ICF-based clinical tool for the assessment of functioning referred to as ClinFIT.

“ISPRM's leadership sees a unique opportunity to embark upon an initiative to develop, implement, and maintain an ICF-based clinical tool for the assessment of functioning referred to as ClinFIT.”



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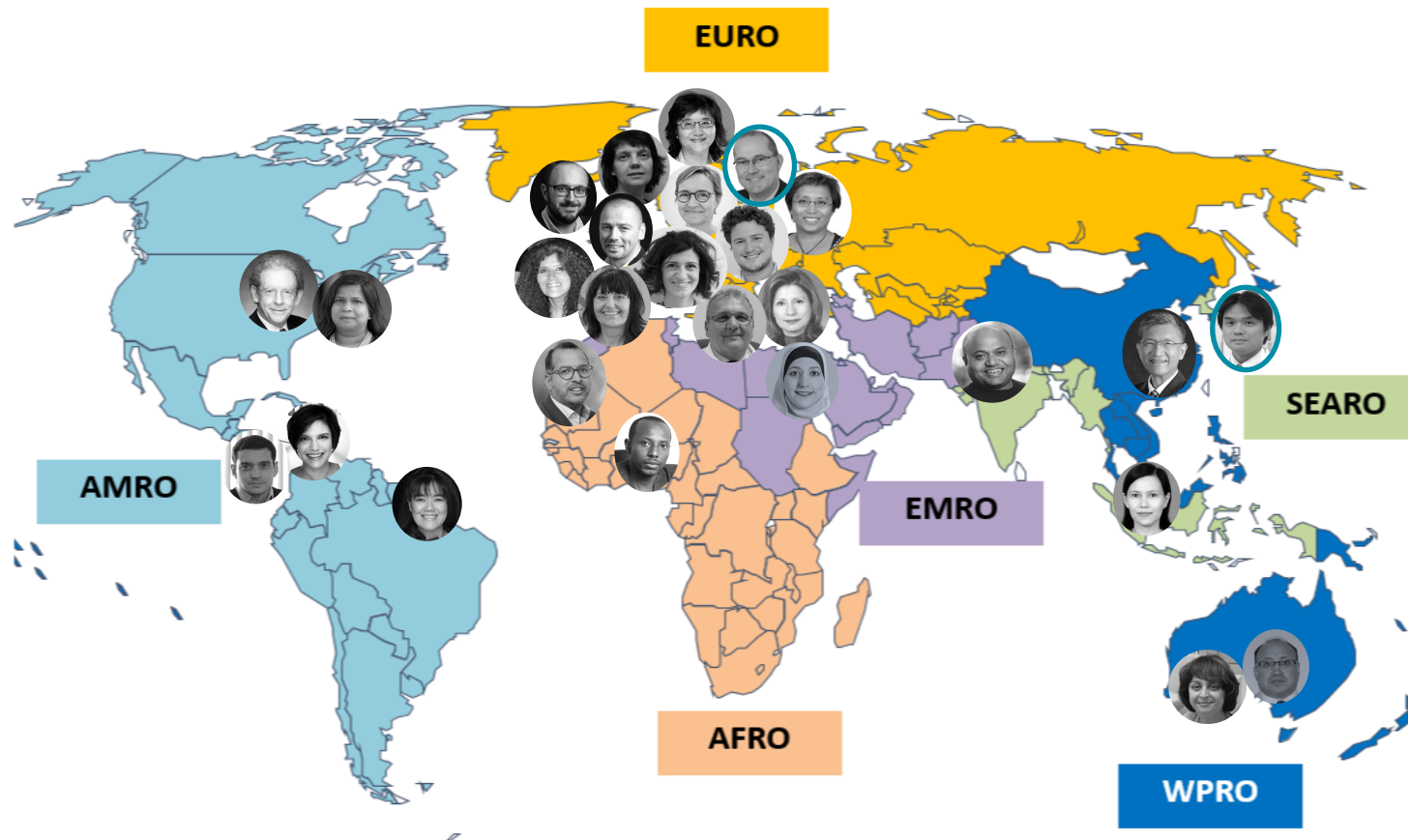
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ISPRM ClinFIT SIG Members



Gerold Stucki (Co-Chair)
 Masahiko Mukaino (Co-Chair)
 Abderrazak Hajjioui
 Alessandro de Sire
 Alia Alghwiri
 Anne Felicia Ambrose
 Aydan Oral
 Bhasker Amatya
 Carlotte Kiekens
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 Catarina Aguiar Branco
 Dominique Van de Velde
 Fary Khan
 Francesca Gimigliano
 Jianan Li
 John Melvin
 Julia Patrick Engkasan
 Maria Gabriella Cervolo
 Mario Giraldo-Prieto
 Marta Imamura
 Mauro Zampolini
 Melissa Selb (Secretariat)
 Patricia de Vriendt
 Raju Dhakal
 Sinforian Kambou
 Stijn de Baets
 Xiaolei Hu

ClinFIT - Clinical Functioning Information Tool

“Clin” \Rightarrow “clinical”; emphasizes the application setting

“F” \Rightarrow “functioning”; refers to its content

“I” \Rightarrow “information”; refers to the relevant building block of the health system

“T” \Rightarrow “tool” refers to its purpose.

...that can be tailored to the needs of clinicians

Frontera W, Gimigliano F, Melvin J, Li J, Li L, Lains J, Stucki G. ClinFIT: ISPRM's Universal Functioning Information Tool based on the WHO's ICF. J Int Soc Phys Rehabil Med 2019.



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ClinFIT - Clinical Functioning Information Tool

A universal ICF-based clinical tool for the assessment of functioning that can be tailored to the needs of...

- rehabilitation service types along the continuum of care
- different patient populations across age groups and
- low-, middle-, and high-income countries

Frontera W, Gimigliano F, Melvin J, Li J, Li L, Lains J, Stucki G. ClinFIT: ISPRM's Universal Functioning Information Tool based on the WHO's ICF. J Int Soc Phys Rehabil Med 2019.



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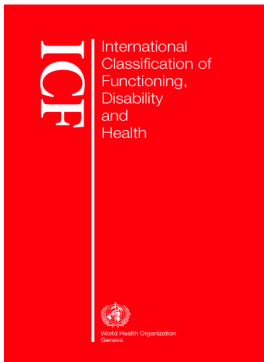


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ClinFIT - Clinical Functioning Information Tool

Users define the relevant category lists:



ICF Generic-7 for health care at large

ICF Generic-30 for rehabilitation teams

Add health condition-specific ICF Core Sets for patients with specific health conditions, e.g. Spinal cord injury, Traumatic brain injury, etc.

Cieza A. et al. Towards a minimal generic set of domains of functioning and health. *BMC Public Health*. 2014;14:218;

Prodingen B, et al. Toward the International Classification of Functioning, Disability and Health (ICF) Rehabilitation Set: A Minimal Generic Set of Domains for Rehabilitation as a Health Strategy. *Arch Phys Med Rehabil*. 2016;97(6):875-84;
www.icf-core-sets.org; www.icf-casestudies.org

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J Rehabil Med 2016; 48: 502–507

SPECIAL REPORT

TOWARDS THE SYSTEM-WIDE IMPLEMENTATION OF THE INTERNATIONAL
CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH IN
ROUTINE PRACTICE: **LESSONS FROM A PILOT STUDY IN CHINA**

Jianan Li, MD^{1,2}, Birgit Proding, PhD^{3,4,5}, Jan Reinhardt, PhD^{3,4,6} and
Gerold Stucki, MD, MS^{3,4,5}

- ICF Generic Set is feasible to use in routine clinical practice
- To facilitate a common understanding and consistent use of ICF categories in clinical routine, descriptions need to be simpler and more intuitive

Language of the ICF

- Unified and standardized
- Commonly understood by various stakeholders in health and its related systems
- Simple and intuitive to understand when applied in routine clinical practice?

“General mental functions of periodic, reversible and selective physical and mental disengagement from one's immediate environment accompanied by characteristic physiological changes.”

b134 Sleep functions

→ *Is this description simple and intuitive for routine clinical practice?*

ClinFIT description:

Cycle, quality, and amount of sleep

ClinFIT (ICF Generic-30) in different languages

English
Chinese
Italian
Japanes
Flemish/Dutch
Croatian
Turkish
Polish
French
German
so far...

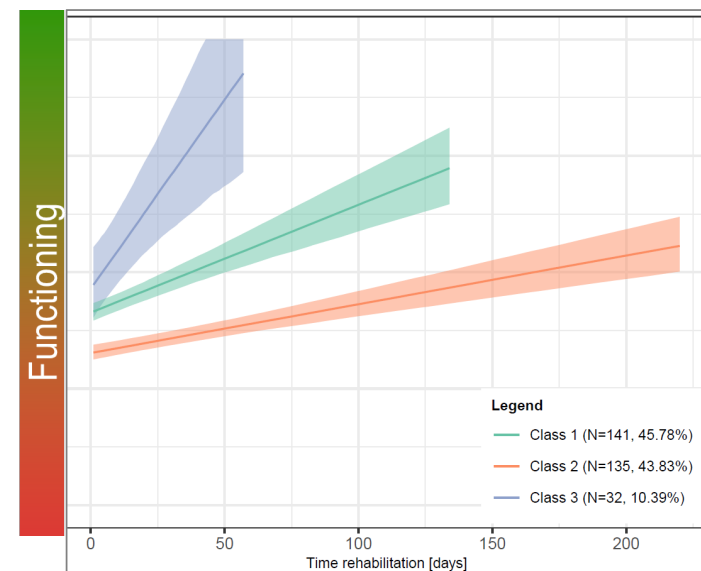
Date	<input checked="" type="checkbox"/> Admission <input type="checkbox"/> Mid-term <input type="checkbox"/> Discharge
Patient:	Raw Score
Clinician:	0 1 2 3 4 5 6 7 8 9 10 No Problem Complete Problem
b130 Energy and drive functions <i>Psychological energy and motivational drive to move towards goals, satisfy needs and control impulses</i>	4
b152 Emotional functions <i>Mental functions for the modulation of the expression of feelings and emotions</i>	2
b280 Sensation of pain <i>Unpleasant sensation indicating potential or actual damage of some body structure</i>	7
d230 Carrying out daily routine <i>Plan, manage and complete routine daily life activities</i>	7
d450 Walking <i>Moving in an upright position, step by step, always maintaining a support on the ground</i>	0
d455 Moving around <i>Moving around differently from walking (for example running, going up and down the stairs, jumping, climbing, swimming, etc.)</i>	7

ClinFIT – Scoring System is purpose-driven

- **11-point Numeric Rating Scale**
(0=no problem to 10=complete problem)
- **0-4 Scale**
(0=no problem, 1=mild problem, 2=moderate problem, 3=severe problem, 4=complete problem)
- **0-4 Scale with specified response items for each category**

ClinFIT - Functioning Profile and Trajectories

Date	<input checked="" type="checkbox"/> Admission <input type="checkbox"/> Mid-term <input type="checkbox"/> Discharge										
Patient: Ms. K	Clinician: Dr. XXX										
Rating	0	1	2	3	4	5	6	7	8	9	10
0 = No problem; 10 = Complete problem											
b130 Energy and drive functions <i>Psychological energy and motivational drive to move towards goals, satisfy needs and control impulses</i>											
b152 Emotional functions <i>Mental functions for the modulation of the expression of feelings and emotions</i>											
b280 Sensation of pain <i>Unpleasant sensation indicating potential or actual damage of some body structure</i>											
d230 Carrying out daily routine <i>Plan, manage and complete routine daily life activities</i>											
d450 Walking <i>Moving in an upright position, step by step, always maintaining a support on the ground</i>											
d455 Moving around <i>Moving around differently from walking (for example running, going up and down the stairs, jumping, climbing, swimming, etc.)</i>											

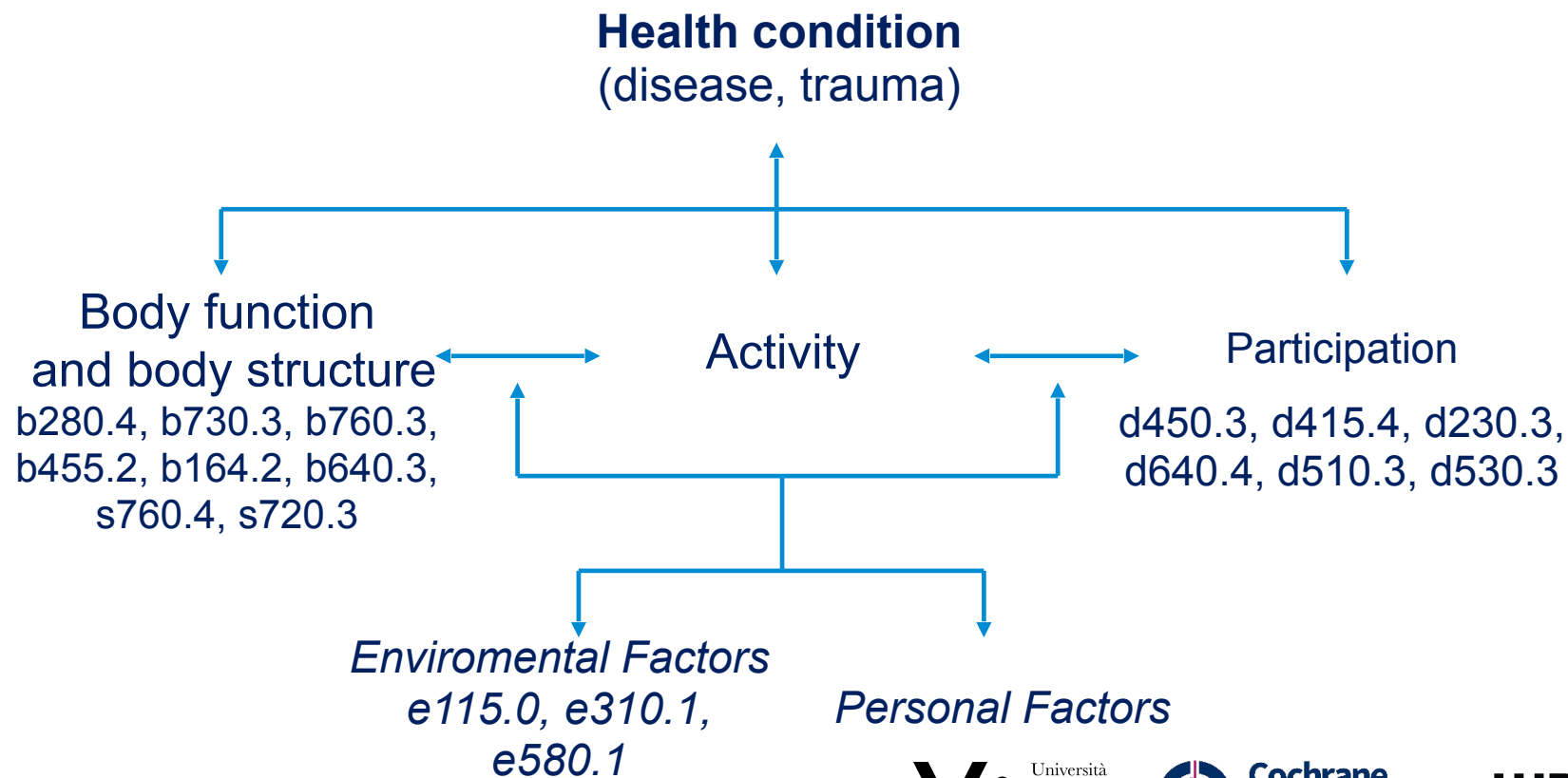


Artificial Intelligence

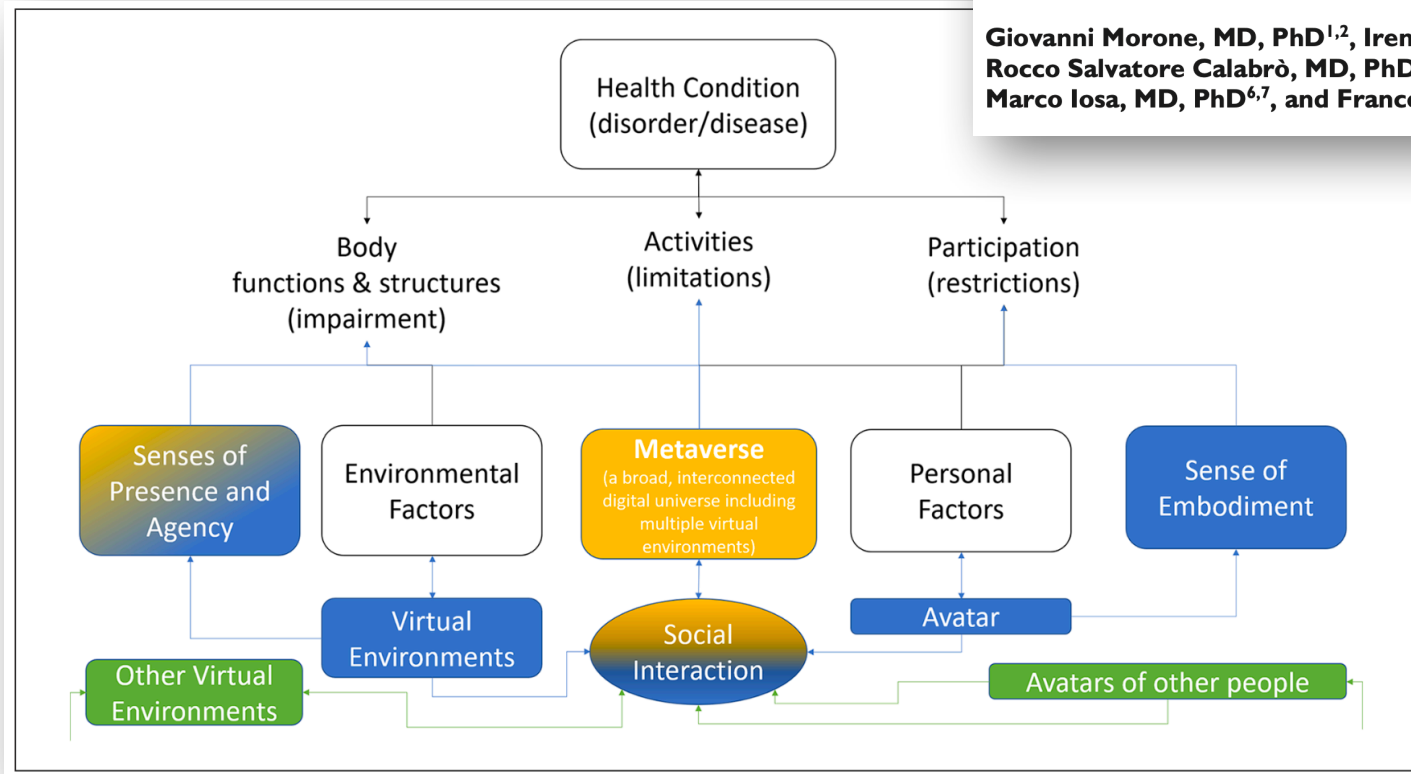


"And we applied for disability, hoping it will be accepted at 100%, and in practice, I'm feeling a bit worse now, especially with regards to my bones, my back is giving me problems, I think it's really serious, I'm completely stuck in bed screaming from pain, many treatments don't work because they make me vomit, I have a delicate stomach therefore we did some infiltrations in the end, but... Anyway, so I have a condition of polyarthrititis. Here, well, right here. So, this is the lumbosacral spine, isn't it? Using the numbers, it's scary, where osteoporosis and severe spondylotic and spondyloarthritic manifestations are evident. And then with this anterolisthesis. And it also starts a bit, let's leave it also at level D8. For example, in the D8, there's a small collapse, typical of osteoporosis. So, I was not working anymore, the problem of love started, I began working a little assistance. They need accompaniment. She and he, well, more or less, they manage it, but a bit slow. Sometimes even with the right one, it starts with me. So, I have memory problems, a little yes. In the morning, I go down, maybe she has turned, the raised hole puts the like. She forgets to turn off the milk pot, is it pouring? I let them square, I leave them alone. If they start getting angry, mine gets agitated. Accompaniment was needed. Madam, madam, what year is it now? More or less, anyway. You, how old are you? 89. And when were you born? In what year? Do you remember the year you were born also because you hear little, from July to July, the year, the year, the year, the year. I don't know if it was an evening. Listen, where are we? Where are we? Where are you right now? And what place is this? Good pedal, good, good. At times, at times, luckily, I'm also with you, so if you have cognitive problems a little bit. But clearly, I wanted to get the wheelchair. At home, I said look, now I'll get you a wheelchair. I started to get agitated in the hospital, I'm not going there, I'm not going there slowly, this chart. Listen, do you need help getting dressed? Yes. Got it? Ah. I understand and then, for example, can you wash yourself? When you get up from bed, can you get up from bed? Does she help you? And then when you go to the bathroom, no, do you clean yourself or do you need help? And about leaks, sometimes do you wet yourself? And if. In time. Slowly, slowly, going there. I understand other diseases high blood pressure. Diabetes? High cholesterol? Days? It makes me want to cry, so she cries easily. Here. And at night, does she sleep? She doesn't sleep. And then she feels very little. If winning almost nothing. Do you understand, so in movements, even if she moves little, anyway, she recently fell. She fell, when? Recently, a long time ago. A month and a half and a half and a half, in fact, I slipped. We cashed in the session. Listen, can you sit down on the bed?"

Artificial Intelligence



MetaRehabVerse



Point of View/Directions for Research

ASNR AMERICAN SOCIETY OF
NEUROREHABILITATION

MetaRehabVerse: The Great Opportunity to Put the Person's Functioning and Participation at the Center of Healthcare

Neurorehabilitation and
Neural Repair
2025, Vol. 39(3) 241–255
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Sage

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Marco Iosa, MD, PhD^{6,7}, and Francesca Gimigliano, MD, PhD⁸

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THANK YOU for your attention b140 and
for listening d115



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