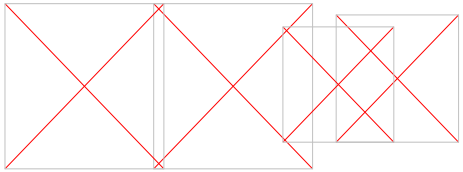


ClinFIT in Action: Functioning data to global impact

ICF Inspiration Day, 11 November 2026

Melissa Selb, PhD
ICF Research Branch Coordinator
Project Scientist



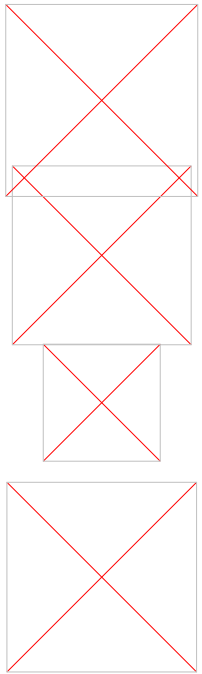
1985 - 1990

BSc and MSc in Rehabilitation Counseling

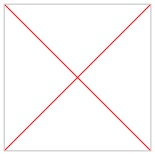
1992

PhD in Rehabilitation & Special Education

1993 - 2009



ICF Research Coordinator
Project Scientist
Ageing, Functioning Epidemiology and Implementation Group



Swiss Paraplegic Research

ICF Research Branch

Since 2009

2021 - 2025

UNIVERSITY OF LUCERNE

PhD in Health Sciences
Faculty of Health Sciences and Medicine

Content of the Talk

- ICF Core Sets
- What is ClinFIT
- Existing research on ClinFIT
- Global ClinFIT study

Strengthening rehabilitation through the ICF

Rehabilitation 2030


World Health Organization

SEVENTY-SIXTH WORLD HEALTH ASSEMBLY
Agenda item 13.4

WHA76.6
30 May 2023

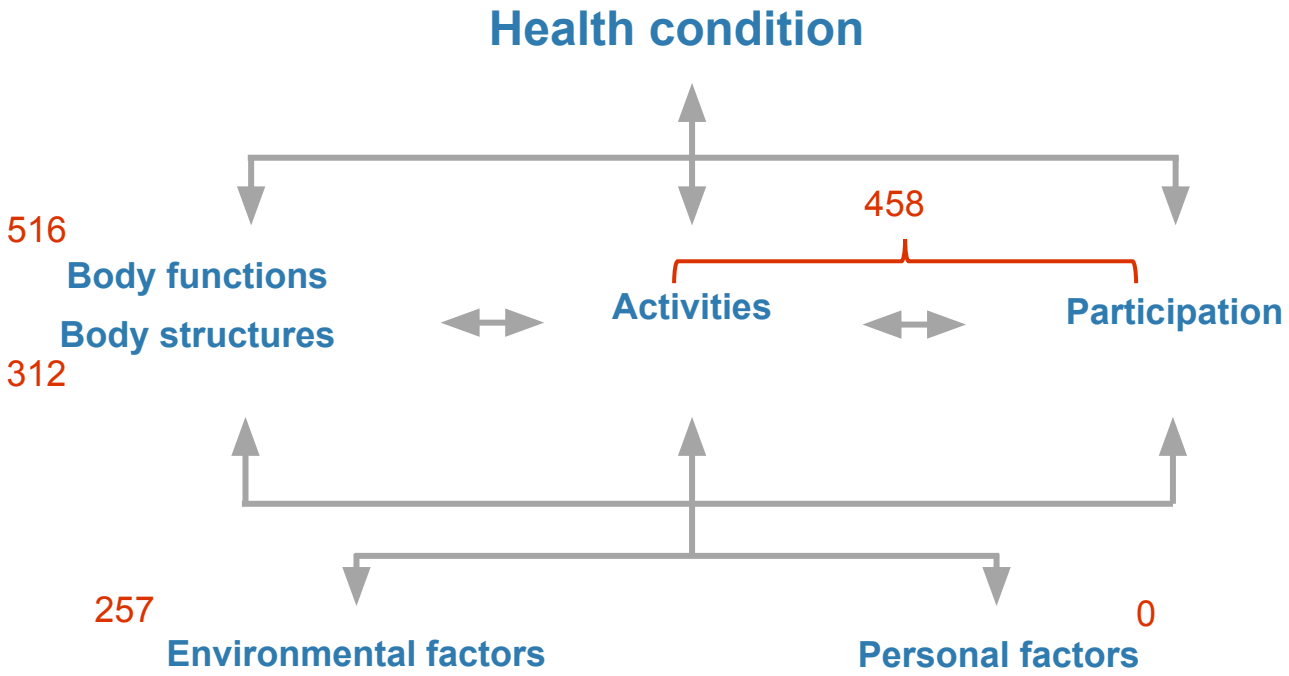
Strengthening rehabilitation in health systems

…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…

…to enhance health information systems to ***collect information relevant to rehabilitation***, including …***information on functioning, utilizing the [ICF]***

ICF Core Sets

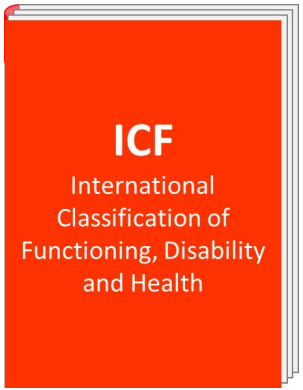
The ICF (Jan. 2026 release) includes 1543 categories



What are ICF Core Sets?

ICF Core Set

Shortlist of categories that are relevant for specific health conditions and health care contexts



s110
s120
s130
s140
s210
s230
…
b110
b114
b117
b122
b126
b140
b144
b147
…
d110
d115
d120
d129
d130
d160
d166
…
e110
e115
e120
e125
e130
e150
…

Comprehensive ICF Core Set

s410
s430
s710
b110
b130
b134
b152
d240
d410
d415
d420
e110
e115
e120

Brief ICF Core Set

s410
b110
b130
d410
d415
e115
e120

Available ICF Core Sets

- Acute inflammatory arthritis
- Ankylosing spondylitis
- Low back pain
- Manual Medicine (low back pain)
- Obstructive pulmonary diseases
- Osteoarthritis
- Osteoporosis
- Rheumatoid arthritis
- Chronic widespread pain
- Multiple sclerosis
- Traumatic brain injury
- Spinal cord injury in post-acute and long-term care
- Chronic ischemic heart disease
- Diabetes
- Obesity
- Stroke
- Depression
- Bipolar disorders
- Schizophrenia
- Breast cancer
- Head and neck cancer
- Cardiopulmonary, musculoskeletal and neurological conditions in acute and post-acute setting
- Autism spectrum disorder
- Attention Deficit Hyperactivity Disorder
- Children/youth with CP
- Adults with CP
- Geriatric population
- Sleep disorders
- Hand conditions
- Inflammatory bowel diseases
- Hearing Loss
- Vertigo
- Vocational rehabilitation
- Major trauma
- Manual medicine
- Oral health

Generic Sets

Generic-30 (Rehabilitation Set): For documenting functioning in a clinical context across persons with different health conditions

Generic-7: Minimum set to document functioning

 These ICF generic sets can be used together with ICF Core Sets

b130 Energy and drive functions
b134 Sleep functions
b152 Emotional functions
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
d240 Handling stress and other psychological demands
d410 Changing basic body position
d415 Maintaining a body position
d420 Transferring oneself
d450 Walking
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
d920 Recreation and leisure

Environmental factors (N=12)

Can be added to the ICF Generic-30 Set, if needed:

e110 Products or substances for personal consumption
e115 Products and technology for personal use in daily living
e120 Products and technology for personal indoor and outdoor mobility and transportation
e135 Products and technology for employment
e150 Design, construction and building products and technology of buildings for public use
e155 Design, construction and building products and technology of buildings for private use
e225 Climate
e310 Immediate family
e320 Friends
e355 Health professionals
e450 Individual attitudes of health professionals
e580 Health services, systems and policies

Clinical Functioning Information Tool (ClinFIT)

Special Report

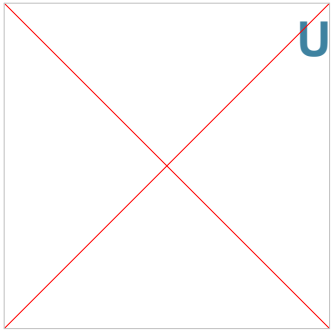
ClinFIT: ISPRM's Universal Functioning Information Tool based on the WHO's ICF

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

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,

"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."

Clinical Functioning Information Tool (ClinFIT)



Universal, ICF-based clinical tool applicable in…

- rehabilitation service types along the continuum of care
- assesses functioning of different patient populations
- low-, middle-, and high-income countries

Generic versions

- Generic-30 Set
- Generic-6 and 7 Sets

Condition-specific versions

ClinFIT COVID-19

Mukaino M, Aguiar Branco C, Alghwiri A, Amato S, Kontaxakis A, Berteanu M, Bölük Şenlikci H, Borman P, Diouane S, Fourtassi M, Gimigliano F, Hajjioui A, Hu X, Kambou S, Lin CI, I Mabrouk M, Mitsiokapa E, Nica RI, Rapidi CA, Serlenga G, Silvestri A, Tarvonen-Schröder S, Ursescu C, Viinanen A, Vorniotakis P, Selb M. *J Rehabil Med.* 2025;57:jrm4322

ClinFIT-MSK

Mariotti M, Selb M, Imamura M, Alghwiri A, Amatya B, Ceravolo MG, Gimigliano F, Giraldo-Prieto M, Hu X, Kambou S, Kiekens C, Li J, Liu S, Mukaino M, Oral A, Stucki G, van de Velde D, Perret C. *Am J Phys Med Rehabil.* 2026;105(4):321-329

Clinical Functioning Information Tool (ClinFIT)

Based on ICF Generic-30 Set

Applicable in diverse settings and patient populations

Has been applied with a

- 0-4 rating scale with/ without specification
- 0-10 rating scale without specification

1	b130 Energy and drive functions *Psychological energy and motivational drive to move towards goals, satisfy needs and control*	No problem ☐	Mild ☐	Moderate ☐	Severe ☐	Complete problem ☐	☐ Need more info	N/A ☐
2	b134 Sleep functions *Cycle, quality and amount of sleep*	No problem ☐	Mild ☐	Moderate ☐	Severe ☐	Complete problem ☐	☐ Need more info	N/A ☐
3	b152 Emotional functions *Mental functions for the modulation of the expression of feelings and emotions*	No problem ☐	Mild ☐	Moderate ☐	Severe ☐	Complete problem ☐	☐ Need more info	N/A ☐
4	b280 Sensation of pain *Unpleasant sensation indicating potential or actual damage of some body structure*	No problem ☐	Mild ☐	Moderate ☐	Severe ☐	Complete problem ☐	☐ Need more info	N/A ☐

1	b130 Energy and drive functions *Psychological energy and motivational drive to move towards goals, satisfy needs and control impulses*	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	N/A ☐	
2	b134 Sleep functions *Cycle, quality and amount of sleep*	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	N/A ☐	**0:** No problem **1:** Mild problem: Patient has a problem but does not affect the patient's daily activities **2:** Moderate problem: Patient has a problem that exceeds 1, but remains a relatively minor problem (<50%)
3	b152 Emotional functions *Mental functions for the modulation of the expression of feelings and emotions*	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	N/A ☐	
4	b280 Sensation of pain *Unpleasant sensation indicating potential or actual damage of some body*	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	N/A ☐	

1	b130 Energy and drive functions *Psychological energy and motivational drive to move towards goals, satisfy needs and control*	No problem ☐	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	Complete Problem	☐ Need more info	N/A ☐
2	b134 Sleep functions *Cycle, quality and amount of sleep*	No problem ☐	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	Complete Problem	☐ Need more info	N/A ☐
3	b152 Emotional functions *Mental functions for the modulation of the expression of feelings and emotions*	No problem ☐	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	Complete Problem	☐ Need more info	N/A ☐
4	b280 Sensation of pain *Unpleasant sensation indicating potential or actual damage of some body structure*	No problem ☐	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐	9 ☐	10 ☐	Complete Problem	☐ Need more info	N/A ☐

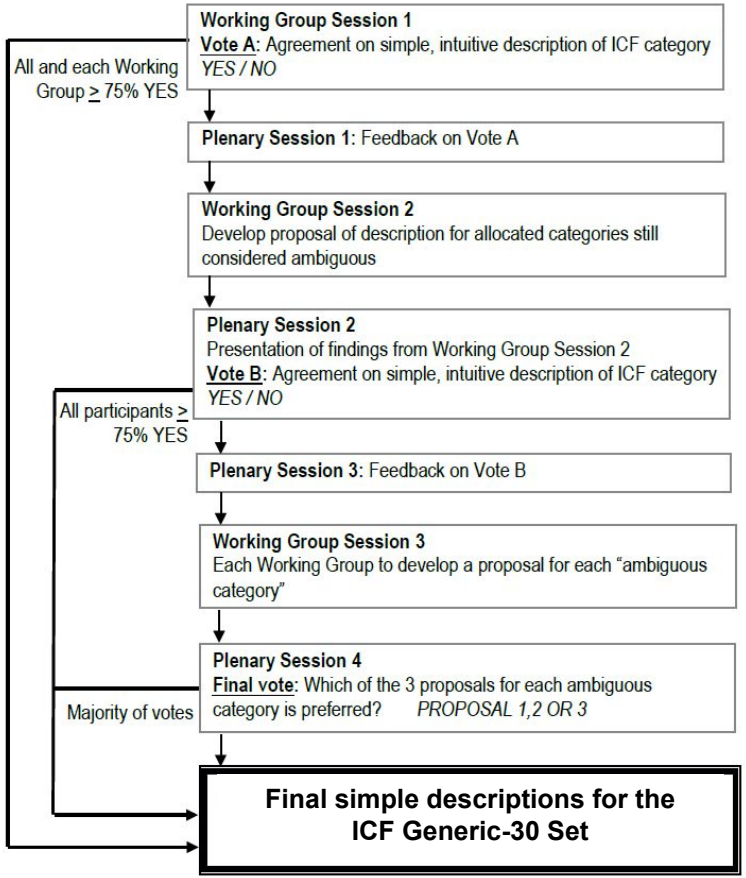
Clinical Functioning Information Tool (ClinFIT)

Patient:	Clinician:	□ Admission: (Date)_____ □ Mid-term: (Date)_____ □ Discharge: (Date)_____

Please rate the patient's functioning from 0 (no problem) to 10 (complete problem).

		RATING SCALE
1	b130 Energy and drive functions *Psychological energy and motivational drive to move towards goals, satisfy needs*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem
2	b152 Emotional functions *Mental functions for the modulation of the expression of feelings and emotions*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem
3	b280 Sensation of pain *Unpleasant sensation indicating potential or actual damage of some body structure*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem
4	d230 Carrying out daily routine *Plan, manage and complete routine daily life activities*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem
5	d450 Walking *Moving in an upright position, step by step, always maintaining a support on the*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem
6	d455 Moving around *Moving around differently from walking (for example running, going up and down*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem
7	d850 Remunerative employment *Properly performing remunerative employment (full or part time or self-employed) in*	No problem 0 1 2 3 4 5 6 7 8 9 10 Complete Problem

Simple descriptions



- English
- Chinese (Mandarin)
- Japanese
- Italian
- Flemish/Dutch
- Croatian
- Greek
- Polish
- Turkish
- Bahasa Malay
- Korean
- German
- French
- Spanish
- Arabic

Application examples



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Online version at http://www.minervamedica.it

European Journal of Physical and Rehabilitation Medicine 2019 April;55(2):258-64
DOI: 10.23736/S1973-9087.18.05324-8

ORIGINAL ARTICLE

Use of the International Classification of Functioning, Disability and Health Generic-30 Set for the characterization of outpatients: Italian Society of Physical and Rehabilitative Medicine Residents Section Project

Francesca GIMIGLIANO [1], Alessandro de SIRE [2, *], Marco GASTALDO [3], Irene MAGHINI [4], Marco PAOLETTA [2], Andrea PASQUINI [5], Paolo BOLDRINI [6], Melissa SELB [7, 8], Birgit PRODINGER [7, 8, 9], SIMFER Residents Section Group [2]



JRM Medicine

ORIGINAL REPORT

RESPONSIVENESS OF THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH (ICF) CLINICAL FUNCTIONING INFORMATION TOOL (ClinFIT) IN ROUTINE CLINICAL PRACTICE IN AN AUSTRALIAN INPATIENT REHABILITATION SETTING

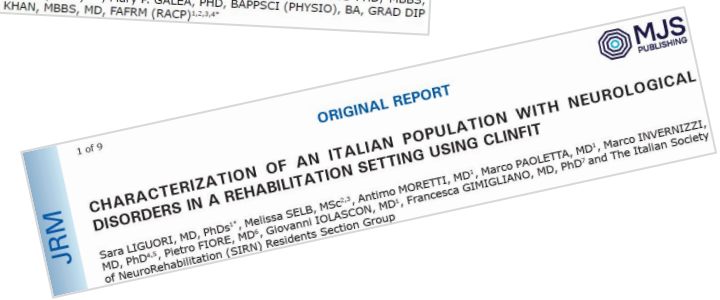
Bhasker AMATYA, DMedSc, MPH, MD[1,2,3*], Alaeldin ELMALIK, MBBS, FAFRM (RACP)[1,2,3], Krystal SONG PHD, MBBS, FAFRM (RACP)[1,2,3], Su Yi LEE, PHD, MBBS, FAFRM (RACP)[1,2,3], Mary P. GALEA, PHD, BAPPSCI (PHYSIO), BA, GRAD DIP PHYSIO, Grad Dip NEUROSCI[1,2,3] and Fary KHAN, MBBS, MD, FAFRM (RACP)[1,2,3,4*]



Original Article

Feasibility of the International Classification of Functioning, Disability and Health Rehabilitation Set for inpatient rehabilitation: Selection and validity of a set of categories for inpatients in a convalescent rehabilitation ward

Reisuke Funahashi, MD,[1,2] Masahiko Mukaino, MD, DMSc,[1] Yohei Otaka, MD, PhD,[1] Yuki Senju, MD,[1,3] Chikako Yoneda, MD, DMSc[4] Yasunori Ozeki, MD, DMSc,[5] Yasuhiro Shimizu, MD, DMSc,[6] Tomoharu Kolke, MD,[7] Eiichi Saito, MD, DMSc[1]



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1 of 9

MJS PUBLISHING

ORIGINAL REPORT

CHARACTERIZATION OF AN ITALIAN POPULATION WITH NEUROLOGICAL DISORDERS IN A REHABILITATION SETTING USING CLINFIT

Sara LIGUORI, MD, PhDs[1*], Melissa SELB, MSc[2,3], Antimo MORETTI, MD[1], Marco INVERNIZZI, MD, PhD[4,5], Pietro FIORE, MD[6], Giovanni IOLASCON, MD[1], Francesca GIMIGLIANO, MD, PhD[7] and The Italian Society of NeuroRehabilitation (SIRN) Residents Section Group



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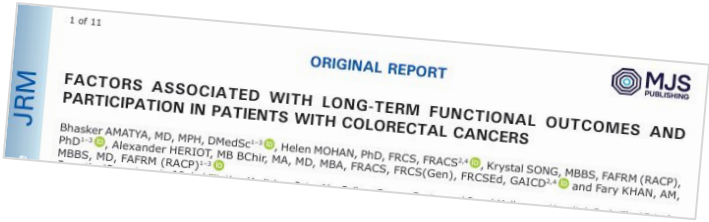
1 of 9

ORIGINAL REPORT

MJS PUBLISHING

OPTIMIZING THE CLINICAL FUNCTIONING INFORMATION TOOL (ClinFIT) IN ROUTINE CLINICAL PRACTICE: DEVELOPMENT OF FUNCTIONAL STAGING CUTOFF SCORES FOR REHABILITATION PROVISION AND INTENSITY

Bhasker AMATYA, DMedSc, MPH, MD[1-4*], Adrian MARTINEZ-DE LA TORRE, PhD[5,6*], Masahiko MUKAINO, MD, PhD[7], Krystal SONG, PhD, MBBS, FAFRM (RACP)[1-3], Melissa SELB, MSc[6,8], Gerold STUCKI, MD, MS[5,6,8,9] and Fary KHAN, AM, MBBS, MD, FAFRM (RACP)[1-4] ON BEHALF OF THE ISPRM ClinFIT COMMITTEE



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ORIGINAL REPORT

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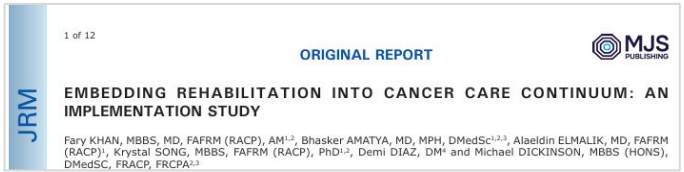
FACTORS ASSOCIATED WITH LONG-TERM FUNCTIONAL OUTCOMES AND PARTICIPATION IN PATIENTS WITH COLORECTAL CANCERS

Bhasker AMATYA, MD, MPH, DMedSc[1-3], Helen MOHAN, PhD, FRCS, FRACS[2,4], Krystal SONG, MBBS, FAFRM (RACP), MBBS, MD, FAFRM (RACP)[1-3] and Fary KHAN, AM,



Minimal important change (MIC) for the Clinical Functioning Information Tool (ClinFIT) in inpatient rehabilitation

Adrian Martinez-De la Torre, Bhasker Amatya, Masahiko Mukaino, Melissa Selb , Gerold Stucki , Fary Khan & on behalf of the ISPRM ClinFIT Committee



JRM

1 of 12

ORIGINAL REPORT

MJS PUBLISHING

EMBEDDING REHABILITATION INTO CANCER CARE CONTINUUM: AN IMPLEMENTATION STUDY

Fary KHAN, MBBS, MD, FAFRM (RACP), AM[1,2], Bhasker AMATYA, MD, MPH, DMedSc[1,2,3], Alaeldin ELMALIK, MD, FAFRM (RACP)[1], Krystal SONG, MBBS, FAFRM (RACP), PhD[1,2], Demi DIAZ, DM[4] and Michael DICKINSON, MBBS (HONS), DMedSC, FRACP, FRCPA[2,3]

Facilitating Clinical Application

- Responsive to change in functioning over time
- Minimal Important Change thresholds available
- Preliminary cut-offs for triaging available

0-4 Rating Scale with specifications

Rate the extent of the problem in the past week…	0 No problem	1 Mild	2 Moderate	3 Severe	4 Complete problem	
b130 Energy and drive functions *Psychological energy and motivational drive to move towards goals, satisfy needs*	No problem	Problem does not interfere	Problem moderately [illegible] with daily activities	Problem significantly interferes with daily activities	Complete problem	N/A
	☐	☐	☐	☐	☐	☐
b134 Sleep functions *Cycle, quality and amount of sleep*				Problem significantly interferes with daily activities	Complete problem	N/A
				☐	☐	☐

Transform ClinFIT as an ordinal scale to an interval scale and validate it for global use

Enable more precise and comparable assessment of functioning

Evidence-based and individualized clinical decision-making

d850 Remunerative employment *Properly performing remunerative employment (full- or part-time or self-employed) in all its aspects*				[illegible]dependently [illegible]ires [illegible]rable support [illegible]others	Cannot perform remunerative employment at all	N/A
				☐	☐	☐
d920 Recreation and leisure *Engaging in recreational or leisure activities (play, cultural and sports activities etc. during spare time)*	Engages in [illegible] or leisure activities without limitations or difficulty	[illegible] limitation in scope but with some difficulty	[illegible]ation or [illegible]ctivities but the range of activities is partially restricted	Engages in recreation or leisure activities but the range of activities is substantially restricted	Cannot engage in recreation or leisure activities at all	N/A
	☐	☐	☐	☐	☐	☐

Global ClinFIT Study

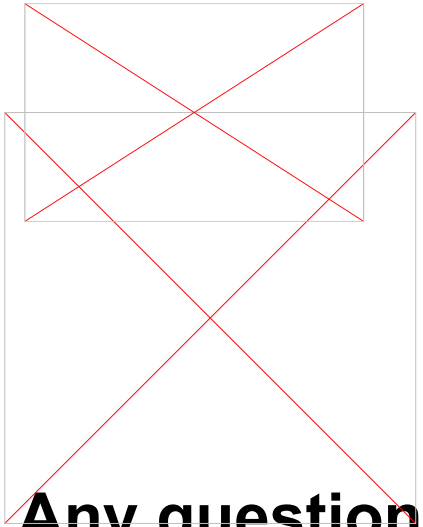
- To develop and validate an interval-scaled measurement metric based on the ClinFIT Generic-30 for adults in inpatient and outpatient rehabilitation
- To evaluate the responsiveness (sensitivity to change) of ClinFIT in both in- and outpatient settings

Study design:
International, multi-center longitudinal study in all WHO regions

Start & end of data collection: Sept. 2026– April 2027



Melissa Selb (melissa.selb@paraplegie.ch)



Any questions?

References

Amatya B, Elmalik A, Song K, Lee SY, Galea MP, Khan F. Responsiveness of the International Classification of Functioning, Disability And Health (ICF) Clinical Functioning Information Tool (ClinFIT) in Routine Clinical Practice in an Australian Inpatient Rehabilitation Setting. J Rehabil Med. 2022; 54:jrm00268.

Bickenbach J, Cieza A, Selb M, Stucki G, editors. ICF Core Sets: manual for clinical practice. Second Edition. Göttingen (Germany): Hogrefe Publishing; 2020.

Cieza A, Oberhauser C, Bickenbach J, et al. Towards a minimal generic set of domains of functioning and health. BMC Public Health 2014;14:218.

Frontera W, Gimigliano F, Melvin J, et al. ClinFIT: ISPRM's Universal Functioning Information Tool based on the WHO's ICF. J Int Soc Phys Rehabil Med 2019;2:19–21.

Prodinger B, CiezaA, Oberhauser C, Bickenbach J, TB Üstün, Chatterji S, Stucki G: Toward the ICF Rehabilitation Set: A minimal generic set of domains for rehabilitation as a health strategy. Archives of Physical Medicine and Rehabilitation 2016; 97(6): 875-884.

Selb M, Escorpizo R, Kostanjsek N, Stucki G, Ustün B, Cieza A. A guide on how to develop an international classification of functioning, disability and health core set. Eur J Phys Rehabil Med. 2015 Feb;51(1):105-17.