

ClinFIT COVID-19

**A universal clinical measure based on WHO's
International Classification of Functioning, Disability and Health (ICF)**

Prof. Gerold Stucki, MD, PD, MS, Dipl.

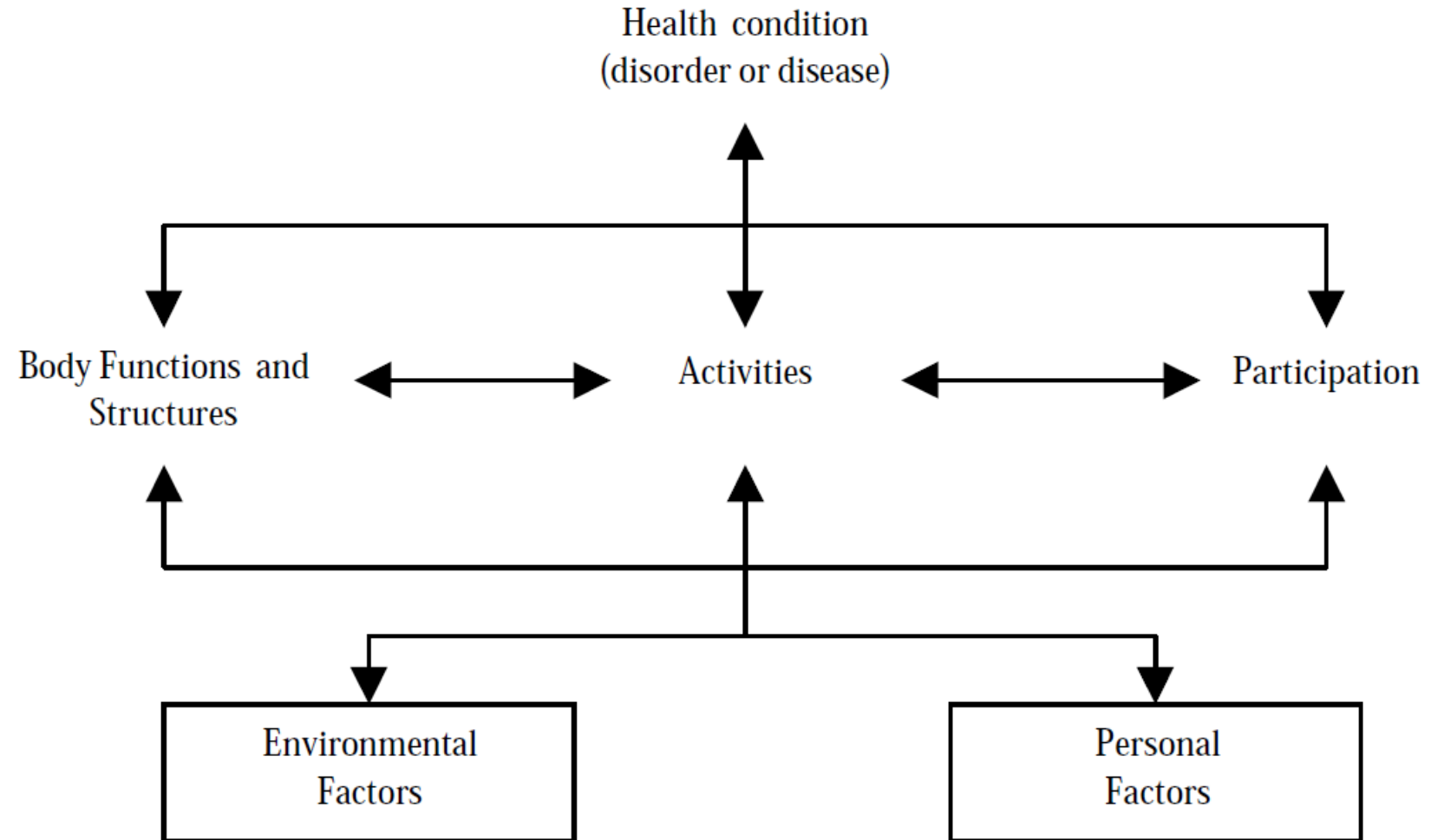
Co-Chair, International Society of Physical and Rehabilitation Medicine (ISPRM)
ClinFIT Task Force

Director, Center for Rehabilitation in Global Health Systems,
WHO Collaborating Center, University of Lucerne, Switzerland



Conflict of Interest Disclosure: NONE

Capturing the impact of COVID-19 on functioning



ClinFIT - Clinical Functioning Information Tool

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] that focuses on the integration of

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 is spearheading the application of the ICF in clinical practice by developing ClinFIT, a clinical measure that can be tailored to specific population needs and in rapid response to public health emergencies

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.

Strengths of an ICF-based approach

- Established and internationally recognized reference system for clinical measurement and the standardized reporting of functioning information
- Mutually exclusive and cumulative exhaustive list of functioning domains
- Facilitates the tailoring of clinical measures in rapid response to public health emergencies, such as COVID-19
- Enables reporting of functioning information independent of the data collection tool or the data source
- Enhances data comparability

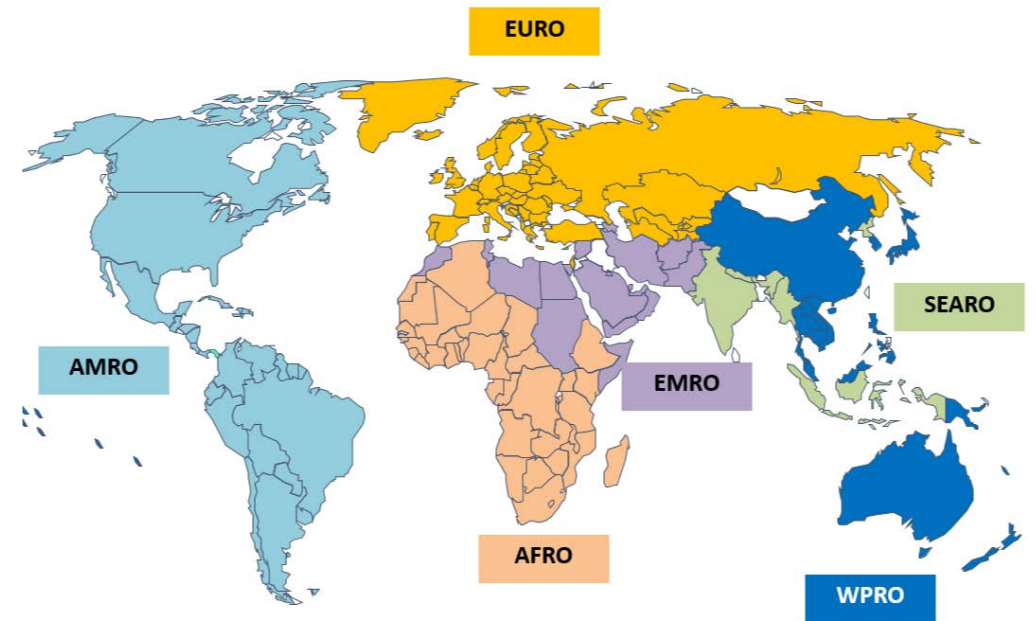
International study to develop ClinFIT COVID-19

Step 1:

Identification of functioning domains

Step 2:

Test and validate ClinFIT COVID-19
and develop an interval-scaled
score



Functioning limitations which matter to patients: ClinFIT COVID-19 Long-term version

ClinFIT COVID-19 Long-term Version
b130 Energy and drive functions <i>Psychological energy and motivational drive to move towards goals, satisfy needs and control impulses</i>
b134 Sleep functions <i>Cycle, quality and amount of sleep</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>
b440 Respiratory functions <i>Functions of breathing, including gas exchange</i>
b445 Respiratory muscle functions <i>Functions of the muscles involved in breathing</i>
b455 Exercise tolerance functions <i>Capacity of enduring physical exertion related to respiratory and cardiovascular functions</i>
b710 Mobility of joint functions <i>Range and ease of movement of a joint</i>
b730 Muscle power functions <i>Capacity to generate force through the contraction of a muscle or muscle groups</i>
s430 Structure of the respiratory system <i>Trachea, lungs, ribcage, and breathing muscles</i>

d230 Carrying out daily routine <i>Plan, manage and complete routine daily life activities</i>
d240 Handling stress and other psychological demands <i>Manage and control the psychological demands to carry out tasks demanding responsibilities involving stress and/or distractions and/or critical issues</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>
d850 Remunerative employment <i>Properly performing remunerative employment (full or part time or self-employed) in all its aspects</i>
d920 Recreation and leisure <i>Engaging in recreational or leisure activity (play, cultural and sports activities etc. during spare time)</i>

Selb M, Stucki G, Li J, Mukaino M, Li L, Gimigliano, on behalf of the ClinFIT Task Force. Developing clinfit COVID-19: An initiative to scale up rehabilitation for COVID-19 patients and survivors across the care continuum, JISPRM. 2021;4(4):174-83.

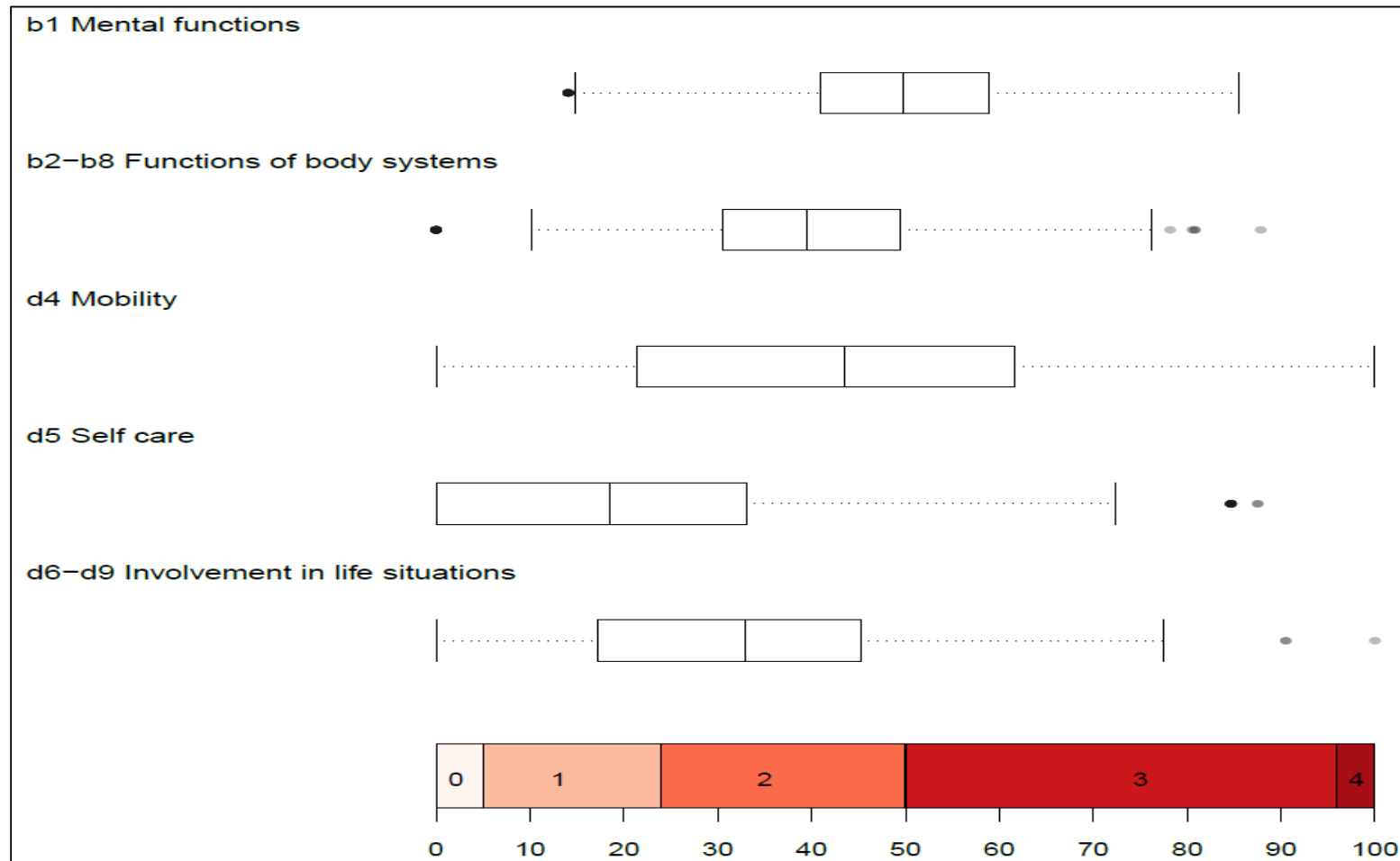
Instructions for rating - ClinFIT COVID-19

- Functioning domains: simple descriptions of ICF categories
- Experts rate functioning limitation based on all available information: patient history incl. information from PROMs, clinical examination, technical investigations
- Response options: 1-10 Numeric Rating Scale, 0-4 scale and 0-4 scale with specifications

0-10 Numeric Rating Scale

1	b130 Energy and drive functions <i>Psychological energy and motivational drive to move towards goals, satisfy needs and control</i>	No problem	0	1	2	3	4	5	6	7	8	9	10	Complete Problem	<input type="checkbox"/> Need more info	N/A <input type="checkbox"/>
2	b134 Sleep functions <i>Cycle, quality and amount of sleep</i>	No problem	0	1	2	3	4	5	6	7	8	9	10	Complete Problem	<input type="checkbox"/> Need more info	N/A <input type="checkbox"/>
3	b152 Emotional functions <i>Mental functions for the modulation of the expression of feelings and emotions</i>	No problem	0	1	2	3	4	5	6	7	8	9	10	Complete Problem	<input type="checkbox"/> Need more info	N/A <input type="checkbox"/>
4	b280 Sensation of pain <i>Unpleasant sensation indicating potential or actual damage of some body structure</i>	No problem	0	1	2	3	4	5	6	7	8	9	10	Complete Problem	<input type="checkbox"/> Need more info	N/A <input type="checkbox"/>
5	b440 Respiratory functions <i>Functions of breathing, including gas exchange</i>	No problem	0	1	2	3	4	5	6	7	8	9	10	Complete Problem	<input type="checkbox"/> Need more info	N/A <input type="checkbox"/>
6	b445 Respiratory muscle functions	No problem	0	1	2	3	4	5	6	7	8	9	10	Complete Problem	<input type="checkbox"/> Need more info	N/A <input type="checkbox"/>

Standardized reporting - interval-scaled common metric



Prodinge et al. Eur J Phys Rehabil Med. 2018 ;54(1):110-117; Maritz R, et al. J Rehabil Med. 2020;52(7):jrm00085; Prodinge B, et al. J Rehabil Med. 2020;52(10):jrm00107; Hodel J, et al. Arch Rehabil Res Clin Transl. 2021; 3(2):100121.

Key messages



- An ICF-based approach enables decision makers to provide guidance for clinical measurement and standardized reporting of functioning information
- COVID-19 impacts a broad spectrum of functioning domains ranging from body functions to activities & participation
- ClinFIT COVID-19 is a customizable and easy-to-use clinical measure that captures what matters to people with COVID-19