Background briefing

The WHO International classification of Functioning, Disability and Health (ICF)

Offered to you by the **SOCIETAL IMPACT OF PAIN (SIP)**

Pain is one of the most significant causes of disability and suffering worldwide. Unfortunately, this fact is not often addressed in health policies. [1, 2]

The problems which health care systems are facing when it comes to managing pain are diverse. One of the most significant is the lack of a 'health system quality indicator' for pain. Health system quality indicators are used to gather data and establish the relative quality of care offered between hospitals or even between countries. Measuring and managing the impact that pain has on the individual, to his/her relatives and social life, as well as on society will support the overall functioning of our health care systems by minimising the chance of pain conditions becoming chronic, and reducing long-term expenditures.

One of the challenges is to allocate budget and resources for pain management. The issue of whether chronic pain can be considered a diagnostic entity, or even a condition "in its own right", can lead to consternation. The first step in tackling this issue is to define common ground regarding the documentation of chronic pain for clinical, budget and policy purposes.

An international classification that takes pain into account is the WHO's International Classification of Functioning, Disability and Health (ICF). Along with the 11th International Classification of Diseases (ICD-11), the ICF provides a framework for documenting health at an individual and population level. For future policy development, the combined use of the ICF and ICD to document pain will be a big step forward. Systematic documentation by ICF and ICD will provide a data base for policy decisions on reimbursement, resource allocation and education.

The story of **Ms. W**

For the last three month Ms. W, 38 year-old female IT specialist, has been experiencing intermittent right lumbar «burning and pressure» pain, with sudden onset when standing up after sitting for a long period of time. She rated her pain at 7/10 at its worst and 5/10 during the examination.

Pain worsens sleeping on her back over 1+ hours and activities requiring right lower extremity. The examination revealed that Ms. W avoids bending, sitting for longer periods and doing houshold tasks. Her pain also hinders optimal performance at work. She experiences limited lumbar active range of motion.

Ms. W reports being able to walk without limitation. The patient received medication for pain and inflammation. Workplace ergonomics are sub-optimal, contributing to continued pain while sitting at her desk for 3+ hours.

The lived experience of health goes beyond the diagnosis...

ICF in clinical practice

Description of functioning, disability and health

Functioning: body function & structures, activities and participation resulting from the interaction with a person's physical, social and attitudinal environment and personal factors.

Disability: impairments in body functions & structures, activity limitations and participation restrictions resulting from the interaction with a person's physical, social and attitudinal environment and personal factors.

Health: State of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.[3]

Assessment of the functioning and disability

Identification of the presence and severity of problems in functioning using selected instruments, tests and other data collections methods, including input from the patient.

Documentation in medical records

Documentation of key functioning components in a patient-centred and comprehensive manner using a common language transcending healthcare disciplines, sectors and country borders.

Inclusion of functioning information in medical communication and documentation in medical records

Facilitates a holistic and individualised, patient-centred documentation of the patient's experience chronic pain and health beyond the diagnosis.

Using the ICF helped to highlight the interaction between Ms. W's painful movements of lower back and restrictions in work participation.

Using the ICF also allowed the aggregation of the results of Ms. W's clinical assessment and the detailed information from her case history and medical records - usually found in different documents - to optimize intervention planning.

What is the ICF

The International Classification of Functioning, Disability and Health (ICF) is the international standard for describing functioning and disability. [4]

In line with the World Health Organization's (WHO) definition of health, the ICF received approval from all 191 World Health Organization (WHO) member states during the 54th World Health Assembly on May 22, 2001 (resolution WHA 54.21).

The ICF is maintained by the World Health Organization (WHO). The ICF complements WHO's International Classification of Diseases (ICD), which contains information on diagnosis and health condition, but not on functional status. The ICD and ICF constitute the core classifications in the WHO Family of International Classifications (WHO-FIC).

ICF serves as the reference system for measuring functioning and disability at both individual and population levels.[5]

The ICF is based on a biopsychosocial model comprising of several interacting components:

BODY FUNCTIONS	BODY STRUCTURES	ACTIVITIES & PARTICIPATION	ENVIRONMENTAL FACTORS	PERSONAL FACTORS
b	s	d	e	PF

The biopsychosocial model is multi-dimensional with dynamic interactions among the components and it also includes the health condition, i.e. any disease, disorder or result of injury as coded with the International Classification of Diseases (ICD).[6]

For example, in the case of Ms. W, an adjustable height work desk may reduce her pain since she would no longer have to sit the whole day.

In turn, pain reduction would improve her sleep and ability to do housework. She may also need less medication.

HEALTH CONDITION OF Ms. W

MG30.02 Chronic primary low back pain (ICD-11)

Body functions

b134 Sleep functions
(Sleeping on back 1+ hours)

b280 Sensation of pain
(Intermitent right lumber "buring and pressure")

b710 Mobility of joint functions
(limited lumbar active range of motion)

Body structures

s760 Structure of trunk
(mild thoracic kyphosis and lumbar lordosis)

Activities

d4103 Sitting
(standing up after sitting for long period of time)

d4105 Bending
(bending)

d4153 Maintaining a sitting position
(sitting at her desk for 3+ hours)

d450 Walking
(able to walk without limitation)

Participation

d640 Doing housework
(doing heavy household tasks)

d850 Remunerative employment

Environmental factors

e1101 Drugs (Medication)
(Medication for pain and inflammation)

e130 Products and technology for employment
(sub-optimal workplace ergonomics)

Personal factors

38 years old, Female
IT specialist

ICF and chronic pain

Lived experience of the same health condition/diagnosis can vary substantially in terms of functioning and disability. A diagnosis alone is insufficient to capture what is important for patients. Not only does the ICF foster a holistic view of a person's lived experience of his/her health situation, it offers a conceptual framework that can be used to describe, measure and document the individual nuances of a person's lived experience of health. Being able to describe the a person's experience of pain in a holistic and nuanced manner would facilitate treatment.

Chronic pain affects around one in five people globally and is the leading cause of disability worldwide.[7]

Patients with chronic pain often experience a deterioration in the quality of life (QoL).[8] The ICF can be applied in assessing a person's health and functioning status, in documenting the assessment results, in goal-setting, in monitoring the progress of interventions and in re-evaluating the outcome of interventions in terms of functioning status.[9]

As with Ms. W, many patients with chronic pain frequently experience depression, anxiety, sleep disturbance, fatigue, mobility limitations, difficulties in coping with stress, changes in daily routines, work, and recreation, among other things.

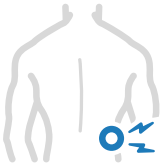
The ICF includes codes for pain!

The assessment and management of pain are important considerations in the context of applying the ICF to any health condition.

Similar to the International Association for the Study of Pain (IASP) definition, **'b280 Sensation of pain'** is described as:

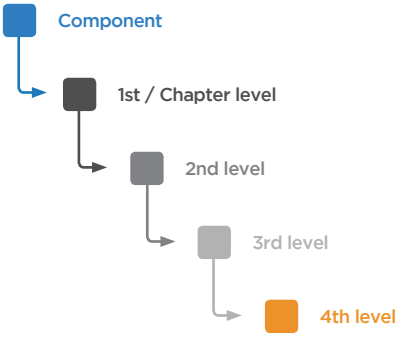
> Sensation of unpleasant feeling indicating potential or actual damage to some body structure" and includes "sensations of generalized or localized pain, in one or more body parts, pain in a dermatome, stabbing pain, burning pain, dull pain, aching pain, and impairments such as myalgia, analgesia, and hyperalgesia.[10]

"The dimensions of the biopsychosocial model of the ICF are similar to the dimensions of quality-of-life scores, of which the presence or absence of pain is one."[11]



How is ICF organised?

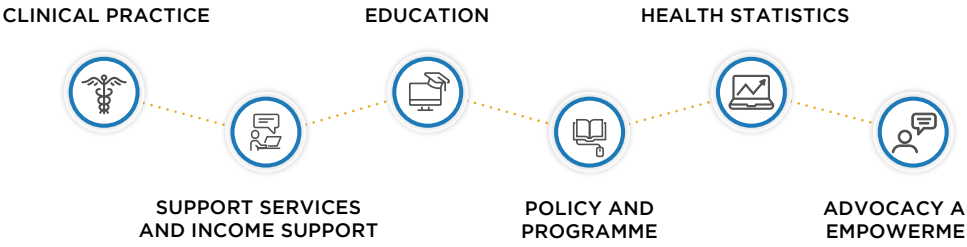
Each dimension is organized in chapters, which comprise of categories at increasing levels of detail.



b	Body functions
b2	Sensory functions and pain
b280	Sensation of pain
b2801	Pain in body part
b28010	Pain in head and neck
b28011	Pain in chest
b28012	Pain in stomach or abdomen
b28013	Pain in back
b28014	Pain in upper limb
b28015	Pain in lower limb
b28016	Pain in joints

Applications of the ICF

The ICF can be used in various ways across many areas of application, including but not limited to:



Joint Use of ICD-11 and ICF

The ICF and ICD are two complementary WHO reference classifications, both members of the WHO Family of International Classifications (WHO-FIC). WHO recommends the joint use of ICF and ICD stating that "joint use... renders better health information, identifying associations between diseases, disability and interventions. In this way knowledge could be distilled about the impact of the diseases and various interventions".[12]

IASP and the International Society of Physical and Rehabilitation Medicine (ISPRM)[13] also support the joint use of ICF and ICD.

The ICD, now in its 11th revision (ICD-11) contains for the first time a designated chapter on functioning. The supplementary section V for functioning assessments include:

- Body functions - e.g., VB70 Exercise tolerance functions or VC00 Mobility of joint functions
- Activities and participation entities - e.g., VC21 Carrying, moving and handling objects
- Option of using WHO's WHO Disability Assessment Schedule (WHO-DAS) 2.0 for the assessments at the individual level and Model Disability Survey (MDS) at the population level

Although a good starting point for orienting users of the ICD to the concept of functioning in clinical documentation, WHO and the ICF community encourages the use of ICF itself for more detailed descriptions and documentation of functioning and disability.

ICD-11 also contains new and more specific codes for pain, e.g. MG30 Chronic pain, MG30.0 Chronic primary pain, MG30.3 Chronic secondary musculoskeletal pain, etc.

Benefits of joint use of ICD-11 and ICF

- Holistic view of person's lived experience of his/her health situation
- Individualized pain management through the consideration of a person's functioning in everyday life
- Improved health care documentation and pain management through standardization

Do you want to know more about ICF?

You find the ICF at the WHO website here:
https://www.who.int/classifications/icf/en/

An ICF e-Learning Tool is available under:
https://www.icf-elearning.com/

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3 Constitution of the World Health Organization. Geneva (Switzerland): WHO. 1948.

4 World Health Organization (2018). *International Classification of Functioning, Disability and Health (ICF).* Retrieved from https://www.who.int/classifications/icf/en/. Last consulted on 8 August 2019.

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12 Melissa Selb, MSc, Friedbert Kohler, MD, Molly Meri Robinson Nicol, DC Marcelo Riberto, MD, PhD, Gerold Stucki, MD, MS, Cille Kennedy, PhD and Bedirhan Üstün, MD. ICD-11: A comprehensive picture of health, an update on the ICD–ICF joint use initiative; J Rehabil Med 2015; 47: 2–8.

13 The IASP classification of chronic pain for ICD-11: functioning properties of chronic pain Nugraha et al. PAIN. 2019 Jan;160(1):88-94.

The 'Societal Impact of Pain' (SIP) platform is a multi-stakeholder partnership led by the European Pain Federation EFIC and Pain Alliance Europe (PAE), which aims to raise awareness of pain and change pain policies. The platform provides opportunities for discussion for health care professionals, pain advocacy groups, politicians, healthcare insurance providers, representatives of health authorities, regulators, and budget holders. The scientific framework of the SIP platform is under the responsibility of EFIC and the strategic direction of the project is defined by both partners. The pharmaceutical companies Grünenthal GmbH and Pfizer are the main sponsors of the Societal Impact of Pain (SIP) platform.