



Societal Impact of Pain

Health Data Standardization Workshop

Implementation of ICD-11 and ICF



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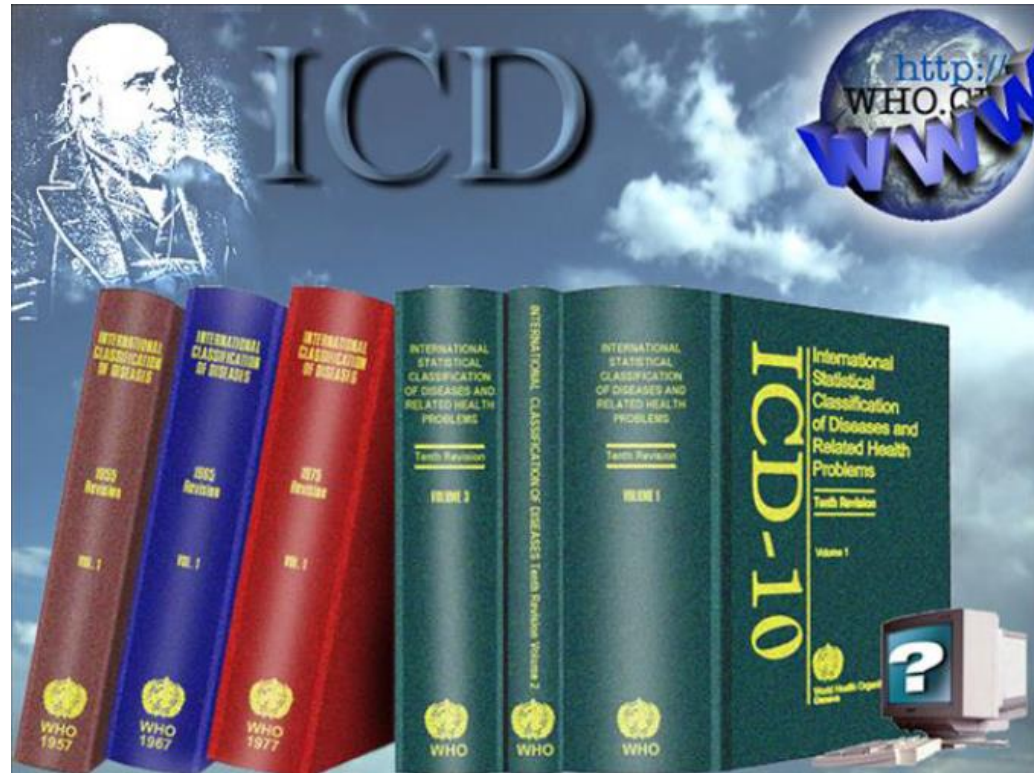
How ICD-11 differs from previous versions

How this matters for pain medicine and digital health

Next steps towards implementation of ICD-11 and ICF

- Disclosures (2009-2019):
- Employment: Heidelberg University
- Advisor: Astellas, Astra-Zeneca, Bauerfeind, Bayer, Boehringer Ingelheim, Galderma, Glaxo Smith Kline, Grünenthal, Lilly, Merz, Merck-Sharpe & Dohme, Novartis, Pfizer, Sanofi, Schwarz-Pharma/UCB
- Shareholder: none
- Honoraria: lectures for Astellas, AWD, Boehringer Ingelheim, Dr. Kade, Nycomed, Grünenthal, Lilly, Mundipharma, Pfizer, Schwarz-Pharma/UCB, Medichem, Teva
- Grants: BMBF, DFG, EU, NIH, Dr. Kade, Boehringer Ingelheim, Astellas, AbbVie, Bayer
- Reviewer: several public funding sources

International Classification of Diseases



Initially developed for: mortality statistics

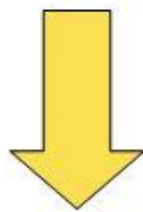
Increasingly used for: morbidity statistics, treatment pathways,
reimbursement, research

11th version no longer a book (WHA , May 25, 2019)

ICD 11 Foundation Component and Linearizations

ICD-11 content model parameters

- Definitions, synonyms
- Clinical descriptions
- Manifestation properties
- Causal properties
- Functional properties



Value Set

SNOMED-CT, International Classification of Functioning, Disability and Health (ICF), International Classification of External Causes of Injury (ICECI)...

Pain linearization

Linearizations



ICD-11 Code	Description	Specialty	Adaptation	Primary Care	Morbidity	Mortality
A000	Cholera due to <i>Vibrio cholerae</i> 01, biovar cholerae					
A001	Cholera due to <i>Vibrio cholerae</i> 01, biovar eltor					
A009	Cholera, unspecified					
A020	Typhoid fever, unspecified					
A021	Typhoid meningitis					
A022	Typhoid fever with heart involvement					
A023	Typhoid pneumonia					
A024	Typhoid arthritis					
A025	Typhoid osteomyelitis					
A026	Typhoid fever with other complications					
A030	Cholera due to <i>Vibrio cholerae</i> 02, biovar cholerae					
A031	Cholera due to <i>Vibrio cholerae</i> 02, biovar eltor					
A039	Cholera, unspecified					
A040	Shigellosis due to <i>Shigella dysenteriae</i>					
A041	Shigellosis due to <i>Shigella flexneri</i>					
A042	Shigellosis due to <i>Shigella boydii</i>					
A043	Shigellosis due to <i>Shigella sonnei</i>					
A044	Other shigellosis					
A045	Shigellosis, unspecified					
A046	Enteropathogenic <i>Escherichia coli</i> infection					
A047	Enterotoxigenic <i>Escherichia coli</i> infection					



Ontologically organized all encompassing structure (“foundation layer”)

Nonlinear structure (**electronic database**, not a book)

Browser and Coding tool: <https://icd.who.int/browse11>

public access to entire foundation layer, multilingual, synonyms

ICD-API (application programming interface) access for software

Favourable for health informatics and digital health

Foundation contains all entities for **diseases**, disorders, injuries, external causes, signs, and **symptoms** in a network of relationships

Content models (definition, **inclusion and exclusion** criteria)

Shift in focus from mortality to **morbidity**

Favourable for inclusion of classification of chronic pain

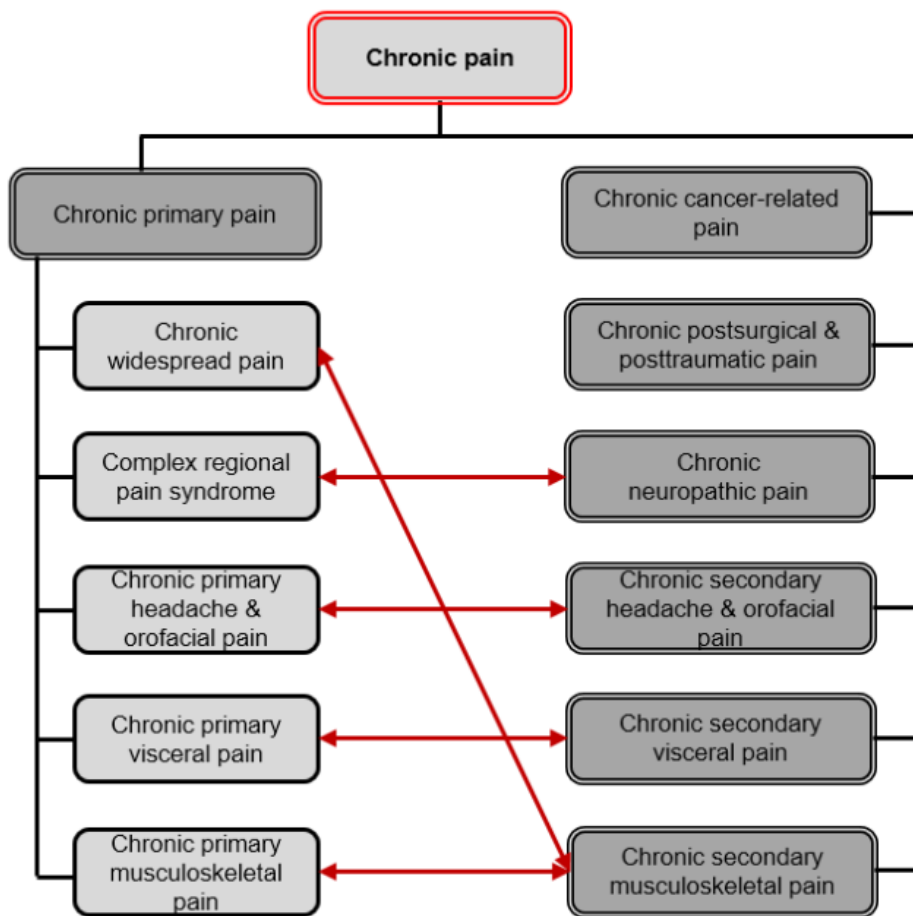


The IASP Task Force

Chronic Pain Classification for ICD-11



Antonia Barke, Winfried Rief, Rolf-Detlef Treede



↔ differential diagnosis

Chronic secondary pain syndromes

Member state level:
Treatment pathways
Multimodal management
Participation (→ ICF)
Workforce
Absenteeism
Reimbursement
...

Core Health Indicators

2018
Global Reference List of
100 Core Health Indicators
(plus health-related SDGs)

EU and global level:

Morbidity statistics

Health care quality indicators

Health data standardization

...

An indicator is prioritized as “core” and included in the List if it meets all of these criteria:

1. The indicator is **prominent in the monitoring of major international declarations** to which all member states have agreed, or has been identified through international mechanisms such as reference or interagency groups as a **priority indicator** in specific programme areas.
2. The indicator is scientifically robust, useful, accessible, understandable as well as specific, measurable, achievable, relevant and timebound.
3. There is a **strong track record of extensive measurement experience** with the indicator (preferably supported by an international database).
4. The indicator is being **used by countries** in the monitoring of national plans and programmes.

Pain is mentioned (page 148) as **additional indicator**. Additional indicators are indicators which are considered **relevant and desirable** but did not meet all the criteria mentioned above or currently have serious measurement challenges.



How this matters for pain medicine and digital health



- **Chronic pain as a symptom and a disease**
 - ‘chronic primary pain’ syndromes may be conceived as diseases in their own right.
 - ‘chronic secondary pain’ syndromes may be conceived as symptoms of underlying diseases, but their management may be necessary beyond treatment of those diseases.
- **Desired outcomes of new classification in ICD-11:**
 - improved diagnostic coding
 - indication for multimodal pain management
 - better health care statistics
 - facilitated cross-border healthcare
 - guidance for research programmes



Next steps towards implementation of ICD-11 and ICF



WHO Family of International Classifications: ICD, ICF, ICHI

- Foundation Layer
- Mortality and Morbidity Statistics Linearization (ICD-11 MMS) Version for preparing implementation (18.06.2018)
Approved by World Health Assembly (29.05.2019)
Mortality reporting by 01.01.2022
Final update of ICD-10: 2019

Member states (and EU):

- Use ICD-11 for health data standardization
- Introduce ICD-11 for morbidity reporting
- Introduce ICF for participation and inclusion
- Introduce chronic pain as a health care indicator

Thanks to:



IASP office

IASP TF:

Rief, Barke, Korwisi (Marburg),

IASP TF:

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Perrot, Scholz, Schug, Smith, Svensson, Vlaeyen , Wang

WHO:

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ISPRM/ICF:

Gutenbrunner, Nugraha, Stucki, Selb

Pilot field tests:

Casser, Fors, Schug, Stubhaug, Ushida

IASP-SIGs:

Acute Pain, Cancer pain, Neuropathic pain, Orofacial pain,
Musculoskeletal pain, Visceral pain

Member states:

Germany (Vogel, DIMDI), Japan (Noguchi, JASP),
Malaysia (Cardosa, MASP), Thailand (Nurithisard, TASP)

See you in Amsterdam:

18th World Congress on Pain, August 4-8, 2020

Proposals website to open shortly