ICD-11
Global Standard for Health Information

is the international standard for recording, reporting and measuring health & health services

➢ Mortality Statistics
➢ Morbidity Statistics
➢ Quality and Safety
➢ Primary care
➢ Health Care Costs
➢ Clinical documentation
➢ Progress towards SDGs
ICD-11
Multiple Uses

ICD-11
icd.who.int
ICD-11
Much more than diagnoses

- Diagnoses
- Injuries
- Signs
- Symptoms
- Findings
- Activities
- Places
- Reasons for encounter
- Objects
- Severity

- Conditions influencing health status
- Mechanisms of harm
- Infectious agents
- Anatomy
- Laterality
- Substances
- Histopathology
- Devices
- AND MORE
WHO Family of International health related Classifications (WHOFIC)

**REFERENCE Classifications**

- International Classification of Diseases
- International Classification of Functioning, Disability & Health
- International Classification of Health Interventions

**RELATED Classifications**

- International Classification of Primary Care (ICPC)
- The Anatomical, Therapeutic, Chemical (ATC) classification with Defined Daily Doses (DDD)
- ISO 9999 Technical aids for persons with disabilities – Classification and Terminology
- International Classification of Nursing Practice

**Special versions**

Derived from reference classifications

Application of the International Classification of Diseases to
- Dentistry and Stomatology
- Dermatology
- Neurology
- Paediatrics
- Pain
- Oncology
- Mental and Behavioural Disorders

ICD national applications
ICH national applications
WHO Family of International health related Classifications - Terminology view

ICF  
ICD-11  
ICHI

Extension Codes
WHO INN (medicaments)
WHO Devices
Histopathology (tumours)
Anatomy
Details of external causes
Severity

Related Classifications and terminologies
ICNP, ICPC, ATC,
ISO 9999, SNOMED,
Orphanet
ICD Revisions

![Diagram showing intervals (years) between ICD revisions from 1900 to 2018.](image)

- ICD-1 (1900) to ICD-2 (1909): 9 years
- ICD-2 (1909) to ICD-3 (1919): 10 years
- ICD-3 (1919) to ICD-4 (1929): 10 years
- ICD-4 (1929) to ICD-5 (1938): 9 years
- ICD-5 (1938) to ICD-6 (1948): 10 years
- ICD-6 (1948) to ICD-7 (1955): 7 years
- ICD-7 (1955) to ICD-8 (1965): 10 years
- ICD-8 (1965) to ICD-9 (1975): 10 years
- ICD-9 (1975) to ICD-10 (1990): 15 years
ICD-11

55,000 codes in ICD-11 v 14,400 in ICD-10

31 countries were involved in ICD-11 field testing

1,673 participants taking part in 112,383 code assignments

#ICD11
ICD-11

Revision was more than necessary

- Improve usability
  - Less training
- Update scientific content
- Enable coding of all clinical detail
- Make eHealth (digital) ready for use in electronic(digital) environments
- Linkage to relevant other classifications and terminologies
- Full multilingual support on translation and output
ICD-11 Timeline

- 2001 Start planning
- 2007 Start ICD-11 editing
- 2019 Adoption World Health Assembly
- 2022 Official reporting with ICD-11

Note: national use can start earlier
ICD-11 Scientific clinical input

- Extensive participation by national and international scientific societies
- Over 300 clinical specialists organized in 30 topic advisory groups, 270 Institutions, 55 countries
- Input from clinical modifications of old ICD-10 – and they were based on clinical needs
- Reviews, testing, commenting => 99 countries
ICD-11 Foundation – input from ICD-10 and derived classifications, links

- **Clinical needs** (ICD-10MM, ICD-10 DA...)
- **Cancer registration** (ICD-O)
- **Substances INN (=> ATC)**
- **ICH** dimensions (International Classification of Health Interventions)
- **National needs** (ICD-10 national modifications Australia, Canada, Germany,...)
- **ICF** (Functioning)
- **Terminologies**, eg SNOMED Orphanet ICPC
- **External causes of injury** ICECI

- **Index**
- **ICD 11 for Mortality and Morbidity Statistics**
- **Specialty versions**
- **Content model**
- **Extension codes**
Examples of problems solved with ICD-11

- Antimicrobial resistance - essentially missing in ICD-10
- HIV subdivisions - outdated detail in ICD-10
- Skin cancer - melanoma types missing – basalioma missing in ICD-10
- Valve diseases - outdated structure, need by valve, less rheumatic
- Postprocedural conditions - clarify when use 19 and when not for postprocedural
- Diabetes coding clinically more relevant and flexible
- External causes - Loosing detail in non-accidents; traffic accidents
ICD-11 IT friendly –

- **Web services** – full functionality available in the software of choice - *you keep your preferred software user interface*
  - **Online services** – everybody can use ICD without any local software
  - **Offline services** – all the functionality on a local computer and updates when internet is available

- Output files – formats include CSV, ClaML and others as necessary

- Print version – Real paper version gives look and feel of the past
ICD API
Web services

ICD API allows programmatic access to the International Classification of Diseases (ICD). You may use this site to access up to date documentation on using the API as well as managing the keys needed for using the API.

Register for using the API

Register to get access to the APIs (if you haven’t registered already)

View API access key(s) (requires logging in)

How to Use the APIs

ICD REST API Documentation
ICD API Authentication

https://icd.who.int/icdapi
ICD-11 User friendly

- Easier coding – coding tool, more instructions built in
- Guidance how to use code combinations
- Specialty versions focus on needs for particular specialties
- And all features are available for every language version
Browser and Coding tool

https://icd.who.int
The ICD-11 browser

- Blue browser is the official release of ICD-11
- Not only a search tool, but (orange browser) also the mechanism to add proposals and comments after registering
- Registered users are able to:
  - Comment on the content
  - Submit proposals for change
  - Read comments and proposals from others
  - Access PDF or Word versions of the classification
- Multiple languages – controlled translation platform
ICD-11 (Mortality and Morbidity Statistics)

01 Certain infectious or parasitic diseases
02 Neoplasms
03 Diseases of the blood or blood-forming organs
04 Diseases of the immune system
05 Endocrine, nutritional or metabolic diseases
06 Mental, behavioural or neurodevelopmental disorders
07 Sleep-wake disorders
08 Diseases of the nervous system
09 Diseases of the visual system
10 Diseases of the ear or mastoid process
11 Diseases of the circulatory system
12 Diseases of the respiratory system
13 Diseases of the digestive system

ICD-11 Maintenance Platform

Welcome to the ICD-11 Maintenance Platform.

IMPORTANT! The content made available here is the draft of the ICD-11. It is a work in progress and is therefore not final.

For the latest release of the classified system, please register below:

Register

You need to create an account to classify by writing proposals in the comment area below.

Please note that the accounts you create for classification are still valid.

User Guide
Training Videos
Caveats
ICD-11 Reference Guide
ICD Revision Site
Downloads
Frozen Releases

World Health Organization
ICD-11 Coding tool

- This tool works by searching all ICD-11 terms and is the ICD-11 index

- Generates and dynamically updates two different outputs
  - Word list
  - Matched entities

- Synonyms, word completion... - like online search engines
Simple search

Type a diagnostic statement into the Coding Tool

e.g. *cancer of stomach*
Simple search

Type a diagnostic statement into the Coding Tool
e.g. *Osteoarthritis of right knee*
Flexible search

Type a diagnostic statement into the Coding Tool

e.g. *splenic flexure colonic liposarcoma*
Flexible search cont.

Try flexible search

The Coding Tool now finds an almost exact match
No change to ICD-10

- Conditions included in following chapters have not been subjected to moves:
  - Maternal
  - Perinatal
  - Injury
  - Tumour

- Mortality coding rules have kept their intent
ICD-11

- 26 chapters, (17000 codes)
  - Special tabulation lists
    (for analysis only, e.g. infections by agent)

- Functioning section (for assessment)

- Supplementary chapter traditional medicine diagnoses

- Extension codes
Special Topic gaming disorder

• Only for very serious cases
  – impaired control over gaming
  – increasing priority given to gaming - takes precedence over other life interests and daily activities;
  – continuation or escalation of gaming despite the occurrence of negative consequences.
  – over a period of at least 12 months.
Reference Guide

- Detailed description of structure of ICD
- Detailed description of differences between ICD-11 and ICD-10
- Rationale for changes
- Updated mortality rules
- Fully rewritten morbidity rules
Mortality Rules – Principles for revision

- Basically no major changes in the rules
  - Minimizing the rule change would allow assessing the impact of structure change better

- Text has been formatted using more easy wordings
  - In order to enhance user understandings

- Detailed review reflects the classification structure change to the mortality rules
Morbidity rule sets

- Based on many countries experience with ICD-10
- Rules for coding an episode (main diagnosis)
  - Additional rules for coding patient safety
  - Additional rules for coding traditional medicine
- Recommendations for recording
  - Main diagnosis
  - Main intervention
  - Additional diagnoses
  - Additional interventions
Morbidity Rules

New definition of main diagnosis:

**Reason for encounter after assessment at the end of the stay!!!**

Patient comes with cough

=> examinations

=> has pneumonia (that explains the cough)

=> Main diagnosis is pneumonia
OPTIONAL Extension codes – add all the detail you need, if you want

Type 1
- Severity
- Temporality (course of the condition)
- Temporality (Time in life)
- Aetiology
- Anatomic detail Topology Anatomic location
- Histopathology (ICD_O)
- Biological Indicators
- Consciousness
- Substances
- External Causes detail
- Injury Specific detail
- Health Devices, Equipment and Supplies

Type 2
- Main Condition
  - Reason for encounter
  - Reason for admission
  - Main Resource Condition
- Present on Admission
  - Developed after admission
  - Uncertain timing relative to admission
- Provisional diagnosis
- Diagnosis confirmed by...
  - Lab
  - Serology
  - Histology
  - Genetics
  - Imaging –
  - Unspecified means
- Differential Diagnosis

*International Nonproprietary Names: https://www.who.int/medicines/services/inn/en/*
Patient safety

A cluster of codes to denote the "Injury or Harm" that resulted from the event

"Cause" of harm
- Substances
- Procedures
- Devices
- Other Aspects of Care

"Mode or Mechanism" of harm
- e.g. overdose/underdose for substances
- e.g. accidental perforation for procedures
- e.g. dislodgement/malfunction for devices
- e.g. mismatched blood used in transfusion for other aspects of care
A clinical example - device

A respirator malfunction causes a barotrauma with air embolism in a patient

Coding:

- **PK9C.1 & XD4M09** Cause of harm (*medical devices associated with injury or harm & Ventilator, Adult*)
- **PL12.1** Mode/mechanism (*Functional device failure*)
- **NF0A.0** Harm (*Air embolism, traumatic*)
A clinical example - medicament

A patient presents with an intracranial hemorrhage arising while on warfarin anticoagulation. INR found to be 7.0 and careful history reveals patient to have accidentally taken double doses over several days.

Coding:

- **PH80 & XE9AC** Code for the cause of harm (*exposure to drug in therapeutic intent & warfarin*)
- **PH92.0** Code for mode/mechanism (*overdose*)
- **8B00.Z** Code for actual harm (*intracranial hemorrhage*)
09 Enfermedades del aparato visual

Descripción
Cualquier enfermedad del aparato visual, que abarca los ojos y los anejo oculares, las vías ópticas y las áreas cerebrales, que inicia y controla la percepción visual y el comportamiento guiado por la vista.

Exclusiones
- Algunas afecciones que se originan en el período perinatal (KA00-KD5Z)
- Algunas enfermedades infecciosas o parasitarias (1A00-1H0Z)
- Enfermedades endocrinas, nutricionales o metabólicas (5A00-5D46)
- Traumatismos, intoxicaciones u otras consecuencias de causas externas (NA00-NF2Z)
- Atrofia cortical posterior (8A21.0)
- Complicaciones del embarazo, parto y puerperio

Codificado en otra parte
- Neoplasias del ojo o de los anejo oculares
- Motivos para contactar con el sistema de salud en relación con los ojos o la visión
- Contusión en el globo ocular o los tejidos orbitarios (NA06.9)
- Cuerpo extraño en múltiples partes de la parte externa del ojo (ND70.2)
- Albinismo oculocutáneo (EC23.20)
- Traumatismo en el globo ocular (NA06.8)
- Lesión traumática en el ojo durante el parto (KA41)
- Síntomas, signos o resultados clínicos anormales relativos al aparato visual (MC10-MC2Y)
- Anomalías estructurales del desarrollo prenatal del ojo, el párpado o el aparato lagrimal (LA10-LA1Z)

All Index Terms
There are no index terms associated with this entity
09 视觉系统疾病

描述
This refers to any diseases of the visual system, which includes the eyes and adnexa, the visual pathways and brain areas, which initiate and control visual perception and visually guided behaviour. [No translation available]

不包括

- 起源于围生期的某些情况 (KA00-KD5Z)
- 某些感染性疾病或寄生虫病 (1A00-1H0Z)
- 内分泌、营养或代谢疾病 (A6A0-5D46)
- 损伤、中毒或外因的某些其他后果 (NA00-NF2Z)
- 后部皮质萎缩 (8A21.0)
- 妊娠、分娩和产褥期的并发症

编码至他处

- 眼或眼附属器的肿瘤 ()
- 与视力或视力有关的医疗保健系统接触的原因 ()
- 眼球或眶组织挫伤 (NA06.9)
- 外眼多部位异物 (ND70.2)
- 眼皮肤白化病 (EC23.20)
- 创伤性眼球损伤 (NA06.8)
- 眼的产伤 (KA41)
- 视觉系统的症状、体征或临床所见 (MC10-MC2Y)
- 眼、眼睑或泪器结构发育异常 (LA10-LA1Z)
Implementation package

- Browser, Coding tool, API
- Reference Guide (user manual - online)
- Information material (online)
- Transition guide
- Translation tool
- Mapping between ICD-11 and ICD-10
- Training material (in preparation)
ICD-11  for you – by you – for best possible health for all people
Thank you