ICD-11:
New features, tooling environment, APIs, testing & implementation arrangements and linkages with SNOMED CT

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World Health Organization
Why ICD-11?

- Up-to-date scientific knowledge – statistical continuity
- Serving multiple use case (mortality & morbidity statistics, health care cost, primary care, quality and safety, progress towards SDGs, clinical documentation, research)
- Improve usability
  More clinical detail – code combinations
  Easy access & less expensive training
- Improved index
- Improved incorporation in electronic environments – not just a print product
- Linkages to other relevant classifications/terminologies (ICD-O, ICPC, ICECI, ICF, SNOMED-CT, ATC, eML etc.)
- Improve comparability of translations
Problems of ICD-10 – examples
Solved in 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- HIV subdivisions - **outdated** detail in ICD-10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- Valve diseases - **outdated** structure, need by valve, less rheumatic
- Chapters 1-18 versus Chapter 19 - **clarify** when use 19 and when not for postprocedural
- **Regrouping** necessary - Allergies and autoimmune diseases
- External causes - **Loosing detail** in non-accidents; traffic accidents
ICD-11 Chapters

01 – Infectious diseases
02 – Neoplasms
03 – Diseases of the blood or blood-forming organs
04 – Disorders of the immune system
05 – Endocrine, nutritional and 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
14 – Diseases of the skin
ICD-11 Chapters Cont.

15 – Diseases of the musculoskeletal system or connective tissue
16 – Diseases of the genitourinary system
17 – Conditions related to sexual health
18 – Pregnancy, childbirth or the puerperium
19 – Certain conditions originating in the perinatal period
20 – Developmental anomalies
21 – Symptoms, signs or clinical findings, not elsewhere classified
22 – Injury, poisoning or certain other consequences of external causes
23 – External causes of morbidity or mortality
24 – Factors influencing health status or contact with health services
25 – Codes for special purposes
26 – Traditional medicine conditions – Module 1
V – Supplementary section for functioning - CF derived linked with WHODAS 2, MDS.
X – Extension Codes
ICD-11 Classification System for coding Quality & Safety Events

**SOURCE OF EVENT**

- **Substances**
  - e.g. insulin
  - e.g. overdose/under-dose
  - e.g. hypoglycemia

- **Procedures**
  - e.g. endoscopy
  - e.g. accidental perforation
  - e.g. subcutaneous emphysema

- **Devices**
  - e.g. knee implant
  - e.g. dislodgement/malfunction
  - e.g. patello-femoral pain

- **Other aspects of care**
  - e.g. blood transfusion
  - e.g. mismatched blood used
  - e.g. febrile non-hemolytic transfusion reaction

**What went wrong?**

**Mode/Mechanism of harm or injury**

**Harm or injury resulting from event**

**In what way? Involving which aspect of care?**

World Health Organization
ICD-11 Changes
Chapter 26 Traditional Medicine conditions - Module I

- Diagnostic categories

- Now module 1: Traditional medicine from ancient China now commonly used in China, Japan, Korea and elsewhere around the world

- Other modules can be added

- The Chapter is a mirror of clinical practice and reality. The TM Chapter categories were derived from:
  - National Clinical Modifications of ICD (i.e. Korean ICD version, KCD-7 Disease Codes of Korean Medicine);
  - National TM Classifications (e.g. Chinese TCM classification GB 95/97, Japanese Kampo Medicine Code Set);
  - Regional Terminologies (i.e. WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region);
  - The Chapter also represents the most common diagnoses used by TM practitioners in other Regions (e.g. Europe and US).
ICD-11 Supplementary section for functioning

- Facilitate **generic functioning assessment**
- The entities are **linked with** the WHO Disability Assessment Schedule 2.0 (**WHO DAS 2.0**) and WHO Model Disability Survey (**MDS**). This will allow to compute general and domain specific summary scores.
- The list will includes **47 entities** is focusing on ICF functioning domains which have high explanatory power (**ICF Annex 9**). The list could be considered a linearization of ICF. These would be optional codes to be used via post-coordination
- **supplementary functioning codes**
The problem of exploding cycling codes in ICD-10

- The history of cycling codes
  - **1972 ICD-9**: 8 codes
  - **1999 ICD-10**: 587 codes

- Example of a confounded code
  - V12.24 Pedal cyclist injured in collision with two- or three-wheeled motor vehicle, unspecified pedal cyclist, non-traffic accident, while resting, sleeping, eating or engaging in other vital activities
Defusing the exploding bicycle:
500 codes in pieces

- **10 things to hit...**
  - Pedestrian / cycle / motorbike / car / HGV / train / unpowered vehicle / a tree / other

- **5 roles for the injured...**
  - Driving / passenger / cyclist / getting in / other

- **5 activities when injured...**
  - resting / at work / sporting / at leisure / other

- **2 contexts...**
  - In traffic / not in traffic
ICD-11 Extension codes

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

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
Differences to ICD-10- Coding scheme

- **The chapter numbering:**
  - Arabic numbers (not roman numerals)

- **The coding scheme for categories:**
  - Minimum 4 characters
  - 2 levels of subcategories

- **Coding scheme**
  - A letter is always in the 2nd position to differentiate from ICD-10 codes
  - No L,l (L,l); 0,O (Zero, o)

- **First character of code always relates to the chapter.** Numbers 1-9 are used for the first nine chapters and letters are used for chapters 10 to 26

- **Residual categories use Y for other, Z for unspecified**
Coding combinations for more detail

- One disease => one code
  Stem codes only can be used alone
  i.e. extension codes are **never** used alone
  *Fracture of humerus* =
  **NB52.4** Fracture of shaft of humerus

- One disease => multiple codes (cluster)
  **Stem code + stem code(s)**
  *Mitral valve stenosis with right ventricular failure* =
  **BB60.Z / BC83**
  (BB60.Z Mitral valve stenosis, unspecified; BC83 Right ventricular failure)

  **Stem code + extension code(s)**
  *Fracture of right humerus shaft* =
  **NB52.4 & XK876572005**
  (NB52.4 Fracture of shaft of humerus; XK876572005 Right)

  **Stem code + stem code(s) + extension code(s)**
  *Comminuted fracture of right humerus shaft* =
  **NB52.4 & XK876572005 & XJ2006159364**
  (NB52.4 Fracture of shaft of humerus, XK876572005 Right; XJ2006159364 Comminuted fracture)
ICD-11 Content model

1. ICD Concept Title
2. Hierarchy, Type and Use
   a) Parents
   b) Type
   c) Use
3. Textual Definition(s)
   a) Description (short)
   b) Definition (long)
4. Terms
   a) Index Terms
      1. Synonyms
      2. Inclusion Terms
   b) Exclusion Terms
5. Clinical Description
   1. Body System(s)
   2. Body Part(s) [Anatomical Site(s)]
   3. Manifestation Properties
      1. Signs & Symptoms
      2. Findings
   4. Causal Properties
   5. Etiology Type
      1. Infection (agents)
      2. Injury (mechanisms)
   6. Risk Factors
   7. Genomic Characteristics
   8. Temporal Properties
   9. Severity Properties
   10. Functional Properties
   11. Specific Condition Properties
   12. Treatment Properties
   13. Diagnostic Criteria
The **Foundation Component**

- is a multidimensional collection of all ICD entities.
- Entities can be diseases, disorders, injuries, external causes, signs and symptoms. Some entities may be very broad e.g. ‘injury of the arm’, others are more detailed, e.g. ‘laceration of the skin of the thumb.’
- has the necessary information to use the entities to **build a tabular list** (a mono hierarchy in the style of a traditional statistical classification). E.g. includes information on where and how a certain entity is represented in a tabular list, whether it becomes a grouping, a category with a stem code, or whether it is mentioned as an inclusion term in a particular category.
The ICD-11 Tabular lists

- Tabular lists are subsets of the foundation component, that are:
  - **Fit for a particular purpose:** reporting mortality, morbidity, or other uses
  - In a tabular list, entities of the foundation become categories that are Jointly Exhaustive and Mutually Exclusive of each other
  - Each category is given a single parent
  - Residual categories: Other (*.8) Unspecified (*.9) generated for each linearization

Examples of ICD-11 Tabular lists
- ICD-11 Mortality and Morbidity Statistics (ICD-11 MMS)
- ICD-11 Primary Care
- Specialty tabulations
  - Dermatology
  - Oncology
  - Mental Health
  - Traditional Medicine
  - ...
- National tabulations (CM, AM, CA, GM...)

ICD-11
International Classification of Diseases for Mortality and Morbidity Statistics
Revision Edition

World Health Organization
ICD-11
Making Classification from Foundation
Making Classification from Foundation
ICD-11 Index terms

– Synonyms
– Entities and Synonyms below the “shoreline” include
  • categories in the ICD-11 MMS
    – e.g. *Hutchinson-Gilford syndrome* under LD2B Syndromes with premature ageing appearance as a major feature
  • Residual categories
    – e.g. *Capsular age-related cataract* under 9B10.0Y Other specified age-related cataract
## Example of a telescopic tabulations

<table>
<thead>
<tr>
<th>Title</th>
<th>Primary Care MMS.</th>
<th>Ophthalm.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataract</td>
<td>code</td>
<td>code</td>
</tr>
<tr>
<td>Age-related cataract</td>
<td>code</td>
<td>code</td>
</tr>
<tr>
<td>Cortical age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Nuclear age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Cataracta brunescens</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Nuclear sclerosis cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Capsular and Subcapsular age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Capsular age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Anterior subcapsular polar age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Posterior subcapsular polar age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Incipient age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Coronary age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Punctate age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Water clefts</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Advanced or mature age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Mature age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Subtotal advanced or mature age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Advanced or mature age-related cataract, total cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Morgagnian age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Calcified age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
<tr>
<td>Combined forms of age-related cataract</td>
<td>other</td>
<td>code</td>
</tr>
</tbody>
</table>
ICD-11 & SNOMED CT Harmonization

- 1200 ICD-11 concepts added in SNOMED CT from the ICD-11 Mortality and Morbidity Linearization
- Editorial feedback on ICD-11 MMS
- Mapping methodology review
Issues when mapping SNOMED CT to ICD-11 MMS (or other ICD-11 Tabulations/Linearizations)

Heart diseases are found in different chapters:
- Circulatory
- Infectious
- Endocrine
- Developmental
- ....
Issues when mapping SNOMED CT to ICD-11 MMS (or other ICD-11 Tabulations/Linearizations)

Entity has a code

Shoreline has a code grouped into a category; has URI for recording, if desired

1CSC.11  1CSD.13  1CS.1Y  1CS.1Z
http://id.who.int/icd/entity/1959883044
http://id.who.int/icd/entity/685093552
http://id.who.int/icd/entity/1302232870

Mapping residual categories and entities that are below the shoreline

http://id.who.int/icd/entity/1104303944
http://id.who.int/icd/entity/588527993
http://id.who.int/icd/entity/854762584
http://id.who.int/icd/entity/154765035
http://id.who.int/icd/entity/682536148
http://id.who.int/icd/entity/307264938
http://id.who.int/icd/entity/961032639
http://id.who.int/icd/entity/804089791
http://id.who.int/icd/entity/1040970454
http://id.who.int/icd/entity/137068483
http://id.who.int/icd/entity/1530937152
http://id.who.int/icd/entity/608978790
http://id.who.int/icd/entity/1501615629
Mapping SNOMED-CT with ICD-11

- Map SNOMED CT with ICD-11 Foundation Component. This will allow for:
  - more stability
  - increased detail
  - better comparability

- All ICD-11 Foundation Component elements will be defined by “query expressions” against the Common Ontology
ICD-11 Tools

http://apps.who.int/classifications/icd11/browse/f/en

- **Coding tool** (multilingual)
  - Index based searching of classification
  - spelling-synonyms no problem

- **ICD-11 browser** (multilingual)
  - See foundation and tabular list (linearization) – grid view - postcoordination
  - Download versions
  - ‘frozen’ versions
  - See differences

- **Proposal and commenting tool**
  - Make suggestions and discuss them
  - Notifications

- **Review tool**
  - Peer review categories and definition

- **Testing tool** (multilingual)
  - Coding of diagnostic terms in ICD-11 and ICD-10
  - Test classification in multiple languages.

- **Translation tool**
  - Translate in your language

- **Mapping tool**
  - See mapping at detailed level – download maps
  - Comment mapping to and from ICD-10
Hosting arrangements for ICD Tools

- Cloud-based
  - more reliable
  - higher performance

- New web-domains
  - URIs:
    - e.g. http://id.who.int/icd/entity/2016376826
  - URLs
    - www.icd.who.int
    - https://icdaccessmanagement.who.int
    - www.icf.who.int
    - www.ichi.who.int
User guidance for accurate coding in ICD-11
Example: searching for “breast cancer” in the ICD-11 Spanish Coding tool

The index term highlighted in blue and marked with a star is pointing to the most accurate code match.
Ongoing improvement of ICD-11 Coding Tool

Example: Left Frontal Glioblastoma

Post-coordination combinations are automatically indexed for the following axes

• Laterality
• Course (acute /chronic )
• Specific anatomy (when the value set has less than 50 items)
### Mappings

**ICD-11 – ICD-10 Mapping tool**

**ICD-10 Version 2016**
- Certain infectious and parasitic diseases
- II Neoplasms
- III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
- D50-D53 Nutritional anemias
- D50 Iron deficiency anemia
- D51 Vitamin B12 deficiency anemia
- D52 Folate deficiency anemia
- D53 Other nutritional anemias
- D53-D59 Haemolytic anemias
- D60-D64 Aplastic and other anemias
- D65-D69 Coagulation defects, purpura and other haemorrhagic conditions
- D70-D77 Other diseases of the blood and blood-forming organs
- D80-D89 Certain disorders involving the immune mechanism
- IV Endocrine, nutritional and metabolic diseases
- V Mental and behavioural disorders
- VI Diseases of the nervous system
- VIII Diseases of the eye and adnexa
- VIII Diseases of the ear and mastoid process
- IX Diseases of the circulatory system
- X Diseases of the respiratory system
- XI Diseases of the digestive system

**ICD-11 Beta Draft**
- Certain infectious or parasitic diseases
- Neoplasms
- Diseases of the blood or blood-forming organs
  - Anaemias and other erythrocyte disorders
    - Iron deficiency anaemia
    - Congenital iron deficiency anaemia
  - Acquired iron deficiency anaemia

**Derived Crosswalks (ICD10 -> ICD11)**

**ICD10 Iron deficiency anemia (D50)**

**ICD11 Acquired iron deficiency anaemia**

(http://id.who.int/icd/entity/84542709)

See the mapping statement that is used to come up with the crosswalk

**Multiple entity Crosswalk**

For this entity, multiple entity crosswalk is the same as single entity crosswalk
ICD-11 Translation Platform
Web application for multilingual representations of ICD-11 content

Platform features

- use of existing translations
  - through translation memory
  - currently ICD-10 translations in 7 languages are loaded into the memory
- flexible translation workflow
  - multiple translator roles and translation stages
    - 3 translator roles with different access rights
    - Higher level translators’ work cannot be undone by lower level translators
  - multiple translators can work simultaneously
  - supports commenting on the translations
  - Handles special requirements of terminology translations (does not force 1 to 1 translation).
ICD API (Application-Programming Interface)

https://icdaccessmanagement.who.int

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
ICD-11 Web Services

What is it?
- Web services are software components that can be accessed by other software
- They use the same architecture and protocols with the web.
- They allow software systems to access capabilities of other software

Benefits
- easier access and use of ICD with using appropriate software (simplification)
- effective response to ICD information needs from multiple stakeholders (customization)
- consistency of ICD multilingual versions in an electronic environment (automation)
- increase coverage and quality of ICD coding (implementation)
- automation of ICD updates
Examples of ICD-11 API use (Proof-of-concept)

- ICD-11 on the Go
  - Mobile browser with voice recognition

- ICD API playground
  - Dynamic web page to query ICD-11 URIs

- ICHI Browser
  - Extension codes: Additional anatomy and Medicaments directly pulled from ICD-11 MMS through API

- WHO electronic List of Essential Medicines
  - Browsing and searching Essential Medicines by Indication (ICD-11 category)
ICD-11 Field Testing
components & scope

- **Generic LINE coding (morbidity)** of 298 diagnostic terms which represent 47 of ICD-11 MMS priority areas.
- **Generic CASE coding (morbidity)** of 30 case scenarios which had the main condition as well as other condition(s) listed.
- **Specialty specific LINE and CASE coding (morbidity)** e.g. Dermatology, Quality and Safety, Traditional Medicine, International Association for the Study of Pain, German Medical Societies etc.
- **Mortality LINE (200 CoD terms)** and **MULTIBLE CAUSE (58 Death Certificates) coding**
Field testing with ICD

ICDfit interface for Generic LINE coding (morbidity)

- Each diagnostic term is **coded** by raters in ICD-11 and ICD-10.
- Following the code assignment, raters are asked to **report on**:
  - difficulties encountered
  - assess the level of coding granularity
  - problems with ambiguity
- Coding time is taken automatically
- Implementation: **28 countries, 62,873 code assignments** made by **630 raters**

Examples of Dx terms used in testing: Incarcerated ventral hernia, Perforated appendicitis, Transmural necrosis of portion of small bowel, Rheumatoid arthritis with anemia of chronic disease, Posttraumatic osteoarthritis right knee, Methicillin-Resistant Staphylococcus Aureus (MRSA) Septicemia, Severe anaphylaxis to hornet sting, Type 2 diabetes mellitus with diabetic foot, Frontotemporal dementia
<table>
<thead>
<tr>
<th>rater</th>
<th>cases</th>
<th>assignments</th>
<th>done</th>
<th>waiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>542</td>
<td>1</td>
<td>548</td>
<td>393</td>
<td>155</td>
</tr>
</tbody>
</table>

No distances data!

**ICD-11 list**

<table>
<thead>
<tr>
<th>#</th>
<th>code</th>
</tr>
</thead>
<tbody>
<tr>
<td>358</td>
<td>1B40</td>
</tr>
<tr>
<td>14</td>
<td>KA40.4</td>
</tr>
<tr>
<td>3</td>
<td>1B70</td>
</tr>
<tr>
<td>2</td>
<td>1B48</td>
</tr>
<tr>
<td>2</td>
<td>1H2Z</td>
</tr>
<tr>
<td>1</td>
<td>1B40 Sepsis due to Escherichia coli</td>
</tr>
</tbody>
</table>

**ICD-10 list**

<table>
<thead>
<tr>
<th>#</th>
<th>code</th>
</tr>
</thead>
<tbody>
<tr>
<td>190</td>
<td>A41.5</td>
</tr>
<tr>
<td>52</td>
<td>A415</td>
</tr>
<tr>
<td>48</td>
<td>P36.4</td>
</tr>
<tr>
<td>30</td>
<td>A41.8</td>
</tr>
<tr>
<td>12</td>
<td>A418</td>
</tr>
<tr>
<td>10</td>
<td>A41.4</td>
</tr>
</tbody>
</table>
Example of ICD-11 coding **distance measure** for Diagnostic term: “Clostridium difficile diarrhea”

<table>
<thead>
<tr>
<th>Distance</th>
<th>Match type</th>
<th>Gold standard Code in ICD-11</th>
<th>Actual code assignment in ICD-11 (n=286)</th>
<th>Actual code assignment - ICD-11 Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Exact match</td>
<td>1A04</td>
<td>1A04 (85% of coders)</td>
<td>Enterocolitis due to Clostridium difficile</td>
</tr>
<tr>
<td>1</td>
<td>Category match (i.e. Sibling/Residual/Parent match)</td>
<td>1A04</td>
<td>1A0Y (3% of coders)</td>
<td>Other specified bacterial intestinal infections</td>
</tr>
<tr>
<td>2</td>
<td>Block match</td>
<td>1A04</td>
<td>1A1Y (2% of coders)</td>
<td>Other specified bacterial foodborne intoxications</td>
</tr>
<tr>
<td>3</td>
<td>Section match</td>
<td>1A04</td>
<td>1A6Y (0.7% of coders)</td>
<td>Other specified protozoal intestinal infections</td>
</tr>
<tr>
<td>4</td>
<td>Chapter match</td>
<td>1A04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5</td>
<td>Different Chapter</td>
<td>1A04</td>
<td>MF21 (2% of coders)</td>
<td>Diarrhoea</td>
</tr>
</tbody>
</table>
Distance between actual & gold standard code assignment
(Distance calculator for ICD coding)
Follow-up action on issues identified in testing

- **Classification issues**
  - *Right breast angiolipoma*: added missing PostC for anatomy and laterality & code for Breast NOS missing
  - *End stage renal failure* added as index term under GC41.5 *Chronic kidney disease, stage 5*

- **Tooling issues**
  - Post-coordination combinations are automatically indexed the following axes
    - Laterality
    - Course (acute/chronic)
    - Specific anatomy

- **Coder issues: awareness & adherence**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5A11</td>
<td>Type 2 diabetes mellitus with diabetic foot</td>
<td>223</td>
<td>36.77%</td>
</tr>
<tr>
<td>5A11/BC14</td>
<td></td>
<td>82</td>
<td>15.22%</td>
</tr>
<tr>
<td>BC14</td>
<td></td>
<td>48</td>
<td>15.22%</td>
</tr>
<tr>
<td>BC14/5A11</td>
<td></td>
<td>30</td>
<td>15.22%</td>
</tr>
<tr>
<td>5A4</td>
<td></td>
<td>19</td>
<td>8.65%</td>
</tr>
<tr>
<td>5A11</td>
<td></td>
<td>4</td>
<td>1.82%</td>
</tr>
<tr>
<td>5A11/BC14</td>
<td></td>
<td>3</td>
<td>1.35%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>37</td>
<td>16.59%</td>
</tr>
</tbody>
</table>
ICD-11 field implementation assessment tool (ICDfit)

**Purpose**
- WHO & Member States can check translation and data quality
- ICD coders can test their accuracy in coding with ICD-11

**Modules (i.e. set of terms/cases)**
- Pre-existing modules:
  - international morbidity module
  - international mortality module
  - custom clinical speciality modules
- Locally defined modules
  - Direct terms-set imported into a module

**Analytics**
- WHO can assess coding quality and improve classification & tooling
- Coders will get summary score indicating their coding accuracy & timing
- Coders can compare their results with their peers
Regional consultations on ICD-11 testing and transition preparation

- AMRO/PAHO (Sep 2017)
- EMRO (Aug/Nov 2017)
- EURO (through WHO-FIC CCs in 2017)
- SEARO & WPRO (through WHO-FIC Asia-Pacific Network in 2017)
- AFRO (upcoming)
ICD Transitions

Trends in cause-of-death reporting by ICD revision

- ICD-8
- ICD-9
- ICD-10

Number of countries

Reference year of data


0 20 40 60 80 100 120
ICD-11 implementation package

- Advocacy materials
- Training materials
- Transition tables (Maps from and to ICD-10)
- Translation tooling
- ICD-11 field implementation assessment tool (ICDfit)
- Transition Guide
- Maintenance arrangements
- Web Services
ICD - Maintenance

ICD-11 | Belgian Terminology Day | 28 March 2018

General proposal submitted

Proposal complete

None

Back to author

Yes

Foundation impact

None

Implement

Yes

MMS impact

None

Implement

Yes

Approved by CSAC

No

Explain and decline

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World Health Organization
ICD Revision Process
Status & way forward

2016-17

- Launch of the ICD-11 2016 version for Member State comment @ ICD Revision Conference, October 2016 Tokyo, Japan
- Field testing in various settings
- Technical work and tools continuing

2018-2021

- Release of the ICD-11 version for implementation (June 2018);
- Member States initiate development of transition plans
- ICD-11 resolution at WHO Executive Board & World Health Assembly 2019

2022+

- Routine update and maintenance
Thank you