

# ICD-11 Update

## Message from the Director

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The second half of 2016 saw the ICD-11 Revision Conference held in Tokyo, Japan, together with the WHO-FIC Network Annual Meeting. The ICD-11-MMS version for Member State comment was launched at the meeting, and WHO Member States have been invited to comment. The Revision Conference was a major success, with more than 450 attendees, and representatives of more than 50 Member States. WHO Director General, Dr Margaret Chan, opened the conference with a strategic speech about the global value and importance of the ICD-11 and expressed sincere appreciation to all contributors and to the Japan Hospital Association (JHA) for ongoing support of the work.

WHO, together with the Joint Task Force (JTF), has reviewed nearly the entire classification draft from a structural perspective. These reviews have contributed to the editing of the structure and index of the classification. WHO also met with key stakeholders on critical topics, including dermatology, diabetes, dementia, cerebrovascular diseases including stroke, and primary care. Quality assurance mechanisms are underway, which will also generate additional improvements. At the same time, WHO has updated several key sections of the Classifications website to improve transparency and provide information about project progress.

The structures that were set up for the design phase of ICD-11 are now being redesigned to meet the needs of the finalization and ongoing maintenance of ICD. At the same time, the joint work with SNOMED International (formerly IHTSDO) has been progressing with a goal of improving the interoperability between the two systems.

ICD-11 is not yet fully complete, but the progress has been remarkable. WHO looks forward to the finalization of ICD-11 based in particular on the input by Member States and the Quality assurance process, and to the launch of ICD-11 for implementation in 2018. I also would like this opportunity to thank all who have contributed so much to getting the ICD in statistical shape during the last year after years of rich valuable clinical inputs, including the small but highly dedicated team at WHO. Looking forward to completing the last mile to the release of the ICD-11.

**- Dr Ties Boerma, Director, Information, Evidence, and Research**

## ICD-11 Revision Conference

In October 2016, WHO and Member States reached a major milestone towards finalization of the 11th Revision of the International Classification of Diseases. The ICD-11 Revision Conference in Tokyo, Japan, was held from 12 – 14 October 2016.

The Director General of the World Health Organization, Dr Margaret Chan, opened the meetings (see Annex A for opening remarks), as well as the Japan Ministry of Health which was hosting the conference. Opening remarks were also made by the president of the IFHIMA, and the president of the Japan Association of Health Information Management. Special gratitude was conveyed to the president of the Japan Hospital Association, which has been instrumental in financing the ICD revision process during the past decade

The theme for the conference was “Health Information in the New Era”, and the opening session aimed to frame the ICD in the global health, the Sustainable Development Goals (SDGs) 2016-2030 and country realities.

More than 450 individuals and institutions from around the world attended the ICD-11 Revision Conference in Tokyo, Japan. In addition, a wide range of countries attended the Tokyo Revision Conference including: Albania; Algeria; Argentina; Australia; Brazil; Cambodia; Canada; China; Denmark; Egypt; Ethiopia; Finland; India; Indonesia; Iran; Japan; Kenya; Korea; Kuwait; Malaysia; Mexico; Mozambique; Myanmar; Namibia; Nepal; Netherlands; Philippines; Republic of Korea; Russian Federation; Rwanda; Slovakia; Sri Lanka; Sweden; Tanzania; Thailand; Turkmenistan; Uganda; United Kingdom; and the United States of America.

**The full report is available on the WHO Website:**  
<http://who.int/classifications/network/meeting2016/ICD-11RevisionConferenceReportTokyo.pdf?ua=1>.

# ICD-11: Taking Shape

## Advances in Content

Following the ICD-11 Revision Conference in Tokyo, the WHO team has been focusing on a cross-cutting view of the classification. The horizontal work is done to ensure the chapters work together and are consistent in their approach to classifying entities, such as post-procedural conditions, or conditions seen principally in Primary Care that appear in multiple chapters. There has also been work done on the index to confirm that terms point to the correct location, and are correctly written in natural language. The mapping of concepts between ICD-10 and ICD-11 is also in the process of being reviewed. Movements of entities between chapters are verified and corrected where necessary.

The WHO team would like to express our appreciation for the review and feedback received from the Joint Task Force, medical societies, WHO-FIC collaborating centres, and other interested parties. These groups and individuals have provided input into each chapter, identifying missing or duplicate entities and other inconsistencies. This feedback has been extremely helpful and incorporated wherever possible. It will continue to be incorporated as the team works towards finalizing the classification in preparation for the quality assurance process.

Balancing the needs of stakeholders is an ongoing consideration. Individual stakeholders have different requirements when it comes to the preferred level of detail in the classification. As a result there is a need to limit the number of four character categories. Where there has been significant detail added to a chapter above and beyond what was in ICD-10, it may be necessary to keep some entities in the foundation of ICD-11, giving it a place in the classification but not an individual code.

## ICD-11 Informatics Update

The screenshot shows the 'Post-coordination' section for the ICD-11 code '2D1Z Malignant neoplasms of breast, unspecified'. The main code is circled in red. Below it, two axes are shown: 'Laterality' with 'XB32 Right' selected, and 'Specific anatomy' with 'XC56 Upper outer quadrant of breast' selected. A section titled 'Add detail to Malignant neoplasms of breast, unspecified' lists various options for these axes. The 'Laterality' options are XB30 Bilateral, XB31 Left, XB32 Right (highlighted), XB33 Unilateral, unspecified, and XB34 Unspecified laterality. The 'Specific anatomy' options are XC50 Nipple, XC51 Lactiferous duct, XC52 Areola, XC53 Upper inner quadrant of breast, XC54 Lower inner quadrant of breast, XC55 Lower outer quadrant of breast, XC56 Upper outer quadrant of breast, and XC57 Axillary tail of breast. A search box is at the bottom.

### Post-coordination in the ICD-11 Browser

The post-coordination system allows adding more detail to a category. Different types of information can be added to different entities. For example, additional 'Histopathology' information could be added to most of the Neoplasm categories, but it cannot be added to the categories elsewhere in the classification.

When viewing an entity in the ICD-11 Browser, the newly developed post-coordination area will show the possible post-coordination axes that are applicable to that entity

### Displaying / Searching value sets of post-coordination

Some of the post-coordination axes can get values from a smaller set of possible values such as *Laterality* whereas some axes can get values from a rather large value set such as *Histopathology*.

If the value set is small, the browser will show all possible values with their codes. If the value set is large, one can search the value sets by typing in the search box. The browser will search only the values for that axis. In addition to searching, one can browse this sub-hierarchy using the  icon.

### Building a Code String

To build a code, one must click on the values that are displayed in the search results, in the hierarchy or in the shorter lists. The example above shows malignant neoplasm of breast detailed with laterality and specific anatomy. The code generated is shown at the top right area of post-coordination section.

## ICD-11: Foundation Update

Updates to the foundation in this phase of the revision have been informed by proposals as well as the reviews conducted by medical societies and together with the Joint Task Force. Proposals and review outputs received by 31 December 2016 will become part of the ICD-11 version to be used for extended quality assurance which will begin in March 2017. Proposals that are received between 1 January 2017 and 30 March 2017 will be taken into account for the final version for implementation. Proposals received after that date will be considered in the context of ICD-11 maintenance after 2018. Independently, comments by Member States and improvements arising as a part of the Quality Assurance mechanism will be included with deadlines later in 2017.

The table below shows the public proposals received by 23 January 2017 and their current outcomes. Work continues to action these proposals in line with the deadlines listed above. These proposals are in addition to other improvements that originated from chapter reviews completed by the Joint Task Force, independent and national medical societies, the WHO team, and other contributors. In addition to changes to the classification, itself, there was also a review of 35,000 index entries, many of which were edited in terms of their titles, spelling, language, and to ensure that they were appropriately guiding users to the correct entities. In late 2016, an additional 4000 terms which originated from a review of national death certificate reporting were added to the foundation, as well. At the structural level, 2016 saw nearly 11,000 parenting changes (mostly the addition of multiple parents), 6163 entity titles were edited for completeness and accuracy, 4255 changes were made to the shoreline (e.g. coding granularity), and 2200 changes were made to the different groupings in the hierarchy.

In addition to these public proposals, the Traditional Medicine chapter has also received 435 proposals, of which 387 have been actioned and 48 are pending.

Chapter		Total Received	Actioned	Pending
1	Infectious Diseases	268	233	35
2	Neoplasms	170	115	55
3	Diseases of blood and blood forming organs	292	287	5
4	Disorders of the immune system	213	182	31
5	Conditions related to sexual health	185	157	28
6	Endocrine, nutritional and metabolic diseases	854	827	27
7	Mental and behavioural disorders	2	2	0
8	Sleep-wake disorders	528	355	173
9	Diseases of the eye and adnexa	238	110	128
10	Diseases of the nervous system	46	39	7
11	Diseases of the ear and mastoid process	368	224	144
12	Diseases of the circulatory system	119	113	6
13	Diseases of the respiratory system	354	306	48
14	Diseases of the digestive system	633	593	40
15	Diseases of the skin	57	50	7
16	Diseases of the musculoskeletal system and connective tissue	376	370	6
17	Diseases of the genitourinary system	92	80	12
18	Pregnancy, childbirth and the puerperium	204	199	5
19	Certain conditions originating in the perinatal and neonatal period	265	206	59
20	Developmental anomalies	1173	913	260
21	Symptoms, signs, clinical forms and abnormal clinical and laboratory findings, not elsewhere classified	323	278	45
22	Injury, poisoning and certain other consequences of external causes	107	81	26
23	External causes of morbidity and mortality	83	70	13
24	Factors influencing health status and contact with health services	163	113	50
25	Codes for special purposes	2	2	0
26	Extension codes	0	0	0
N/A - Proposals attached to deleted entities		71	32	39
<b>Total received up to 23 January 2017</b>		<b>7186</b>	<b>5937</b>	<b>1249</b>

# Implementing line coding pilot testing of ICD-11- MMS

## Morbidity line coding pilot testing

Twenty-two countries are currently participating in the morbidity line coding pilot testing of the ICD-11-MMS. Fifteen countries are conducting the pilot testing in English and seven in Spanish. The pilot testing started in August 2016 with coding of 308 diagnostic terms (1<sup>st</sup> and 2<sup>nd</sup> batch) uploaded to a web-based data entry platform (ICDfit). Each term was coded in ICD-11 and ICD-10 using the single-code assignment form on the ICDfit platform. The form was linked with a frozen version of the ICD-11 coding tool and browser as well as the ICD-10 browser 2016 version.

At the end of November 2016, a third batch with 88 diagnostic terms was released for coding. The third batch included diagnostic statements which required multiple-code assignments in ICD-11 and ICD-10. Possible multiple-code assignments type the coders might have encountered included:

- coding two or more stem codes (without using post- coordination) in ICD-11 and ICD-10;
- coding of two or more stem codes using post-coordination (associated with) in ICD-11;
- coding of stem code(s) with one or more extension codes in ICD-11;
- coding of "dagger" code and "asterisk" code in ICD-10.

To enable multiple-code assignment a new ICDfit interface with four code fields was created and linked with an updated frozen version of the ICD-11 Browser which allows for the building of string codes using the post-coordination mechanism.

## Mortality line coding pilot testing

For mortality, the line coding pilot testing was initiated at the end of January 2017. At this stage, fourteen countries are lined up to participate in the exercise. In preparation for the line coding, a list of terms most commonly found in death certificates at national level from selected sample countries was compiled. From this list, a first batch with 100 Cause of Death terms was identified and uploaded. Each term will be coded in ICD-11 and ICD-10 using the multiple-code assignment form on the ICDfit platform. The form is linked with the frozen version of the ICD-11 coding tool and browser as well as the ICD-10 browser 2016 version.

## Meeting Dates

20-22 Feb - Joint Task Force (JTF)  
 19-21 March – Morbidity Reference Group  
 23-24 March – MRG Table Group  
 27-28 March – Mortality Reference Group  
 29-30 March – IRIS Core Group Meeting (TBD)  
 26-27 April – WHO-FIC Council SEG Midyear (TBD)  
 22-31 May – 70<sup>th</sup> WHO World Health Assembly  
 20-21 June – Family Development Committee  
 22-23 June – ICHI Task Force  
 28-29 June – Education & Implementation Comm.  
 28-29 June – Functioning & Disability Ref. Group

## Teleconference Dates

13 Jan – WHO-FIC Council SEG  
 18 Jan – Joint Task Force (JTF)  
 23 Jan – Functioning and Disability Ref. Group  
 26 Jan – WHO-FIC Council Quarterly TC  
 30 Jan – Joint Task Force Co-Chairs  
 2 Feb – Med. & Sci. Advisory Comm. Co-Chairs  
 6 Feb – FDRG Quarterly TC  
 9 Feb – WHO-FIC Council SEG  
 16 Feb – Joint Task Force  
 2 March – MSAC Co-Chairs  
 6 March – FDRG Co-Chairs  
 9 March – WHO-FIC Council SEG  
 16 March – Joint Task Force  
 3 April – FDRG Co-Chairs  
 6 April – MSAC  
 13 April – WHO-FIC Council SEG  
 20 April – Joint Task Force  
 27 April – WHO-FIC Council Midyear TC  
 4 May – MSAC  
 8 May – FDRG Quarterly TC  
 11 May – WHO-FIC Council SEG  
 18 May – Joint Task Force  
 1 June – MSAC  
 8 June – WHO-FIC Council SEG  
 12 June – FDRG Co-Chairs  
 15 June – Joint Task Force