

Status of ICD-11

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February 17, 2016



Overview of ICD-11

- History of ICD
- ICD-11 Revision Process
 - Goals
 - Development
 - New features
- Current status
 - ICD-11 Tools
 - Timeline
- How ICD-11 compares to ICD-10-CM

ICD Revision History

<i>ICD Revision No.</i>	<i>Year of Conference When Adopted</i>	<i>Year in Use in the U.S.</i>	<i>ICD, Clinical Modification</i>	<i>Year in Use in the U.S.</i>
First	1900	1900-1909		
Second	1909	1910-1920		
Third	1920	1921-1929		
Fourth	1929	1930-1938		
Fifth	1938	1939-1948		
Sixth	1948	1949-1957		
Seventh	1955	1958-1967		
Eighth	1965	1968-1978	ICDA-8 H-ICDA-1 H-ICDA-2	1968-1978 1968-1972 1973-1978
Ninth	1975	1979-1998	ICD-9-CM	1979
Tenth	1989	1999-	ICD-10-CM	Oct. 1, 2015

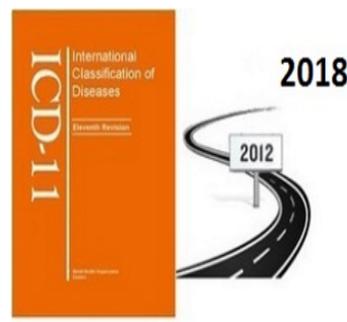
Sign up for WHO updates



Classifications

- Family of International Classifications
- Family of International Classifications network
- Classification of Diseases (ICD)
- Classification of Functioning, Disability and Health (ICF)
- Classification of Health Interventions (CHI)
- Frequently asked questions

The International Classification of Diseases 11th Revision is due by 2018



Participate in the ICD Revision

- Beta phase participants will have the opportunity to:
- Make Comments
 - Make Proposals
 - Propose definitions of diseases in a structured way
 - Participate in Field Trials
 - Assist in translating ICD into other languages

- [Video invitation to participate](#)
- [Frequently Asked Questions About ICD-11](#)
- [ICD Information Sheet](#)
- [ICD Revision Information Notes](#)
- [ICD-11 Browser for browsing the classification and participating the development](#)

ICD-11 Highlights



ICD-11 Update

ICD-11 Newsletter - November 2015 [pdf 209kb]

A quarterly update from the WHO team on the ICD-11 progress, accomplishments, and ongoing work.



Sign Up!

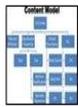
Register to become involved WHO wants to know if you are interested in being involved in the ICD Revision.



Timelines

Learn about the ICD-11 Timelines

New ICD-11 Features



Content Model



Definitions

ICD Revision

- [Revision News](#)
- [Steering Group](#)
- [Topic Advisory Groups](#)
- [External Review of the ICD-11 Revision](#)

ICD-11 Revision Goals

- **Ensure that ICD-11 will function in an electronic environment**
 - Will be a digital product
 - Link with terminologies (e.g., SNOMED)
 - 22 July 2010 - WHO and the International Health Terminology Standard Development Organisation (IHTSDO) have worked on a collaborative arrangement to link the WHO Family of Classifications and the Standardized Nomenclature of Medicine - Clinical Terms (SNOMED CT). This arrangement enables the linkage of terminologies and classifications. In the era of computerization of health information and electronic health records, it represents a major achievement.
 - ICD Categories
 - “defined” by "logical operational rules" on their associations and details
 - Support electronic health records and information systems

ICD-11 Revision Goals

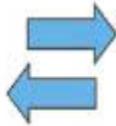
- **Multi-purpose and coherent classification**
 - Mortality, morbidity, primary care, clinical care, research, public health...
 - Consistency & interoperability across different uses
- **International multilingual reference standard for scientific comparability**
 - English, French, Spanish, Russian, Chinese, Arabic

ICD-11 Development Process

- Topic Advisory Groups (TAGs)
- Content
 - Definitions
 - Content model parameters
- Structure (linearizations)
 - Mortality, morbidity, primary care, quality/patient safety
- JLMMS (mortality & morbidity linearizations)

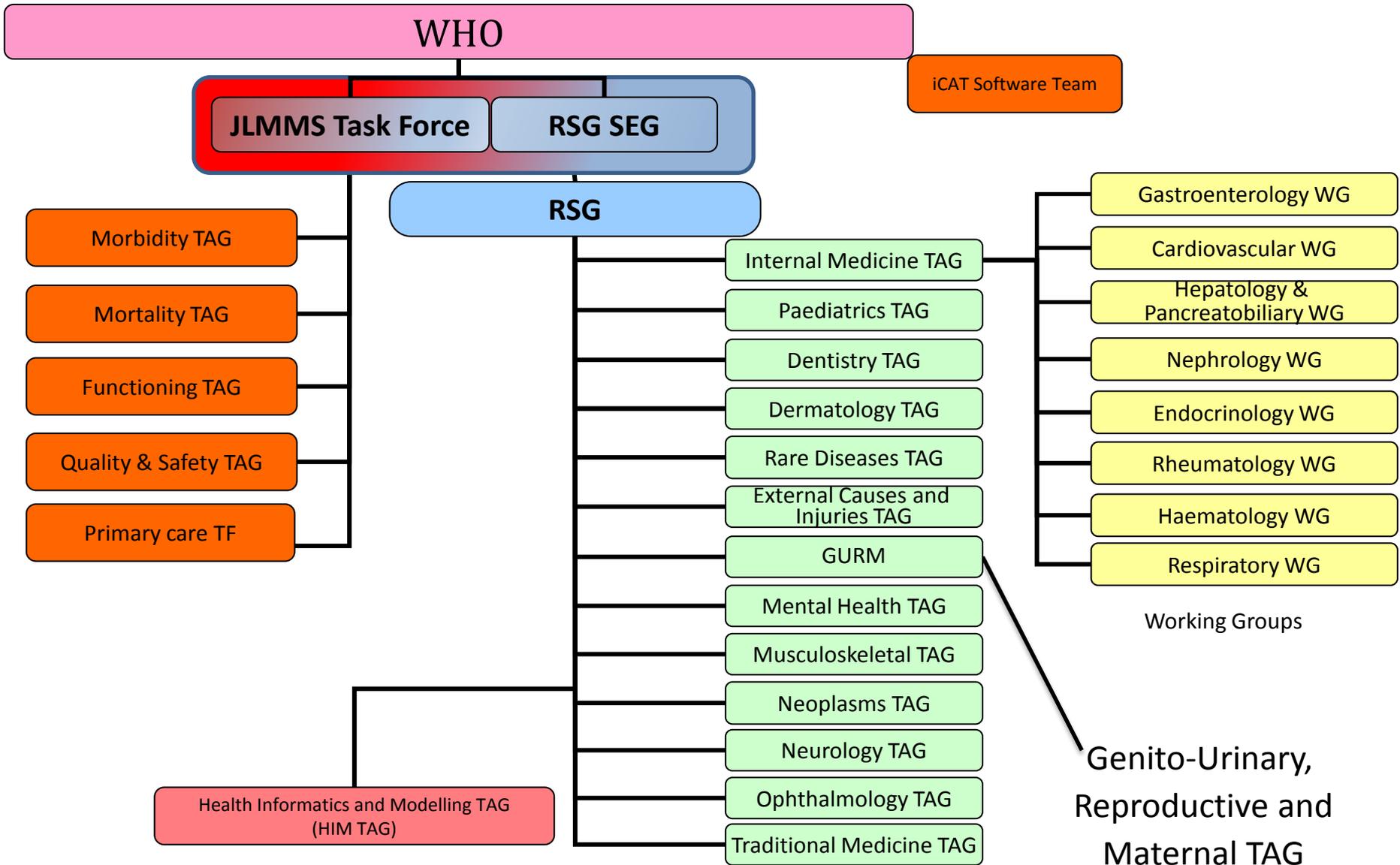


Stability Analysis Objectives



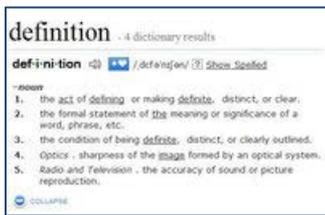
- Ensure a **seamless transition** between ICD-10 and ICD-11
 - national
 - international levels
- CrossCutting TAGs review and confirm **continuity** between ICD-10 and ICD-11
- Represent knowledge gained from **national clinical modifications** in the revised ICD.

ICD Contribution



ICD-11 Development Process

- RSG & RSG-SEG chair: Dr. Christopher Chute, Johns Hopkins
- Cross-cutting Topic Advisory Groups (TAGs):
 - Co-chair Mortality TAG – Robert Anderson, NCHS
 - Co-chair Morbidity TAG – Donna Pickett, NCHS
 - Co-chair Functioning TAG – Cille Kennedy, ASPE
- Content
 - Definitions
 - Content model parameters
- Structure (linearizations)
 - Mortality, morbidity, primary care, quality/patient safety
- JLMMS (mortality & morbidity linearizations)



- All ICD entities will have definitions:
 - key descriptions of the meaning of the category
 - in human readable terms – to guide users
 - *Limited definition in Print Version – 100 words*
 - *Detailed definitions ONLINE*
- Definitions will be *compatible* with:
 - Content Model
 - Diagnostic Criteria
 - Across the whole classification and the versions

Major events

- External ICD Process Review
 - http://www.who.int/classifications/icd/revision/2015_11_ICD11_Newsletter.pdf?ua=1
- Activities of individual vertical TAGs
- JLMMS Task Force
- WHO working

Main activities

- Restructure infectious diseases chapter
- Edit 'Dementia'
- Structure 'postoperative complications'
- Edit and design 'primary care'
- Revisit 'shorelining'
- Edit volume 2
- Ordering
 - Terminology
 - Terms
 - Parenting
 - Exclusions
- Planning

Is a category and has a code

Shoreline



Lumped into a category



PRIMARY CARE low

PRIMARY CARE intermediate

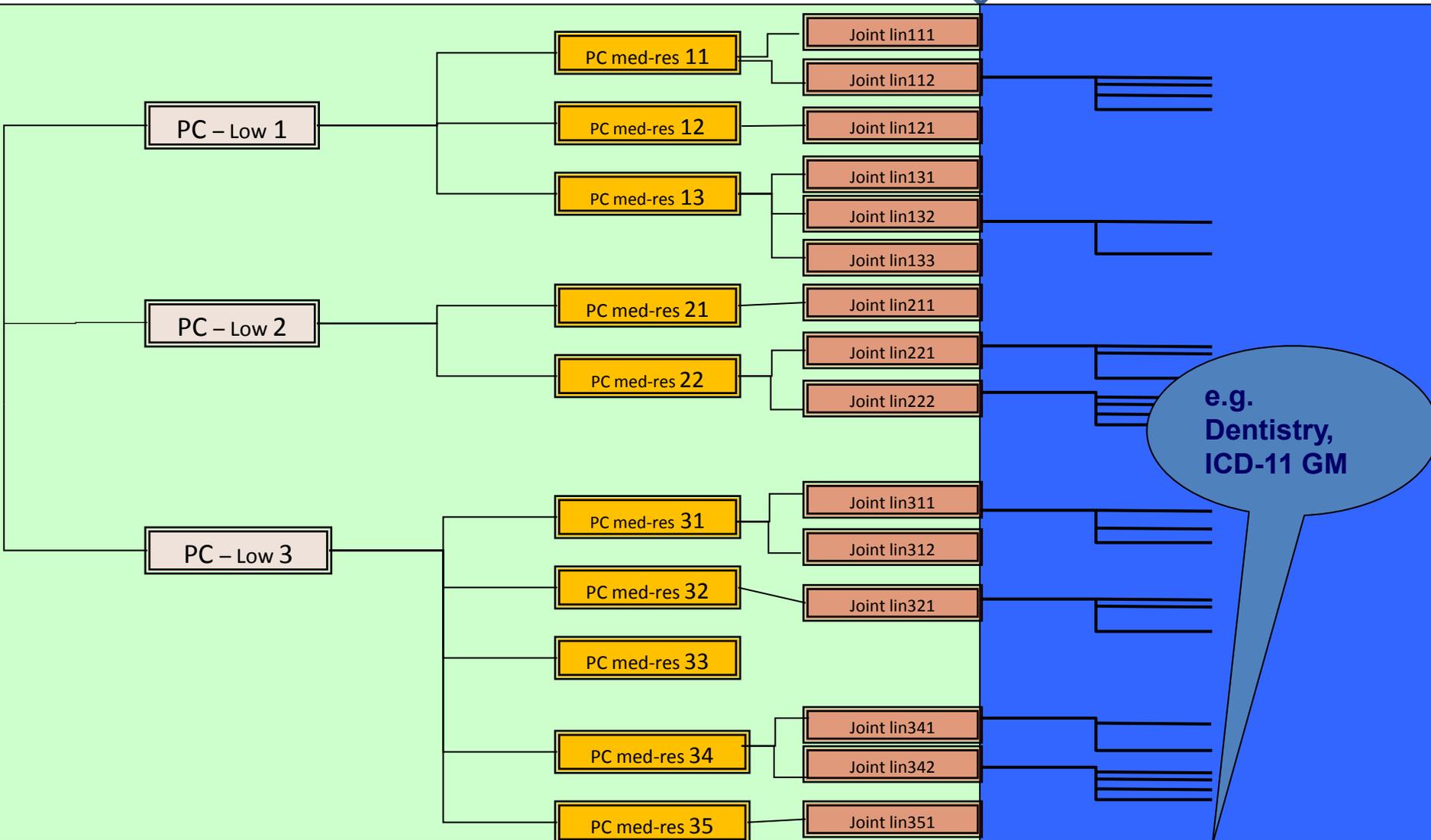
Joint linearization

**International
Extensions
National Linearizations
Specialty - Research**

Is a category and has a code

Shoreline

Lumped into a category



PRIMARY CARE low

PRIMARY CARE intermediate

Joint linearization

International
Extensions
National Linearizations
Specialty - Research

Above or Below Shoreline – good classification (linearization)

- Content is still in foundation
- Content is used as index entry
- Content is codable with postcoordination
- Postcoordination= 2 or more codes describe one disease

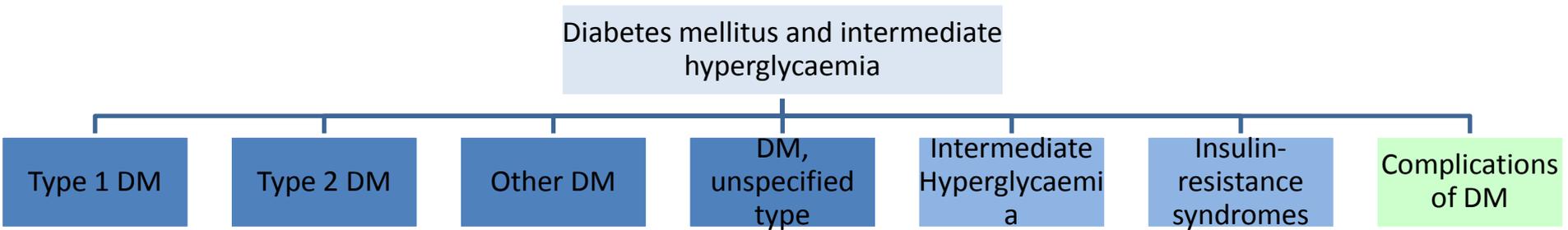
- **Criteria: relevance**
95% of cases per country by age group, and sex for mortality and morbidity

Main activities

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Hierarchy

'Diabetes' Chapter 06 - Endocrine Chapter codes



[ICD-11 Browser Diabetes](#)

Coding example

Patient with type 1 DM with diabetic retinopathy

6A10 Type 1 diabetes mellitus

MG45 Diabetic retinopathy

6A10/MG45 = type 1 DM with diabetic retinopathy

Chapters

- Chapter 01 – Infectious diseases
- Chapter 02 – Neoplasms
- Chapter 03 – Diseases of the blood and blood-forming organs
- Chapter 04 – Disorders of the immune system
- Chapter 05 – Conditions related to sexual health
- Chapter 06 – Endocrine, nutritional and metabolic diseases
- Chapter 07 – Mental and behavioural disorders
- Chapter 08 – Sleep – Wake disorders
- Chapter 09 – Diseases of the nervous system
- Chapter 10 – Diseases of the eye and adnexa
- Chapter 11 – Diseases of the ear and mastoid process
- Chapter 12 – Diseases of the circulatory system
- Chapter 13 – Diseases of the respiratory system

Chapters

- Chapter 14 – Diseases of the digestive system
- Chapter 15 – Diseases of the skin
- Chapter 16 – Diseases of the musculoskeletal system and connective tissue
- Chapter 17 – Diseases of the genitourinary system
- Chapter 18 – Pregnancy, childbirth and the puerperium
- Chapter 19 – Certain conditions originating in the perinatal period
- Chapter 20 – Developmental anomalies
- Chapter 21 – Symptoms, signs, clinical forms, and abnormal clinical and laboratory findings, not elsewhere classified
- Chapter 22 – Injury, poisoning and certain other consequences of external causes
- Chapter 23 – External causes of morbidity and mortality
- Chapter 24 – Factors influencing health status and contact with health services
- Chapter 25 – Codes for special purposes
- Chapter 27 – Traditional medicine
- Chapter 26 –Extension Codes

Differences to ICD-10

- ICD-11 has five new chapters:
 - Chapter 3 Diseases of the Blood and Blood-forming Organs
 - Chapter 4 Disorders of the Immune System.
 - Chapter 6 Conditions related to Sexual Health.
 - Chapter 8 Sleep-Wake Disorders
 - Chapter 26 Extension codes
 - Chapter 27 Traditional Medicine

Differences to ICD-10

Term

Foundation

Entity

Linearization

Stem code

Extension code
information

Linearization parents
hierarchy

Translation

Everything in ICD

Thing in foundation

Classification

Category (mostly dagger)

Additional

Classification

Chapter, Block, Category,

Differences to ICD-10- Coding scheme

- The chapter numbering:
 - now arabic numbers
 - not roman numerals
- The coding scheme for categories:
 - now minimum 4 characters
 - 2 levels of subcategories
- Coding scheme
 - always has a letter in the second position to distinguish from the codes of ICD-10.
 - No l,l (L,i); 0,O (Zero, o)
- First character of the code always relates to the chapter number.
 - 1-Z

Differences to ICD-10 - Terminology

- ICD-10 had a range of expressions to describe a causal relationship between conditions in a code title.
 - In ICD 11, the preferred term is “due to”.
- ICD-10 had a range of expressions indicating the coincidence of two conditions in a code title (e.g. “in” or “with”).
 - In ICD-11, the preferred term is “associated with”.

Differences to ICD-10: **Extensions**

Term	Translation
Diagnosis timing indicator	Histopathology
Severity scale value	Consciousness
Dimensions of injury	Substances
Topology Scale Value	Code usage
Specific Anatomic Detail	Temporality
Capacity or context	Etiology
Dimensions of external causes	

New Feature: X – Extension Code Chapter

Type 1	Type 2	Type 3
Severity	Main Condition (types)	History of
Temporality (course of the condition)	Reason for encounter/admission	Family History of
Temporality (Time in Life)	Main Resource Condition	Screening/Evaluation
Etiology	Present on Admission	
Anatomic detail Topology Specific Anatomic Location	Provisional diagnosis	
Histopathology	Diagnosis confirmed by	
Biological Indicators	Rule out / Differential	
Consciousness		
External Causes (<i>detail</i>)		
Injury Specific (<i>detail</i>)		

Differences to ICD-10: Definitions

- Content model
 - ICD-11 categories have a short and a long definition.
 - All ICD-11 categories include separate information on
 - anatomy,
 - aetiology and
 - other aspects

Can be accessed for search purposes, or when browsing in the tabular list of the

- For morbidity, the definition of main diagnosis has changed:
 - reason for admission after assessment at the end of the stay.

ICD-11 Tools

apps.who.int/classifications/icd11/browse

- Coding tool: spelling-synonyms no problem icd11ct.cloudapp.net/ct#/
- ICD-11 browser
 - See foundation and linearization – grid view
 - Download versions
 - ‘frozen’ versions
 - See differences
- Proposal tool
 - Make suggestions and discuss them
 - Notifications
- Review tool
- Translation tool
 - Translate in your language
- Mapping tool
 - See mapping at detailed level
 - Comment mapping to and from ICD-10

www.who.int/classifications/icd/revision/

- Online information
 - FAQ
 - Video
 - Working groups
 - ICD-11 features
 - Becoming involved

The ICD-11 Beta Phase

- Draft ICD-11 Content presented in web portal:
www.who.int/classifications/icd11
- Daily Updates
- Participants can:
 - Make comments
 - Make proposals to change ICD Categories
 - Propose structured definitions of diseases
 - Participate in field testing
 - Assist in translating ICD into other languages
- Answer Single Assessment Questions
 - (e.g. Is this category in the right place? Is this scientifically accurate?)

ICD-11 Review Process

- Focus
 - Scientific accuracy
 - Completeness of each unit
 - Internal consistency
 - Utility/relevance of each unit
- Types of Review
 - Initial
 - Continuous

Field Trials

- WHO will develop a framework to ensure standardization of beta testing
- Goals
 - Test fitness of ICD-11 for multiple purposes (mortality, morbidity, quality, other use cases)
 - Ensure comparability between ICD-10 and ICD-11
 - Increase consistency, identify improvement paths, reduce errors

Field Trials

- Assessments
 - Applicability (feasibility): ease of use
 - Reliability (consistency): same results by all each time
 - Utility (added value): renders useful information

Field Trials

- Key Uses
 - Mortality: cause of death coding, verbal autopsy
 - Morbidity: hospital discharge, outpatient, casemix
- Different settings
 - Primary care: high and low resource settings
 - General health care
 - Research settings: population health, clinical research

Examples of ICD-10-CM Concepts in ICD-11

Concept	ICD-10	ICD-11 Beta	ICD-10-CM	9-CM
Encounter for prophylactic breast removal	No	No (as a unique code)	Yes	1994
Female genital mutilation	No	Yes	Yes - 2005	2004
Genetic susceptibility to breast CA	No	No	Yes	2004
CKD Staging	Yes - 2010	Yes	Yes	2005
Pressure ulcer stages	Yes - 2010	Yes	Yes - 2005	2008
Laterality	No	Yes – as extension code	Yes	No

ICD-10-CM Implementation Timeline

- Evaluation of ICD-10 for U.S. purposes (1994 - 1997)
Summary document available at
<http://www.ncvhs.hhs.gov/031105a1.htm>
- NCVHS Hearings (1997-2003)
Summary document available at
<http://www.ncvhs.hhs.gov/031105a2.htm>
- NPRM (2008)
- Final Rule (2009)
- NPRM (2012)
- Final Rule (2012)
- Interim Final Rule (2014)

Thank You

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

