

# ICD 11

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# Overview

- Vision
- Access and participation
- Content
- Activity to date
- Future

# ICD-11 [www.who.int/classifications/icd/revision/](http://www.who.int/classifications/icd/revision/)

- Scientifically up to date – statistical continuity
- Suitable for electronic environments – print product
- Multilingual
- Smooth transition – simpler use
- Mortality
- Morbidity
  - Quality & safety
  - Casemix
  - Epidemiology
  - Primary care

# ICD-11

- Coding tool: spelling-synonyms no problem
- ICD-11 browser
  - 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
- Translation tool
  - Translate in your language
- Mapping tool
  - See mapping at detailed level – download maps
  - Comment mapping to and from ICD-10

# Browser (search for ICD-11 browser)



icd 11 browser

Web Images Videos

## ICD-11 Beta Draft - WHO

ICD-11 Browser contains up to date content for the ICD-11 (International Classification of Diseases 11th Revision)

[apps.who.int/classifications/icd11/browse/ff/en](https://apps.who.int/classifications/icd11/browse/ff/en)

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Last Update: May

## ICD-11 Beta Draft (Joint Linearization for Mortality and Morbidity Statistics)

Search  [ Advanced Search ]

Foundation

Linearizations

Contributions

Info

ICD-10 : I10

- 09 Diseases of the nervous system
- 10 Diseases of the eye and adnexa
- 11 Diseases of the ear and mastoid process
- ▾ 12 Diseases of the circulatory system
  - Neoplasms of the circulatory system
  - Developmental anomalies of the circulatory system
  - ▾ Hypertensive diseases
    - CA00 Essential hypertension
      - CA01 Hypertensive heart disease
      - CA02 Hypertensive renal disease
      - CA03 Hypertensive crisis
    - CA04 Secondary hypertension
      - CA0Y Other specified hypertensive diseases
      - CA0Z Hypertensive diseases, unspecified
    - MG1B White coat hypertension
  - Ischaemic heart disease
  - Diseases of coronary artery
  - Pulmonary heart disease and diseases of pulmonary circulation
  - Pericarditis
  - Acute and subacute endocarditis
  - Heart valve disease
  - Certain specified rheumatic heart diseases
  - Diseases of the myocardium and cardiac chambers
  - Cardiac arrhythmia
  - Heart failure
  - Diseases of arteries and arterioles
  - Diseases of veins

### Definition

Essential (primary) hypertension, accounting for 95% of all cases of hypertension, is defined as high blood pressure for which a secondary cause cannot be found.

### Long Definition

Defined through the measurement of the blood pressure using cuff method with a sitting systolic blood pressure above 140mmHg or a sitting diastolic blood pressure above 90mmHg in three consequent measurements. No specific medical cause can be found.

### Inclusions

- high blood pressure

### Exclusions

- involving vessels of brain (9C00-9C2Z)
- involving vessels of eye (AH01)

### All Index Terms

- Essential hypertension
- idiopathic hypertension
- primary hypertension
- systemic primary arterial hypertension
- HBP - [high blood pressure]
- systemic arterial hypertensive disorder
- high blood pressure
- bp+ - hypertension
- elevated blood pressure
- high arterial tension
- high blood pressure disorder
- hyperpiesia
- hypertensive vascular degeneration
- hypertensive vascular disease
- systemic arterial hypertension
- HT - [hypertension]
- HTN - [hypertension]

Hide index terms

# Browser

Signed in as: bokajjakob1@gmail.com | Manage Account | Log Out

Last Update: May 1

## ICD-11 Beta Draft (Joint Linearization for Mortality and Morbidity Statistics)

Search  [ Advanced Search ]

Foundation ? Linearizations ? Contributions Info

### ICD-11 Beta Draft - Joint Linearization for Mortality and Morbidity Statistics

- ▶ 01 Certain infectious and parasitic diseases
- ▶ 02 Neoplasms
- ▶ 03 Diseases of the blood and blood-forming organs
- ▶ 04 Disorders of the immune system
- ▶ 05 Conditions related to sexual health
- ▶ 06 Endocrine, nutritional and metabolic diseases
- ▶ 07 Mental and behavioural disorders
- ▶ 08 Sleep-wake disorders
- ▶ 09 Diseases of the nervous system
- ▶ 10 Diseases of the eye and adnexa
- ▶ 11 Diseases of the ear and mastoid process
- ▼ 12 Diseases of the circulatory system
  - ▶ Neoplasms of the circulatory system
  - ▶ Developmental anomalies of the circulatory system
  - ▼ Hypertensive diseases
    - ▶ CA00 Essential hypertension
    - ▶ CA01 Hypertensive heart disease
    - ▶ CA02 Hypertensive renal disease
    - ▶ CA03 Hypertensive crisis
    - ▶ CA04 Secondary hypertension
    - ▶ CA0Y Other specified hypertensive diseases
    - ▶ CA0Z Hypertensive diseases, unspecified
    - ▶ MG1B White coat hypertension
  - ▶ Ischaemic heart disease
  - ▶ Diseases of coronary artery
  - ▶ Pulmonary heart disease and diseases of pulmonary circulation
  - ▶ Pericarditis

Foundation Id : ht

**CA00 Essential hypertension** (primary) hypertension for which no other cause can be found.

**Parent**  
Hypertension

#### Definition

Essential (primary) hypertension, accounting for approximately 90% of hypertension, is defined as high blood pressure for which a secondary cause cannot be found.

#### Long Definition

Defined through the measurement of the blood pressure using cuff method with a sitting systolic blood pressure above 140mmHg or a sitting diastolic blood pressure above 90mmHg in three consequent measurements. No specific medical cause can be found.

#### Inclusions

- high blood pressure

#### Exclusions

- involving vessels of brain (9C00-9C2Z)
- involving vessels of eye (AH01)

Show all index terms [17]

Joint Linearization for Mortality and Morbidity Statistics

Print Versions

Coding Tool

Special tabulation list of infectious agents

Frozen Releases

The Coding Tool for ICD-11 Beta Draft - Joint Linearization for Mortality and Morbidity Statistics



ICD-10 : I10

Please read the Caveats

# Coding Tool

## ICD-11 Coding Tool

breast cancer



Guessing the word being typed...

Feedback

Let us know if you couldn't find what you were looking for

### Word list

sort: Relatedness/repetition

cancer

### Destination Entities

sort: Matching score

**2D20** Malignant neoplasms of breast

breast cancer \*

**2G6Y** Other specified inherited cancer-predisposing syndromes

Hereditary breast cancer

**MM01.1** Fear of breast cancer female

### Chapter distribution / filter

Neoplasms

2



## 2D20 Malignant neoplasms of breast

### Parent

Malignant neoplasms, stated or presumed to be primary, of specified sites, except of lymphoid, haematopoietic, central nervous system and related tissues

Show all ancestors up to top

ICD-10 : C50-C50

### Post-coordination

#### Laterality

- XB1A Contralateral
- XB1B Ipsilateral
- XB1C Medial
- XB1D Lateral
- XB30 Bilateral
- XB31 Left
- XB32 Right
- XB33 Unilateral, unspecified
- XB34 Unspecified laterality

#### Specific anatomy

Search allowed values

#### Histopathology

Search allowed values

#### Specific anatomy

- XC57** Axillary tail of **breast**
- XC53** Upper inner quadrant of **breast**
- XC55** Lower outer quadrant of **breast**
- XC54** Lower inner quadrant of **breast**
- XC56** Upper outer quadrant of **breast**



# Postcoordination

- Cluster of codes to describe one condition in more detail  
Known already from ICD-10
- Optional  
“Use additional code, if desired, to identify...”
- Mandatory  
“Code also...”

# Cluster 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

# Structural innovations

- Multiple parenting
  - Code in one place - see in multiple places – analyze in alternative ways
- Alternative special tabulations
- Foundation
- Development on ontology editor online
- Web platform for participation
- Web services
- Coding tools

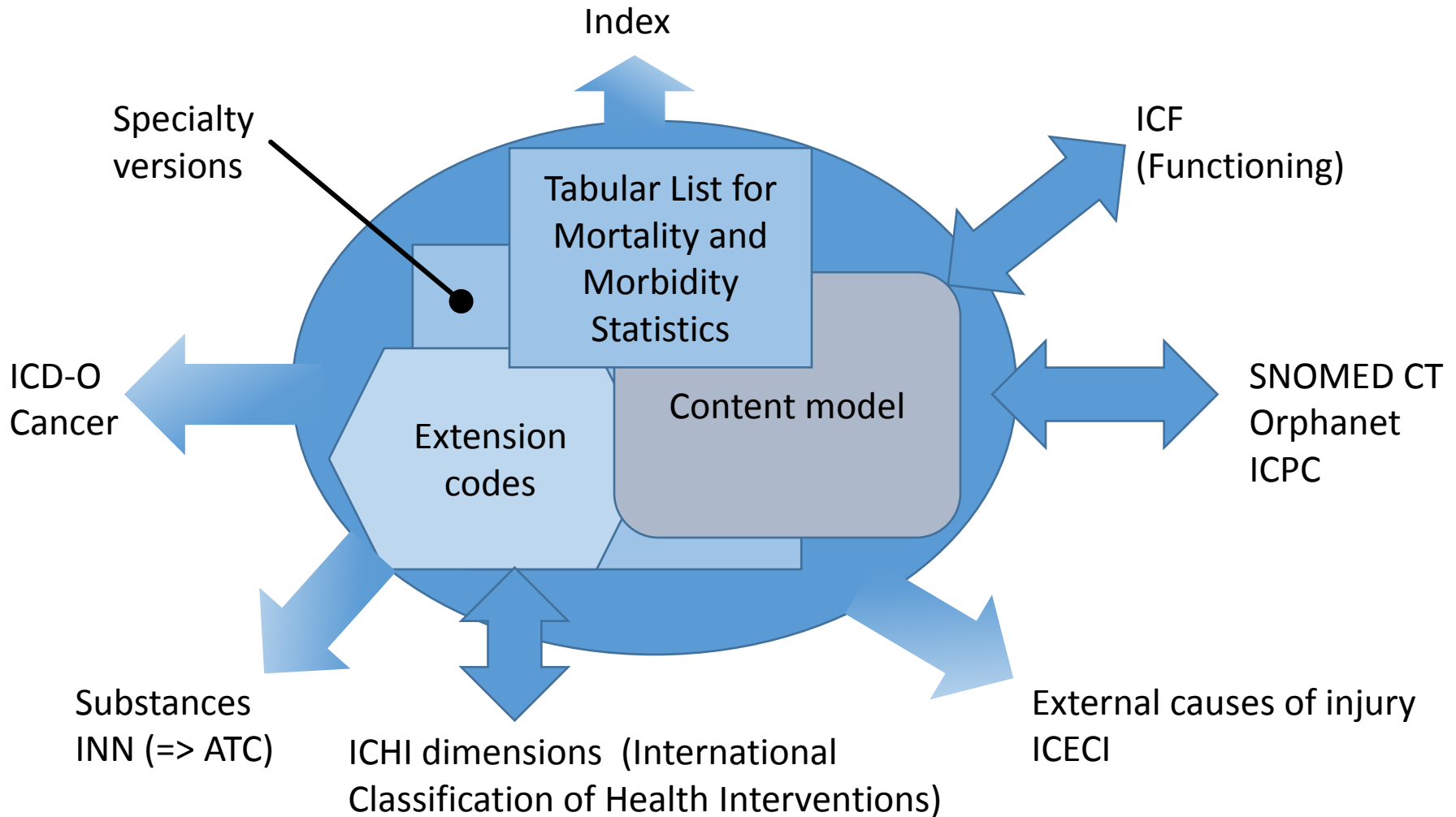
# Differences to ICD-10

Term	Translation
Foundation	Everything in ICD
Entity	Thing in foundation (rubric)
<del>Linearization</del>	Classification – Tabular list
Stem code	Category (mostly ‘dagger’)
Extension code	Additional information

# Differences to ICD-10

- Coding scheme
- Content model
- Morbidity, main diagnosis:
  - Reason for admission, after assessment at the end of the stay

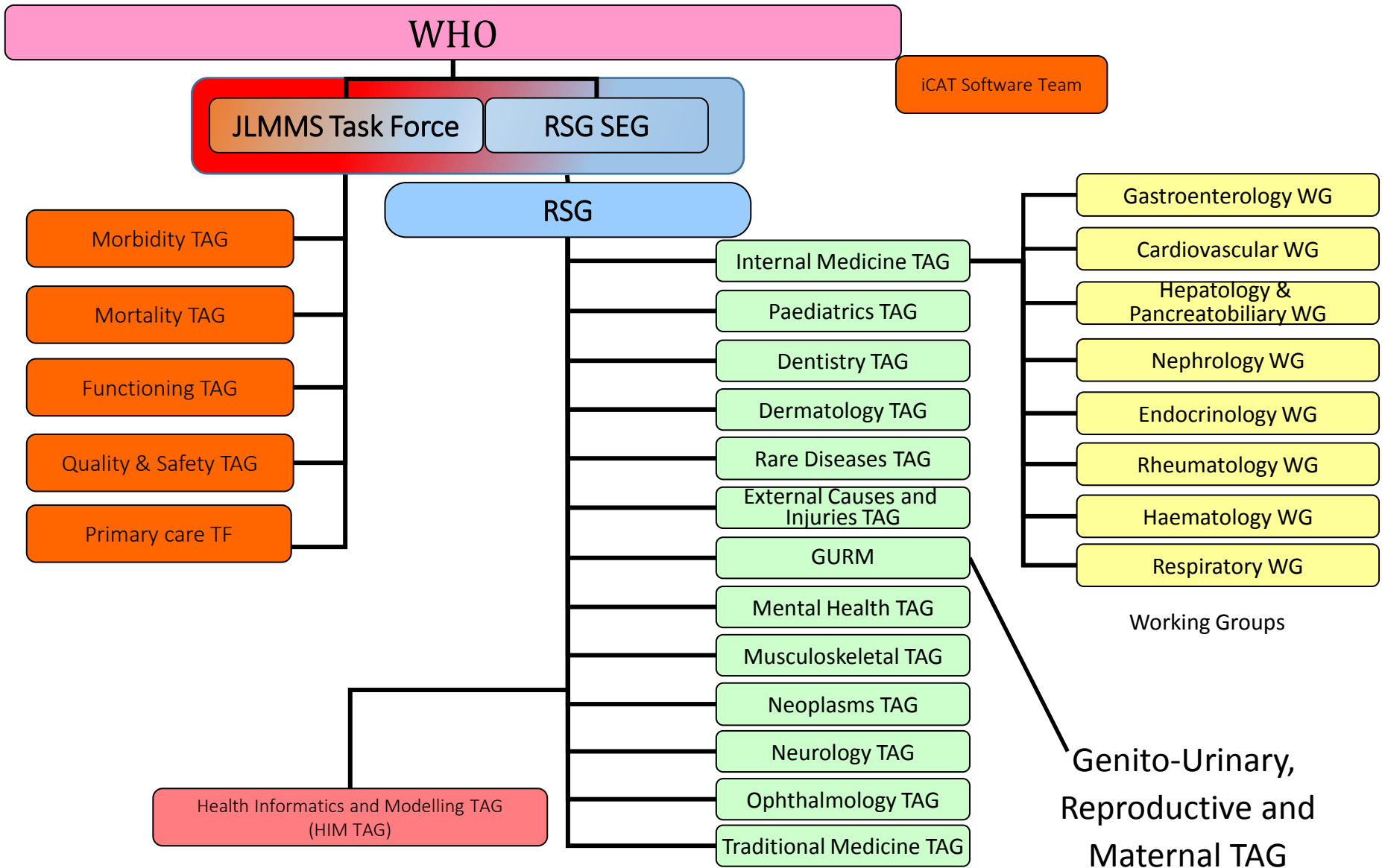
# ICD-11 Foundation



# ICD-11 - work to date

- Authoring by Topic Advisory Groups (since 2007)
- Proposal platform (start June 2014)
  - 5302 proposals; 97% actioned
- Kind of proposals submitted
  - Enhancement of definitions or terms (65%)
  - Hierarchical changes (35%)

# ICD Contribution





# New chapters

- **Immune System**
  - Diseases related to the immune system
  - Some remain in organ system
- **Conditions related to Sexual Health**
  - Small chapter - special tabulation?
- **Sleep Wake Disorders**
  - Small chapter - special tabulation?
- **Extension Codes**
  - Allows adding detail – retaining important detail
- **Traditional Medicine**
  - Only for additional coding

# New Content

## Infectious Diseases Chapter

- Compatibility with ICD-10
  - Clinical , Health prevention, Treatment or Monitoring tradition
  - Useful for limited diagnostic capacity
  - Assist coders to understand and use the structure
  - Grouping of diseases with multiple agents
  - Meaningful tabulation categories.
- Innovation
  - Alternative special view
    - Infectious diseases by agent (from all chapters)
  - Additional agents
  - Influenza moved into chapter
- Last issues
  - Sepsis
  - Some organ specific infections

# New Content

## Neoplasms Chapter

- Compatibility with ICD-10 at 3-character level
- Compatibility with ICD-O
- Innovation:
  - Add relevant histopathology
  - Tumours outside old behaviour scheme (benign, malignant...)
    - Brain neoplasms
    - Haematologic neoplasm
- Last issues
  - Match new brain and haematology structure for comparison with 'old' data

# New Content

## More examples

- **Diseases of Skin**
  - Replaced and removed outdated concepts
- **Diseases of Eye**
  - More clinical detail
- **Diseases of the digestive system**
  - Systematic subdivision by anatomy, then etiology
- **Endocrine, nutritional and metabolic diseases**
  - Simplification of diabetes
  - Update of 'nutrition' (malnutrition – undernutrition – overweight)

# Hierarchy of 'Diabetes' is simpler

## Aetiology

- 6A30 Type 1 diabetes mellitus
- 6A31 Type 2 diabetes mellitus
- 6A32 Diabetes mellitus, other specified type
- 6A33 Diabetes mellitus, type unspecified

## Manifestation

- MB10 Diabetic acidosis
- MF20 Diabetic coma
- MH01 Diabetic cataract
- ML40 Diabetic bullae
- ML41 Diabetic cheiroarthropathy
- ML43 Diabetic dermopathy
- MG50 Diabetic foot
- ..... other complications

# Taxonomy related coding principles

- **Always aetiology and manifestation**
  - Precoordinated where important (or not feasible or meaningful otherwise)
  - Postcoordinated where
    - More flexibility is necessary
    - Either manifestation or etiology are necessary for usecases
- **Data better usable**
  - Public health (more etiology)
  - Clinical or casemix (more manifestation)

# New Content - More examples

- Diseases of circulatory system
  - Myocardial infarction by 'STEMI', no longer by location
  - Valve diseases by valve, etiology and type of issue
- Injuries
  - Inclusion of more aspects, e.g. injuries of blood vessels of the head
  - Add detailed anatomy separately
- External causes
  - Same detail for all 'intents' (accidental, self harm, assault ...)
  - New intent 'intent pending'
- Factors influencing health status and contact with health services
  - Alignment with ICF, primary care needs
  - Update with needs coming from ICD use

Focus work – verify impact  
Next steps



# Relevance of ICD codes - frequencies

(Espinosa, Jakob)

- Morbidity – sample 6 countries
  - Australia, Canada, Chile, England, Mexico, Thailand
  - Age (< 1 year old; over 1 year old) and Gender; No year breakdown
  - 1-2 latest data years
  - 95% case coverage (AU: 95%= 222; 100%=222+926)
  - View by rank, percentage, chapter, age, sex

# Morbidity frequent codes

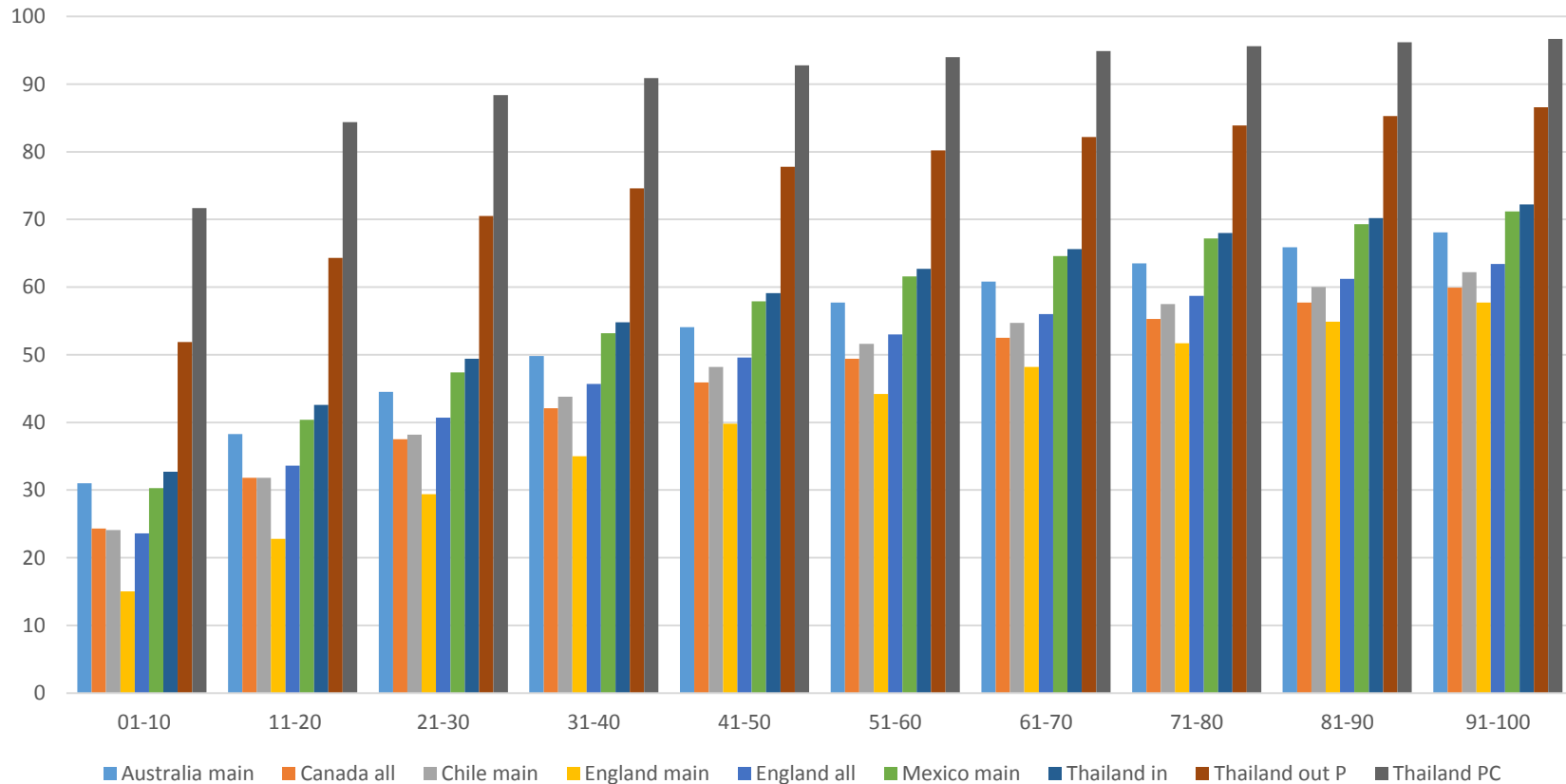
(Espinosa, Jakob)

	Diagnosis	ICD	# of characters	Breakdown	Period
<b>Australia</b>	Primary	ICD-10-AM	3, 4, 5	Age x Gender	2013-14
<b>Canada</b>	All	ICD-10-CA	4	No	2014-15
<b>Chile</b>	Discharge	ICD-10	4	Age x Gender	2012
<b>England 1</b>	Primary	ICD-10	3, 4	Age, Gender	2013-14
<b>" 2</b>	All	ICD-10	3, 4	Age, Gender	2013-14
<b>Mexico</b>	Discharge	ICD-10	4	No	2008-14
<b>Thailand 1</b>	In-patient	ICD-10-TM	4	Age	2015
<b>" 2</b>	Out-patient	ICD-10-TM	4	Age x Gender	2015
<b>" 3</b>	Primary care	ICD-10-TM	4	Age x Gender	2015

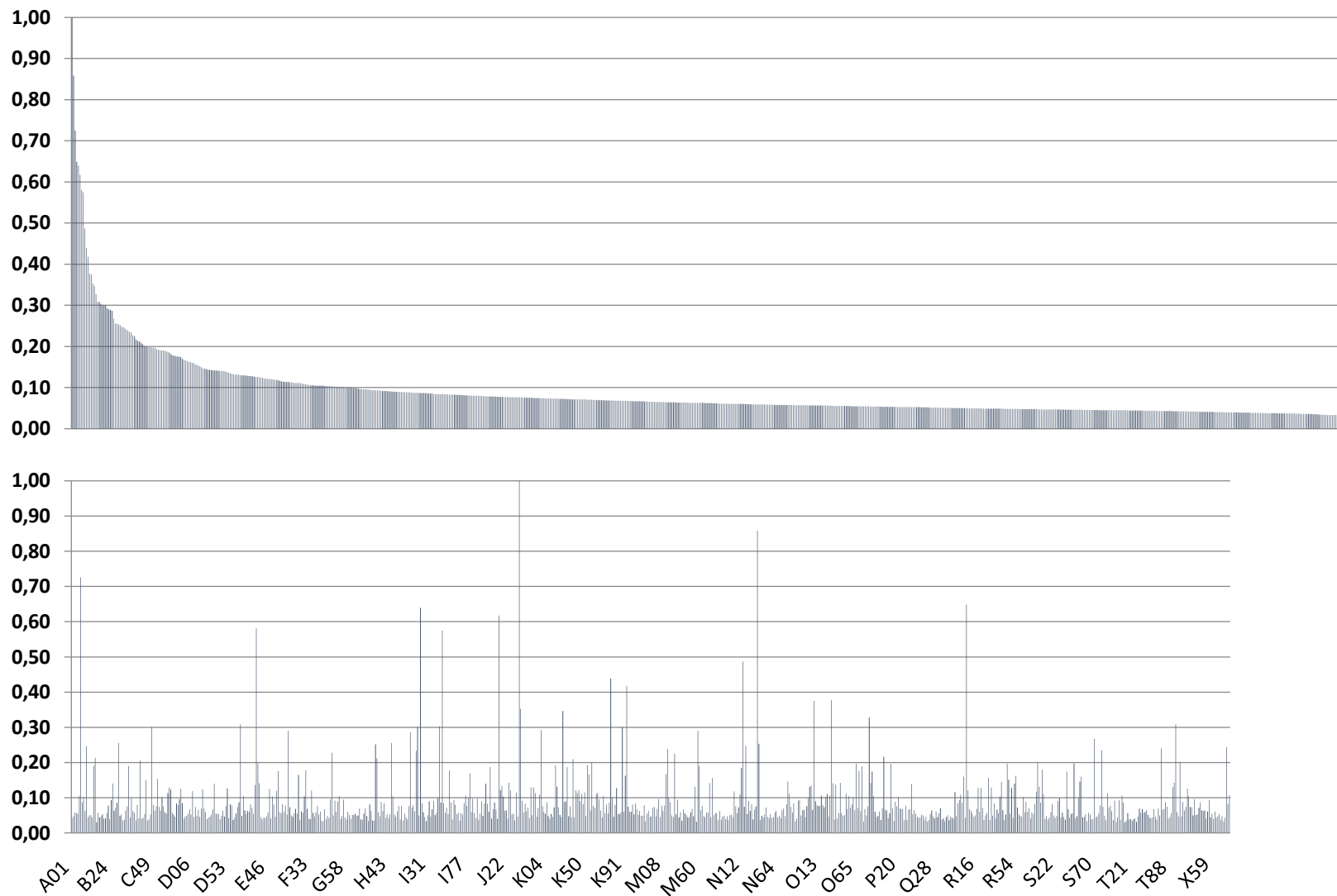
J44	O80
N39	I10
A09	O82
R10	E11
I25	E78
J18	J18
E11	N18
I50	K80
N18	R03
K80	J00
L03	J44
O33	N39
O06	O06
J45	A09
K29	R10
O80	E87
D64	I25
V28	K35

# Few ICD-10 codes very frequent

Cumulative % cases covered by ranked diagnoses

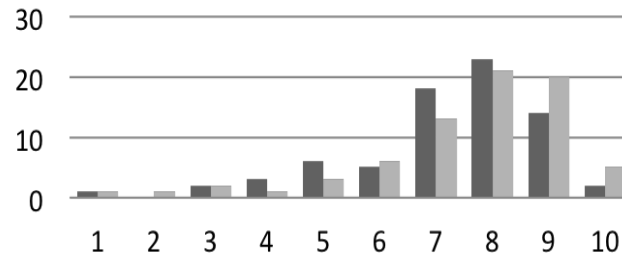


# 798 ICD-10 3-ch codes explain of 95% cases

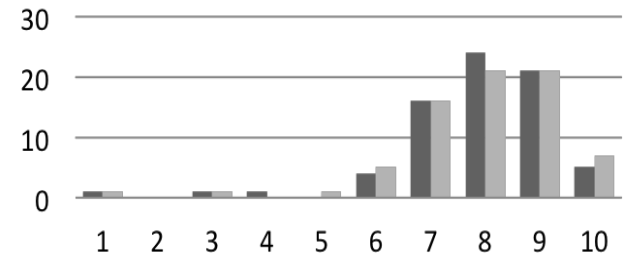


Accuracy and ease of use of the allergic and hypersensitivity conditions section of ICD 11 (N=90; 4 continents)

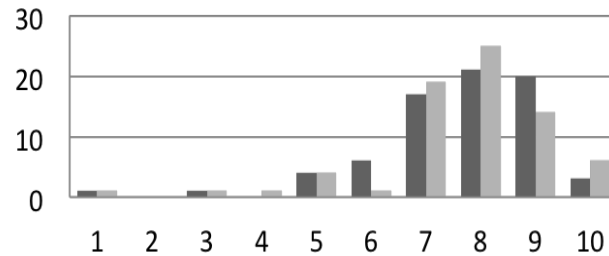
"Allergic or hypersensitivity disorders involving the RESPIRATORY tract"



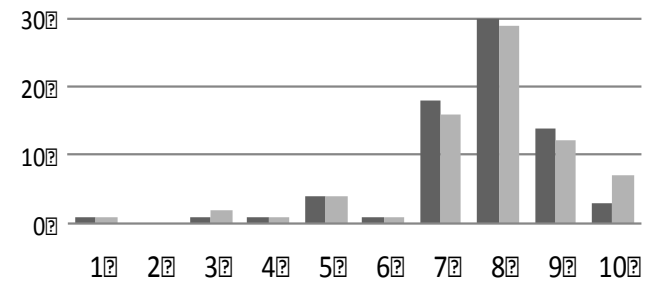
"Allergic or hypersensitivity disorders involving the EYE"



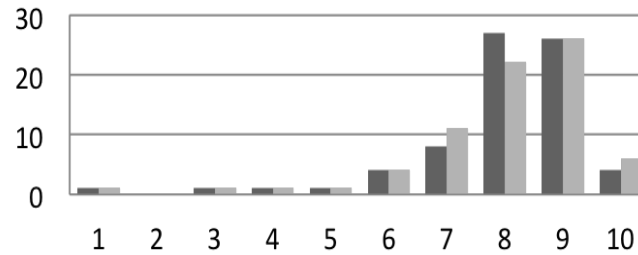
"Allergic or hypersensitivity disorders involving the SKIN and MUCOUS membranes"



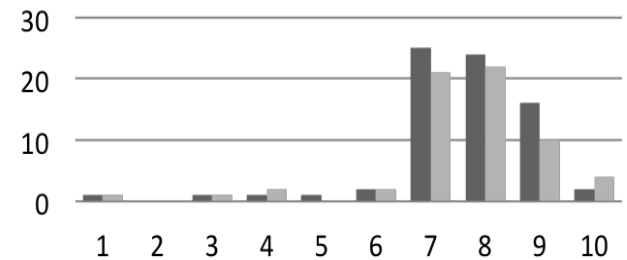
"Allergic or hypersensitivity disorders involving the GASTROINTESTINAL tract"



ANAPHYLAXIS



"COMPLEX allergic or hypersensitivity conditions"



■ Easy to use ■ Accuracy

■ Easy to use ■ Accuracy

Tanno et al., Allergy submitted

# Focus on ICD-11 for Mortality and Morbidity Statistics (MMS)

- Index entries
- Relevant detail
- Remaining proposals
- User guidance
- Crosswalks
- Implementation guidance
- Quality assurance

# Major upcoming events

- Statistical review meeting 06 / 2016
- Revision Task Force Meeting 07 / 2016
- Briefing Executive Board of WHO 05 / 2016
- Revision conference 10 / 2016
  - ICD-11 member state version



***ICD-11 MMS:  
Striving together to maximise utility  
of ICD-11 for  
mortality and morbidity***