



ICD-Revision

Robert Jakob, WHO



Ziele

- Wissenschaftlich untermauert und aktuell
- Definitionen der Kategorien
- Eignung für elektronische Arbeitsumgebung
- Eignung für die wesentlichen Anwendungsfälle
- Mehrsprachig



ICD11 Use-Cases

1. Mortalität
2. Morbidität
3. Case Mix Groupings
4. Primary Care = Erstversorgung ?
5. Qualität and Sicherheit
6. Wissenschaftliche Definition des klinischen Bildes

3

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3

Wege zum Ziel

- Definition der Inhalte
- Online Platform
- Organisation
- Kontrolle
- Ergebnisse
- Nächste Etappen und Zeitplan

4

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Das "CONTENT MODEL"

Beschreibung jeder ICD-Klasse anhand:

TITLE of ENTITY: Name of disease, disorder, or syndrome...

1. A.) Short Textual definition + B.) Extensive definition
2. Synonyms - Inclusion – Exclusion - Index terms

Descriptive characteristics

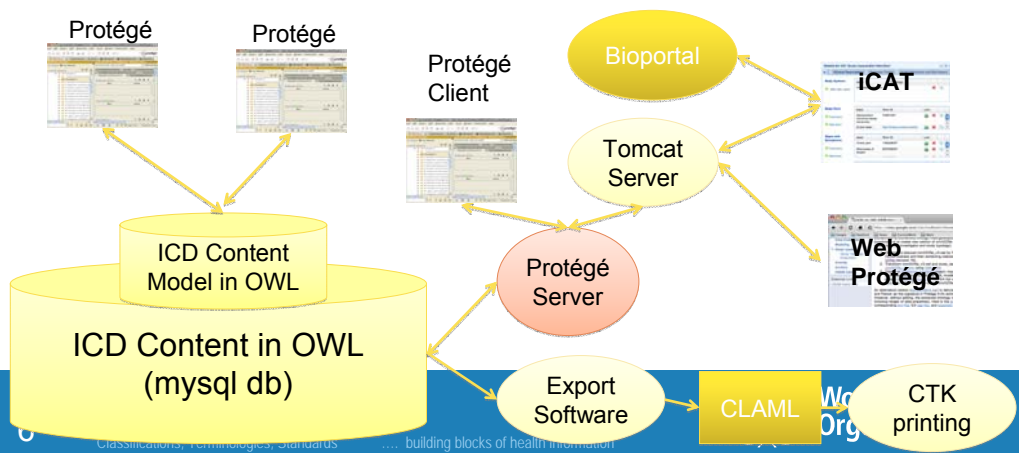
1. **Type**
Disease, disorder, syndrome, injury, sign/symptom, external cause, reason for encounter;
2. **Body System(s)**
3. **Body Part(s)**
4. **Manifestation Attributes**
 - a. Signs & Symptoms
 - b. Diagnostic Findings
5. **Causal Properties** (*etiology*)
 - a. Causal Mechanisms /Agents
 - b. Risk Factors
 - c. Genomic characteristics
6. **Temporal Properties**
7. **Severity and/or Extent**
8. **Functional Properties**
9. **Treatment**

Maintenance attributes

- A. **Unique identifier**
- B. **Subset, adaptation, and special view flag**
 1. Primary Care
 2. Clinical Care
 3. Research
 4. Special indices (e.g. Public Health Indices or Resource Groupings)
- C. **Hierarchical relationships** parents and children in ICD structure
- D. **Mapping relationships**
Linkages to other systems like SNOMED etc.
- E. **Other rules**

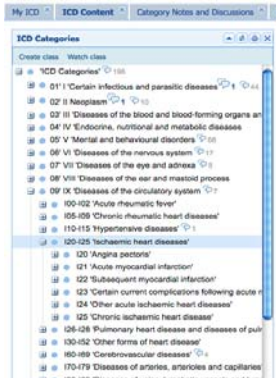
ICD 11 Content Model: Software Infrastructure

Protégé: Open-source ontology development environment (<http://protege.stanford.edu>)

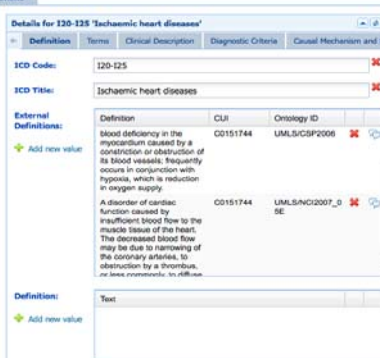


iCAT ICD Curation Platform *Functionalities*

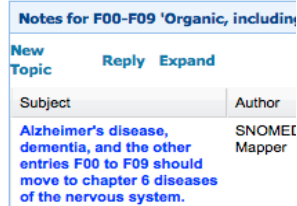
Manage hierarchy



Enter and edit content of each ICD category



Collaboration:
Add notes and discussions on concepts and content



To come: Proposals and workflow management

7

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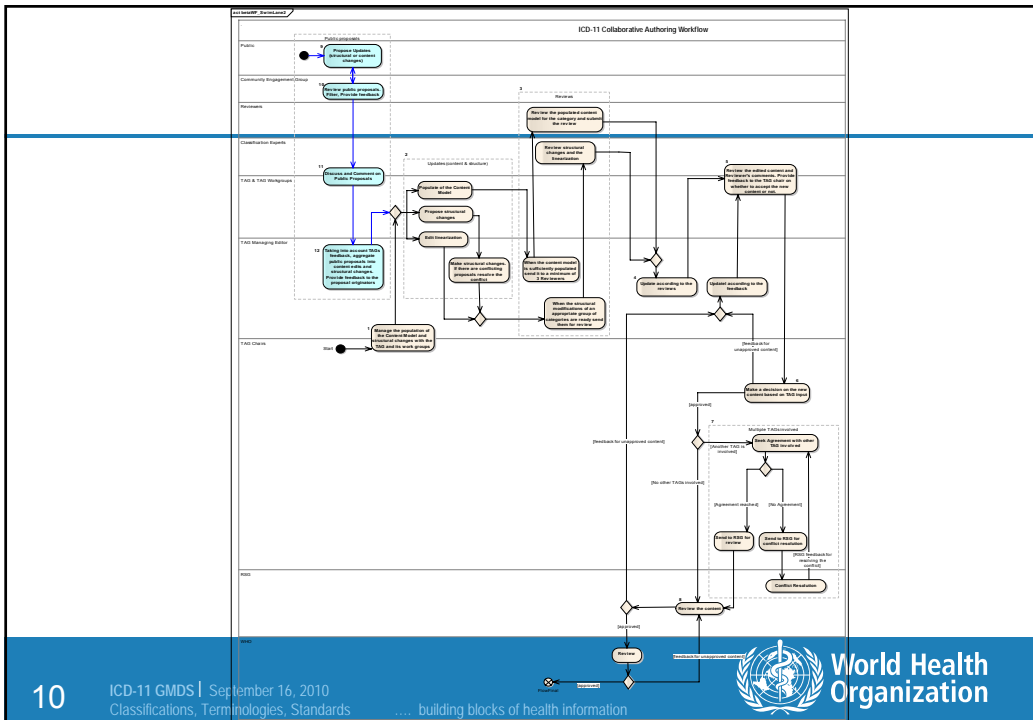
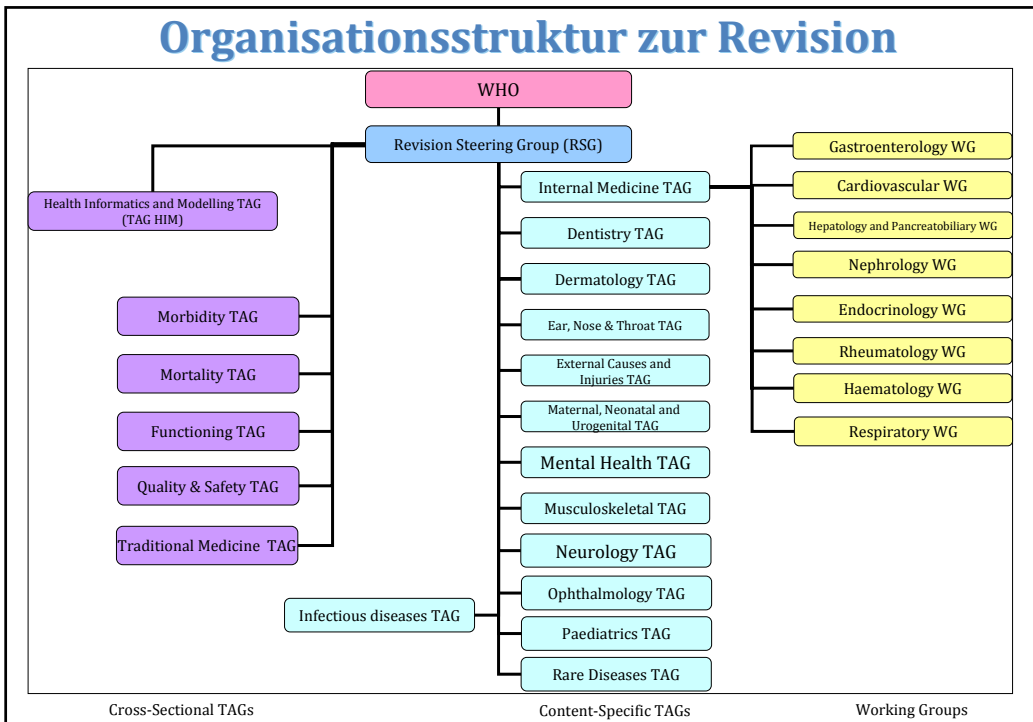
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Organisationsstruktur zur Revision



Mehrsprachigkeit

J03.0

Is a category that relates to an **acute disease** of the **tonsil** presenting with **inflammation** caused by an **infection** by **beta-haemolytic streptococcus**

Streptococcal
Tonsillitis

Amygdalite à
Streptocoques

Стрептококков
ый тонзиллит

链球菌性扁桃
体炎

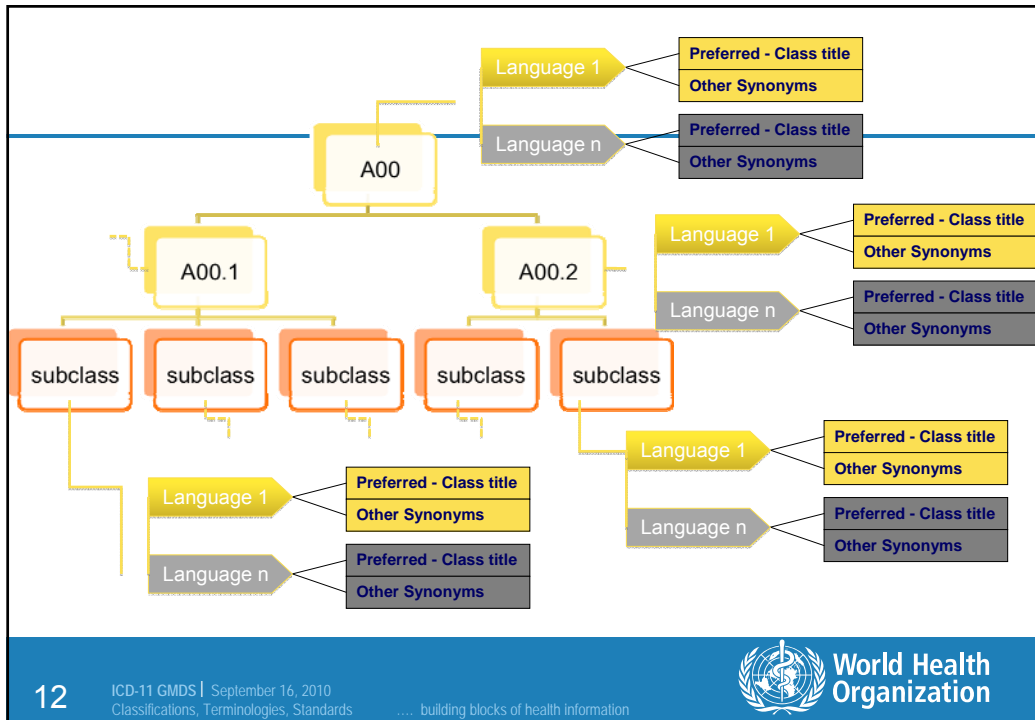
11

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12

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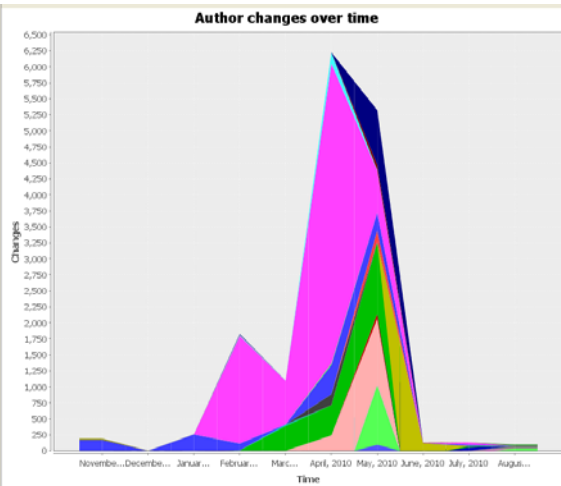
Cholera	التهُجَّة [الكوليرا]	霍乱	Холера
Typhoid and paratyphoid fevers	الْحُمَّى التَّيفَوِّدِيَّة [التيفوئيدِيَّة] والْحُمَّى نظيرَة التَّيفَوِّدِيَّة [الباراتيفوئيدِيَّة]	伤寒和副伤寒	Тиф и паратиф
Paratyphoid fever B	الْحُمَّى نظيرَة التَّيفَوِّدِيَّة (الباراتيفوئيدِيَّة)	副伤寒乙	Паратиф В
Paratyphoid fever, unspecified	الْحُمَّى نظيرَة التَّيفَوِّدِيَّة (الباراتيفوئيدِيَّة)، غير المُعَيَّنَة	未特指的副伤寒	Паратиф неуточненный
Other salmonella infections	عَدَاوى أُخرى بالسَّلْمُونِيَّات	其他沙门氏菌感染	Другие сальмонеллезные инфекции
Salmonella enteritis	السَّلْمُونِيَّات المُهَيَّبَة لأَمْعَاء	沙门氏菌肠炎	Сальмонеллезный энтерит
Salmonella septicaemia	إِنْتَانٌ كَمَوِيّ (سبتيسيميا) بالسَّلْمُونِيَّات	沙门氏菌败血症	Сальмонеллезная септицемия
Salmonella infection, unspecified	عَدَاوى بالسَّلْمُونِيَّات، غير مُعَيَّنَة	未特指的沙门氏菌感染	Сальмонеллезная инфекция неуточненная
Shigellosis due to Shigella dysenteriae	دَاءُ الشَّيْجِيَّاتِ النَّاجِمِ عَنِ الشَّيْجِيَّاتِ الرَّحَارِيَّة	由于志贺痢疾杆菌引起的志贺菌病	Шигеллез, вызванный Shigella dysenteriae
Shigellosis due to Shigella flexneri	دَاءُ الشَّيْجِيَّاتِ النَّاجِمِ عَنِ الشَّيْجِيَّاتِ الْفِلْخُنْزِيَّة	由于弗氏志贺菌引起的志贺菌病	Шигеллез, вызванный Shigella flexneri
Shigellosis due to Shigella boydii	دَاءُ الشَّيْجِيَّاتِ النَّاجِمِ عَنِ الشَّيْجِيَّاتِ الْبُوَيْدِيَّة	由于波伊德志贺菌引起的志贺菌病	Шигеллез, вызванный Shigella boydii
Shigellosis due to Shigella sonnei	دَاءُ الشَّيْجِيَّاتِ النَّاجِمِ عَنِ الشَّيْجِيَّاتِ السُّونِيَّة	由于宋内志贺菌引起的志贺菌病	Шигеллез, вызванный Shigella sonnei

Kontrolle



Author changes over time (August)

[Adam Harrison, 2]
 [Ajloscha Neubauer, 90]
 [Ana Rath, 971]
 [Annette W-Dahl, 3]
 [Benjamin Hidalgo-Mateos, 2]
 [Cari Cell, 3]
 [Catherine Hooppell, 1276]
 [Coongor Nyulas, 41]
 [Doris Chou, 79]
 [Elfi Kales, 52]
 [Francesco Gongolo, 1998]
 [Franz Grehn, 120]
 [Ingrida Januikiviciene, 9]
 [Jean Marie Rodrigues, 24]
 [Julie Rust, 181]
 [Karyn Chen, 169]
 [Linda Best, 1328]
 [Michael Weichert, 24]
 [Mourad Mokri, 1]
 [Robert Chalmers, 7744]
 [Robert Jalob, 192]
 [Sara Cottler, 8]
 [Satoshi Kashi, 90]
 [Tania Tudorache, 870]
 [Tiana, 16]
 [webprotege_prd, 22]

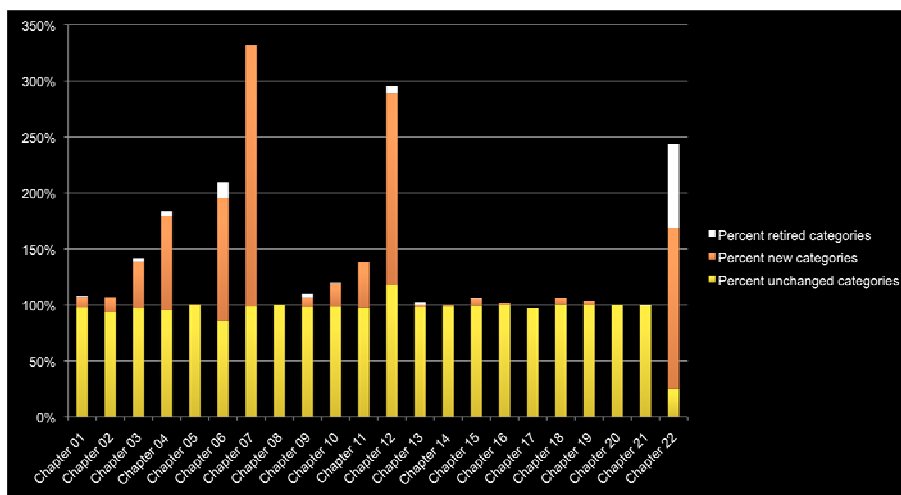


Legend for Author changes over time:
 Adam Harrison, Ajloscha Neubauer, Ana Rath, Annette W-Dahl, Benjamin Hidalgo-Mateos, Cari Cell, Catherine Hooppell, Coongor Nyulas, Doris Chou, Elfi Kales, Francesco Gongolo, Franz Grehn, Ingrida Januikiviciene, Jean Marie Rodrigues, Julie Rust, Karyn Chen, Linda Best, Michael Weichert, Mourad Mokri, Robert Chalmers, Robert Jalob, Sara Cottler, Satoshi Kashi, Tania Tudorache, Tiana, webprotege_prd



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Change to structure categories



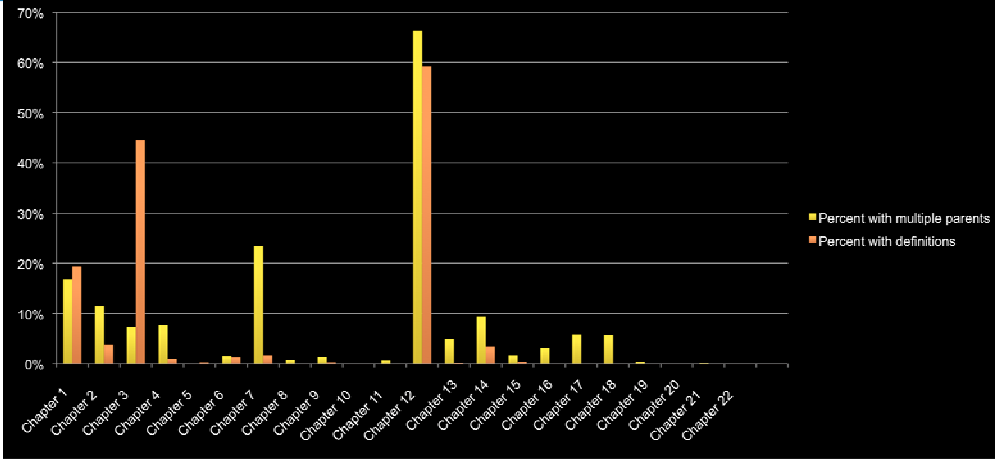
16

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Multiple parents NEW definitions



17

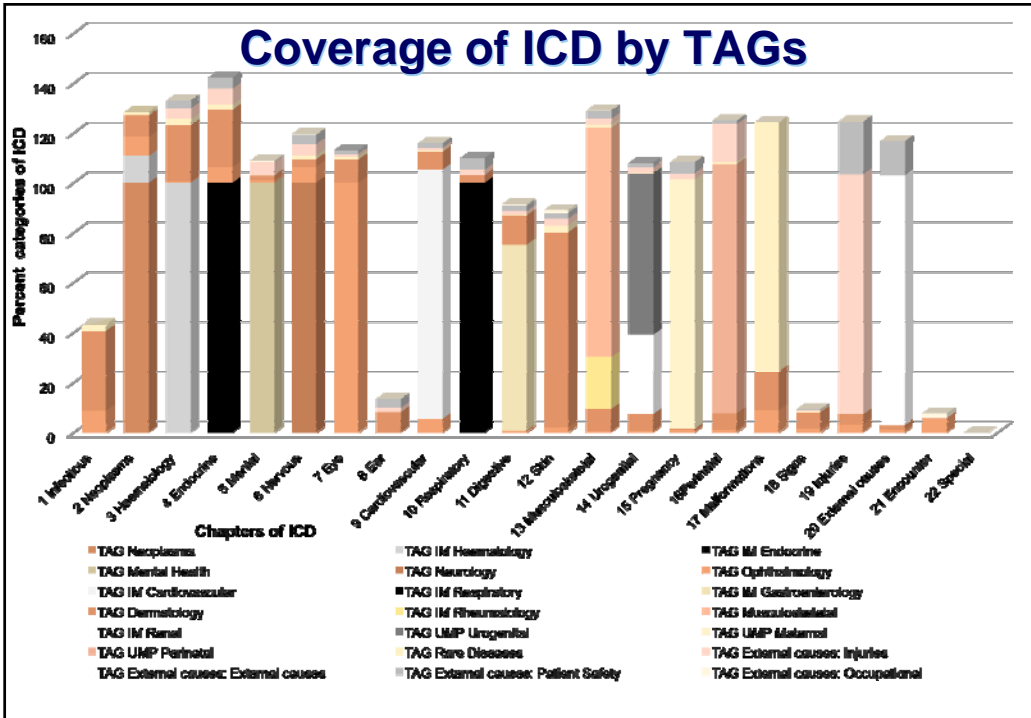
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Coverage of ICD by TAGs



Ergebnisse



Content	
1. ICD Concept Title	Congenital tuberculosis
2. Classification Properties	
2.1.0 Current ICD-10 code	P37.0
3. Textual Definition(s)	Congenital tuberculosis is the infection with <i>Mycobacterium tuberculosis</i> complex to the infant by a mother with haematogenously spread tuberculosis or by aspiration of infected amniotic fluid in cases of tuberculous endometritis.
5. Clinical Description	
5.1. Body System(s)	Whole body
6. Manifestation Properties	
	Positive bacteriologic probe Primary disease complex in the liver Exclusion of extrauterine infection
6.1. Signs & Symptoms	Fever Failure to thrive Lymphadenopathy Hepatomegaly, Splenomegaly
7. Causal Properties	
7.1. Etiology Type	Infection
7.2. Agents	<i>Mycobacterium tuberculosis</i> complex
7.3. Mechanisms	Spread from mother to infant due to placenta infection Aspiration of infected amniotic fluid
7.5. Risk Factors	Mother with haematogenously spread tuberculosis
8. Temporal Properties	
8.1. Age of Occurrence & Frequency	Antenatal
11. Specific Condition Properties	
11.2. Life-Cycle Properties	Perinatal : antenatal



Tumour of the skin of the eyelid

Basal cell carcinoma

Eyelid tumor Stage 2 TNM

Meine Wahrheit

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Nervous system (6)

G93.A.- Disorders of CSF pressure and flow [Gj90]

G93.A.A- Increased intracranial pressure disorders [Gj90.0]

G93.A.A.A Idiopathic intracranial hypertension [Gj90.00]

IIH is a disorder of unknown cause. The diagnostic criteria include an awake and alert patient with signs and symptoms of increased intracranial pressure with no localising signs. All neurodiagnostic studies should be normal. Increased CSF pressure.

Pseudo-tumour Cerebri

Excl.: hypertensive encephalopathy

G93.A.A.A.A Intracranial hypertension related to obesity [Gj90.000]

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Skin chapter (12)

XII_AA.C.- Fungal infections affecting the skin [LA2]

This group incorporates both localized infection of the skin by fungus (e.g. pityriasis versicolor) and manifestations of systemic fungal infection (e.g. cutaneous cryptococcosis)

B35-B49_AA- Candidosis of skin and mucous membranes [B37a]

Superficial colonisation or infection of skin and mucous membranes by Candida yeasts

B37.0 Candidosis of lips and oral cavity [B37a.0]
Oral thrush

B37.0_AA Acute erythematous oral candidosis [LB37a.00]

23

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Skin chapter (12)

XII_AA.B.D- Syphilis and other treponematoses [LA13]

XII_AA.B.D.A Syphilis [LA130]

A51.5 Early latent syphilis [A53.A]

Early latent syphilis (infection < 1 yr duration), sometimes with recurrence of infectious lesions.

A52.8 Late latent syphilis [A53.B]

Late latent syphilis (infection > 1 yr duration), rarely with recurrences; positive serological tests.

XII_AA.B.D.B Yaws and pinta [LA131]

XII_AA.B.E Other predominantly sexually transmitted bacterial infections affecting skin [LA14]

24

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L20- Atopic dermatitis [LB00]

A chronic inflammatory genetically determined disease characterized by elevated circulating IgE levels, Type I allergy, asthma and its pathogenesis. It is manifested by intermittent pruritic eruptions presenting in infancy affecting the face, forehead and neck. Although commonly limited in extent and duration.

L20_AA Infantile atopic dermatitis [LB000]

L20_BB Childhood atopic dermatitis [LB001]

L20_CC Adult atopic dermatitis [LB002]

L20.9 Atopic dermatitis... [LB00z]



Gastrointestinal (11)

Diseases of oral cavity, salivary glands and jaws [A].....

Diseases of oesophagus [B]

Diseases of stomach [C]

Diseases of duodenum [D]

Diseases of small intestine [E].....

Noninfective enteritis and colitis [E]

Diseases of appendix [F]

Diseases of large intestine [G]

Diseases of anal canal [H].....

Diseases of liver [I]

Diseases of gallbladder and biliary tract [J]

Diseases of pancreas [K]

Diseases of peritoneum [L].....

Hernia [M].....

Functional gastrointestinal disorders [N].....

Other diseases of the digestive system [O]



Gastrointestinal (11)

K21.- Gastro-oesophageal reflux disease [C]

K21_AA- Non-erosive reflux disease [A]

K21.9 Gastro-oesophageal reflux disease without oesophagitis [K21.9]
Oesophageal reflux NOS

K21_BB Erosive oesophagitis without complications [B]

K21_CC Erosive oesophagitis with complications [C]

K21_DD- Other and unspecified gastro-oesophageal reflux disease [D]

K21.0 Gastro-oesophageal reflux disease with oesophagitis [K21.0]
Reflux oesophagitis

27

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Eye

H40.2- Primary angle-closure glaucoma [H40.2]

Angle-closure glaucoma (primary)(residual stage): acute
Angle-closure glaucoma (primary)(residual stage): chronic
Angle-closure glaucoma (primary)(residual stage): intermittent

H40.20 Unspecified primary angle-closure glaucoma [H40.20]

H40.21 Acute angle-closure glaucoma [H40.21]

H40.22 Chronic angle-closure glaucoma [H40.22]

H40.23 Intermittent angle-closure glaucoma [H40.23]

H40.24 Residual stage of angle-closure glaucoma [H40.24]

H40.242 Residual stage of angle-closure glaucoma, let eye [H40.242]

28

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Disorders of sclera, cornea, iris and ciliary body [H15-H22]
(H15-H22)

H16.- Keratitis [H16]

H16.2- Keratoconjunctivitis [H16.2]

Keratoconjunctivitis: exposure
Keratoconjunctivitis: neurotrophic
Keratoconjunctivitis: NOS
Keratoconjunctivitis: phlyctenular
Ophthalmia nodosa
Superficial keratitis with conjunctivitis

H16.20 Unspecified keratoconjunctivitis [H16.20]

H16.21 Exposure keratoconjunctivitis [H16.21]

H16.22 Keratoconjunctivitis sicca, not specified as Sjögrens [H16.22]

H16.23 Neurotrophic keratoconjunctivitis [H16.23]

H16.24 Ophthalmia nodosa [H16.24]

H16.25 Phlyctenular keratoconjunctivitis [H16.25]

H16.26 Vernal keratoconjunctivitis, with limbar and corneal involvement [H16.26]

H16.29 Other keratoconjunctivitis [H16.29]

29

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Combine M05 and M06

M05

Seropositive Rheumatoid arthritis

[See site code at the beginning of this chapter]

Excludes: rheumatic fever (I00)
rheumatoid arthritis (of):
- juvenile (M08.-)
- spine (M45)

M05.0

Felty's syndrome

Rheumatoid arthritis with splenadenomegaly and leukopenia

M05.1+

Rheumatoid lung disease (J99.0*)

M05.2

Rheumatoid vasculitis

M05.3+

Rheumatoid arthritis with involvement of other organs and systems

Rheumatoid:

- carditis (I52.8*)
- endocarditis (I39.-*)
- myocarditis (I41.8*)
- myopathy (G73.7*)
- pericarditis (I32.8*)
- polyneuropathy (G83.8*)

IM30 face-to-face meeting
2010 in Tokyo

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Combine M05 and M06 (cont'd)

M05.8		Other <u>seropositive</u> rheumatoid arthritis
M06.1		Adult-onset Still's disease --> should be moved to somewhere
		<i>Excludes:</i> <u>Still's disease NOS (M08.2)</u>
M06.2	M05.9	Rheumatoid bursitis
M06.3	M05.10	Rheumatoid nodule
M06.4	M05.11	Inflammatory polyarthropathy
		<i>Excludes:</i> <u>polyarthritis NOS (M13.0)</u>
M06.8		Other <u>specified rheumatoid arthritis</u>
M06.9		<u>Rheumatoid arthritis, unspecified</u>
M06.5	M05.12	Polymyalgia rheumatica
		<i>Excludes:</i> <u>polymyalgia rheumatica with giant cell arteritis (M31.5)</u>
M05.9	M05.13	<u>Seropositive Rheumatoid arthritis, unspecified</u>



BAND 2 – ANLEITUNG UND REGELWERK BAND 3 - INDEX



Tentative Timeline

- 2010 : **Alpha version (ICD 10+ → ICD 11draft)**
 - +1 YR : **Commentaries and consultations**
- 2011 : **Beta version & Field Trials Version**
 - +2 YR : **Field trials**
- 2013 : **Final version for public viewing**
 - 2014 : **WHA Approval**
- 2015+ : **Implementation**



33

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- iCamp 2 - drafting and sorting out
- 26 September 2010- 1 Oktober

34

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Teilnahme

- www.who.int/classifications
- A. Kribben Uni Essen - Nephrologie
- Aljoscha Neubauer, Uni München, Augenkrankheiten
- Karsten Dreinhofer, Europ. Verband ORT/EFFORT, Musculoskeletal
- Michael P. Manns, Uni Hannover, Hepatologie & Pancreatobiliär
- Michael Weichenthal*, Uni Kiel, Dermatologie
- Peter Malfertheimer, Otto-von-Guericke Univ. Gastroenterologie
- Wolfgang Gaebel, Heinrich-Heine Univ., Psychiatrie
- J.W. Thüroff, Mainz, Urologie

35

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iCAT Lite browse proposals info links

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Comments

- On 13th August 2010
[Please clarify usage.](#) - Huck Finn
- On 11th August 2010
[Why use this?](#) - Margaret Thatcher
- On 6th June 2010
[Really like this feature.](#) - John Candy
- On 3rd June 2010
[Where can I find X?](#) - Tania Tudorache

Proposals

- On 12th August 2010
[This term's preferred name needs to be updated.](#) - Sean Falconer
- On 3rd August 2010
[Definition is missing.](#) - Sean Falconer
- On 28th June 2010
[Should add this term as a child of this category.](#) - Tania Tudorache
- On 5th May 2010
[New child term.](#) - Tania Tudorache

Newslinks

- [iCamp Day 9](#)
- [iCamp Day 1](#)
- [iCamp Day 3](#)
- [ICD Revision Project Plan 2.0](#)
- [ICD Revision Process Description](#)
- [ICD Revision Press Release](#)

WHOICD11

- WHOICD11 iCAMP2 Preparation Meeting Starts today! 12 days ago
- WHOICD11 <http://www.youtube.com/watch?v=...> <http://bit.ly/9hid07> 195 days ago
- WHOICD11 iCamp2: 27 September-1 October 2010 (Geneva, Switzerland) 33 days ago
- WHOICD11 iCAMP2 Preparation Meeting Starts today! 12 days ago

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37

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