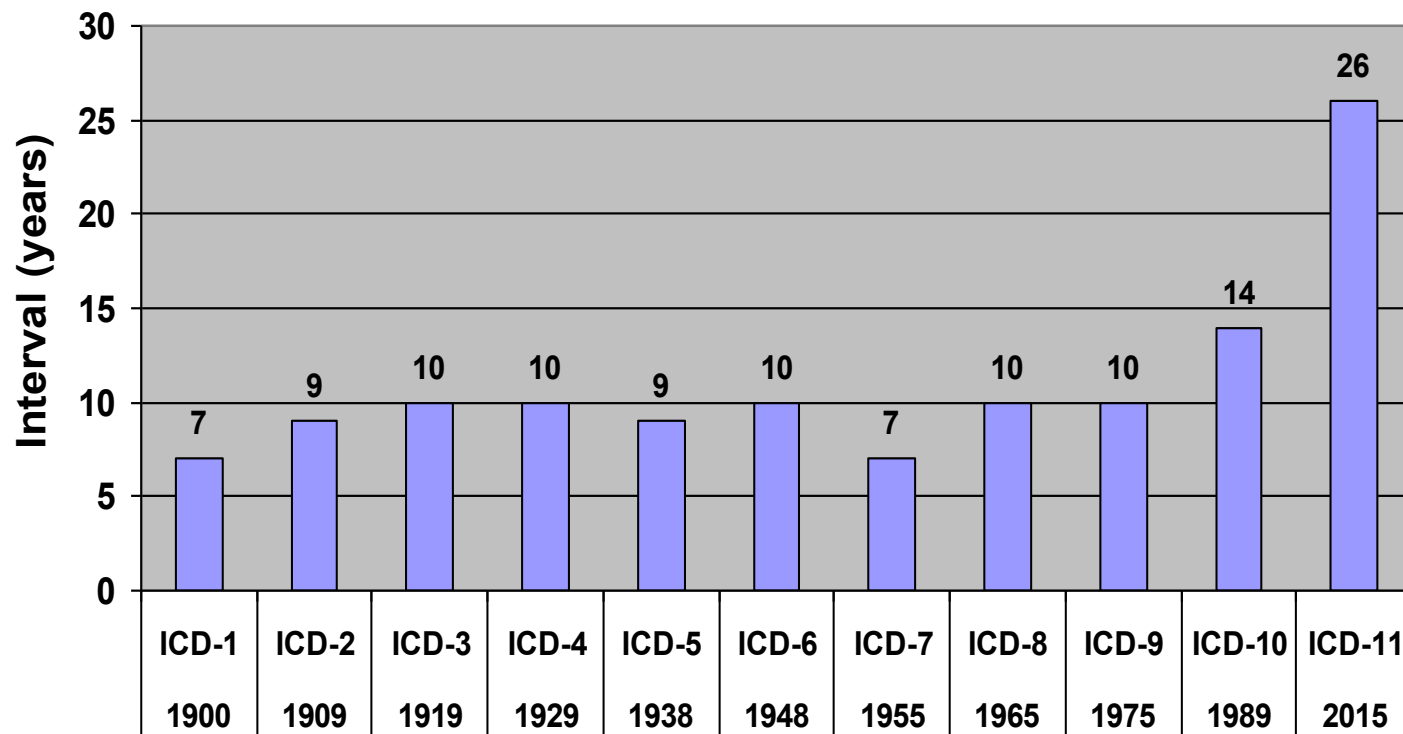




# ICD10 revision process and rare diseases

Ségolène Aymé  
WHO Topic Advisory Group  
on Rare Diseases

# ICD Revisions



# ICD Revision Process

- Drafting
  - Taxonomic Guidelines
  - Definition, Diagnosis and Indexing / mapping guidelines
- Overall Structure
- Individual Chapters
- Overseeing the **TOTAL ICD**
  - ALPHA Draft – structured comments
  - BETA Draft – field testing
- Final Draft

➤ **WHA Approval**

# ICD Revision Work Streams

## 1. Scientific Stream

- Evidence Based Reviews, Meta analyses
- Surveys, Validation Studies
- Add-on protocols for existing studies

## 2. Clinical Stream

- Clinical utility – linkage to patient reports
- Treatment Response
- Phenotypes: gene to behaviour specs

## 3. Public Health Stream

- Impact on Health Systems –society –service delivery
- Resource management -reimbursement - accounting
- IT applications - terminology

# Core Classification issues

- 1. Definition of the classification entity:**
  - *medical disease, disorder (syndrome), injury, sign, symptom, ...*
- 2. Clustering of signs, symptoms, & operational features**
- 3. Link to underlying pathophysiology & genetic markers**
- 4. Clinical utility of the classification entity**
- 5. Reliability of the classification entity**
- 6. Validity of the classification entity**
- 7. Separation of disease and disability elements**
- 8. Cultural elements that need to be attended**
- 9. Threshold considerations**
- 10. Other nosological issues relevant to this disorder**

# ICD Revision Applications

As a part of **ICD Knowledge Portal** three main applications:

1. **ICD-10 + Application**
2. **ICD-11 Draft Creation**
3. *(ICD – Terminology/Ontology Tools )\**

*\* Possibly for display – not directly for WEB entry*

# ICD Revision Applications

## 1. ICD-10 + Application

- Designated **Scientific Group Review**
  - Systematic reviews
    - Scientific, Clinical, Public Health Streams
  - Taxonomic rules & definitions
- Open Comments and suggestions
  - **Periodic Continuous Structured peer review**
    - » requested by WHO
  - Open to whole world – all users

# ICD Revision Applications

## 2. ICD-11 Draft

- Codes
  - Inclusions ( *all historical links, index terms*)
  - Exclusions
- Definition of the entity
  - Disease, disorder, injury, syndrome, sign, symptom
  - Level of use ( Primary Care, Clinical Care, Research)
  - Glossary description
  - Taxonomic ontology status
- Diagnostic Criteria for the entity
  - Clinical and/or research rules for diagnosis



# Composition of TAG



## – Europe

- Ségolène Aymé (TAG chair), Ana Rath (Orphanet)

## – North America

- Stephen Groft (Office of RD-NIH)
- Roberta Pagon (GeneClinics, University of Seattle)

## – South America

- Eduardo Castilla (Clearinghouse of birth defects, Brazil)

## – Australia

- Agnes Bankier (Possum, Murdoch Institute)

## – Asia

- Hyun-Young Park (NIH, Genetic and rare diseases center, Seoul)

# What is ongoing

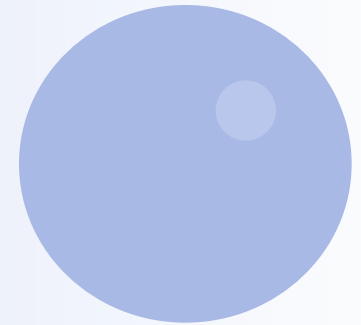


- Chapter by chapter comparison between
  - ICD-10
  - Orphanet classification
  - Published classifications (when available)
- List of proposals for ICD-10+
- Proposal for ICD-11 for the chapter
  - An information scientist was recruited to assist submitting proposals (contract RDTF secretariat 2009-2011)

# Orphanet analysis



- Lack of systematic approach
  - Classification according to major symptom
  - Classification according to aetiology / mechanism
- Confusion between anatomy / organs and Systems
  - Respiratory system, cardiovascular system, immunological system.....
- Confusion between « malformation » and « congenital » and « genetic »



# Proposal for general principles

Based on published classifications  
and on past experience in coding  
at Orphanet

# Organisation of Chapters

- By system
  - based on physiology
  - Etiology/mechanism being the final level
  - From the « upper level » to the « lower level »
- Addition of a chapter for mutisystemic diseases
  - Ex: Marfan syndrome is a multisystemic disease
- Chapter for prenatal developmental defects (not only malformation) as in utero development is a process- a « system »)

# ICD-11 proposals



- A dossier with the rationale for proposals is established
- The definitional items chart (WHO) is fulfilled for each disease
- The dossier is submitted
  - to identified best experts by Orphanet and by other TAG members
- A final proposal will be sent to WHO, chapter by chapter, one every month

# ICD10+ proposals



- Each proposal is
  - qualified following the WHO revision tool
  - justified (literature)
- Orphanet input on the ICD10 revision
  - based on already validated subclassifications
- Experts for the specialty ( Official networks / Societies / Associations)
  - informed in order to add their contributions to the revision process

# Networks of experts in Europe

- EUROCAT (congenital malformations)
- ENERCA (congenital anemias)
- SCN (severe congenital neutropenias)
- EUROMUSCLENET (myopathies)
- CAUSE (CHARGE et Usher)
- EINPRDP (rheumatic paediatric diseases)
- IDR (immunodeficiencies)
- TEAM (adult metabolic diseases)
- European Autism Information System (Autistic disorders)
- RARECARE (rare cancers)
- TREAT-NMD (neuromuscular diseases)
- EUROGLYCANET (glycosilation disorders)
- GENESKIN (skin genetic diseases)
- SKINTHERAPY (epidermolysis bullosa)
- CONTICANET (connective tissue cancers)
- HISTIONET
- .....



# Conclusions

- Possibility to propose a profound evolution of the organisation of chapters II to XVIII
  - With a possible migration of almost all existing codes
  - With a common logics applied to all chapters
  - Putting rare diseases where they should be
    - Everywhere as a lower node
- Chapter on Haematology is already available
  - Draft proposal by Orphanet to be sent to TAG members for dissemination to experts
  - Please look at our proposals on the WHO website
- Production of one chapter per month