# IHTSDO SNOMED Clinical Terms internationale samenwerking

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## **About SNOMED Clinical Terms**

- The world's most comprehensive clinical terminology
- A description-logic based "ontology" or "reference terminology"
- Purpose, scope, boundaries, requirements:
- Agreed by the design group during merger of SNOMED RT and Clinical Terms v3 (June 2000)
- http://www.ihtsdo.org/snomed-ct/snomed-ct-publications/
- IHTSDO\_Modeling\_StyleGuide-Overview-20080408\_v0-01.pdf



## **Purpose**

- Electronic health records
  - Common meanings regardless of language, dialect, professional variation, etc.
- Interchange of clinical data
- Public health reporting
- Analysis and aggregation
- Support for choosing case classifications in ICD



## Requirements

- General requirements of a terminology
- Support of electronic health records
  - Data entry, presentation, decision support
  - Communication
  - Population health
- Implementation & migration
- International & multilingual adaptation
- Localization



## Scope and boundaries

- Scope
  - Domains covered
    - Findings, disorders, procedures, observables, situations, drugs, devices, organisms, anatomy, morphology
  - Granularity (general vs specific)
    - Multiple levels
    - Names of things, not sentences
  - Knowledge representation
    - Terminological knowledge only



### **IHTSDO**

- International Health Terminology Standards
   Development Organization
  - Rechtsvorm: Not for profit Danish Association
  - Opgericht in Denemarken in 2007
  - Eigendom verworven van SNOMED Clinical
     Terms van de College of American Pathologists
  - Bestuurd door een General Assembly gevormd uit 15 Member Countries

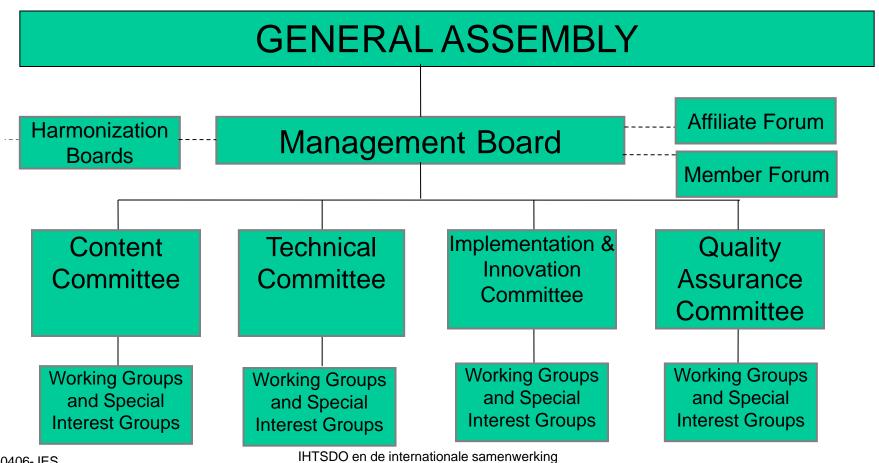


## Doelstellingen van IHTSDO

- To acquire, own and administer the rights to SNOMED CT and other relevant assets (collectively, the "Terminology Products");
- To develop, maintain, promote and enable the uptake and correct use of its Terminology Products around the world;
- To undertake activities required to achieve these purposes



## **IHTSDO Organisatie Schema**





## **IHTSDO Organizational Strengths**

- Representative Governance by the Member Countries
  - Globally coordinated effort
  - Pooling of resources to share costs
  - Long-term sustainability
- Open forums and terminology development / review
  - Public web site: www.ihtsdo.org
  - Collaboration site: thecap.seework.com
  - Tools for international distributed development:
    - Workbench, CollabNet, SourceForge, Subversion,
- Involvement of clinicians
  - Medicine primary and specialty, nursing, allied health, veterinary medicine
  - Selection as preferred terminology for clinical applications
  - Active and ongoing curation, review and QA



### **IHTSDO Members**

- Members zijn landen
  - Als Members komen alle stemgerechtigden van de VN in aanmerking
- De Members besturen de organisatie door middel van de de Articles of Association; [naar Deens recht]
- Negen Charter [initieel] Members in 2007:
  - Australie, Canada, Denemarken, Litouwen, Nederland, New Zealand, Zweden, United Kingdom, United States of America
- Sindsdien zes nieuwe Members:
  - Cyprus, Estonie, Singapore, Slovakije, Slovenie, Spanje
- Vijftig armste landen op de lijst van de Worldbank BNP



### **IHTSDO Affiliates**

- Member geeft (gratis) licenties uit in het eigen land
- Ziekenhuizen, onderzoekers, vendors over de hele wereld kunnen een Affiliate License verwerven
- In meer dan 40 landen



## **Working Groups**

Twee types WGs [beide open van aard]

Project Group:

[Task focused: Mapping ICD-10]

Special Interest Group (SIG):

[Domain focused e.g. profession (nursing), special technology (mapping)]

## Harmonisatie met andere internationale standaarden (1)



- HL7
  - Terminfo work product: Initial guide on how to use SNOMED CT in HL7
  - Vocab wg in Orlando

#### OpenEHR

- Initial agreement to begin working together is complete
- Closer working relationship is being developed

#### WHO

Final agreement is complete: cooperative work plan encompassing all WHO classifications (ICD-10, ICD-0, ICD-11, ICF, etc)

#### WONCA

GP/FP RefSet en ICPC mapping project

## Harmonisatie met andere internationale standaarden (2)



- LOINC and IFCC-IUPAC (NPU)
  - Nearing agreements on laboratory test terminology cooperation
- IHE
  - Work to date driven by individual IHTSDO Members:
  - E.g. Netherlands Nictiz, IHE/SNOMED in lab test reporting
  - EPSOS /IHE Pisa connectathon
- DICOM
  - Long-standing working relationship
- Medical Devices GMDN
  - Invitational conference Geneva WHO



## **Europese samenwerking**

- FP7 projecten
  - CEHRTAIN Royal College of Phycians
     Patient Guidance Services for personalised management of health status, allowing access and integration to PHR's
  - SemanticHealthNet
     Knowledge representation for semantic IO in EHR
- EPSOS
  - EPSOS /IHE Pisa connectathon



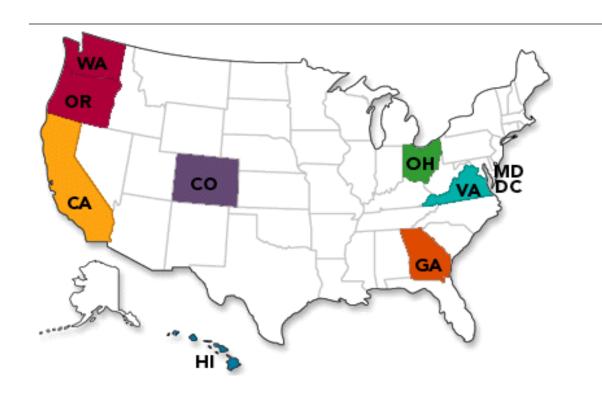
### **Kaiser Permanente CMT**

- CMT convergent medical terminology
- Donation of Content en Tooling
- Drie jaar project periode funding

#### **Kaiser Permanente**

- Nation's largest nonprofit health plan
- Integrated health care delivery system
- 8 regions serving 9 states and D.C.

- 8.7 million members
  - 14,000 physicians
- 165,000 employees
- 36 hospitals and medical centers
  - 431 medical offices
  - \*\$44.2 billion annual revenues





\* 2010 revenues

#### Wat is CMT?



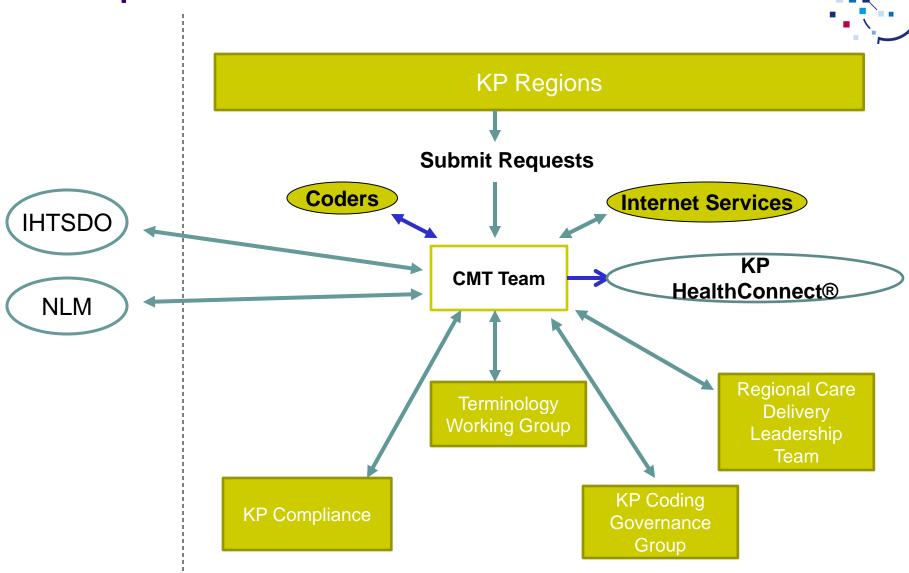
- KP's Concept based enterprise terminology designed to "converge" multiple terminologies in a single/central terminology system
- CMT is the terminology content for KP HealthConnect® (KPHC) for supporting functions such as Order Entry, Results Review, Charge Capturing, and Clinical Documentation
- Covers domains such as: Medical procedures, Surgical procedures, Diagnosis and Problem List subset, Lab result components, Organisms, Specimen types and body sites, Chief Complaints, Vaccines, clinical observations, etc.
- Started more than 15 years ago

#### Wat is CMT? (2)



- Today CMT is a collection of various tools and databases to build, support, and maintain:
  - End user terminology (clinician facing, patient facing)
  - Standard terminology (SNOMED CT, LOINC, Etc.)
  - Administrative codes (ICD 9-CM, ICD 10-CM, CPT4, etc.)
  - Query and Decision support
  - Request and Release process

#### **CMT Operations/Governance model**



## Waarom heeft KP de IHTSDO workbench geadopteerd (1)



- Too many disparate tools to "complete" the job
  - Costly
  - Inefficient
  - Lack of visibility
- Interface/end user terminology management not integrated well with the "Reference" terminology
  - Confusion about the term meaning
  - Duplicate work
- No ability to model a new concept as a logical extension of SNOMED CT

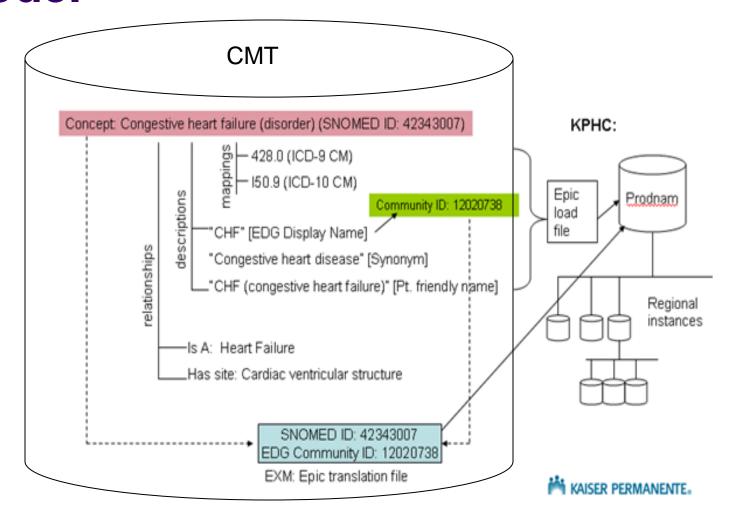
## Waarom heeft KP de IHTSDO workbench geadopteerd (2)



- No ability to integrate/converge multiple terminologies into a single platform
- Collaborate on terminology development more efficiently within and outside of organization
- Roadmap:
  - Pilot completed. Proved we can extend IHTSDO Workbench to support KP CMT terminology model (including Reference + Interface attributes) and KP operations
  - 3 year migration plan to implement KP Enterprise Terminology Tool (KP version of IHTSDO Workbench)
  - Back to a truly "Convergent" CMT

## **KP Enterprise Terminology Model**





## Wat wordt gedoneerd?



- Content
  - CMT SNOMED CT Extensions: Kaiser Permanente modeled SNOMED CT concepts including FSN, PF, Synonym, Relationships (defining).
  - CMT derivatives: Kaiser Permanente derivatives to SNOMED CT or non-SNOMED CT terminology including KP Clinician Display Names, KP Patient Display Names, KP mappings to ICD9-CM, ICD 10-CM, CPT4, LOINC, etc.
- Enhancements to IHTSDO Workbench
  - Collaborative editing workflow, enhancements to core functionality, i.e. searching
  - KP operation specific, i.e. "extracting into Epic load file format"



### **Nieuws**

- SNOMED CT as a public good
  - Gebruik van ID en description tables
  - Voorbeelden voor Genomics
  - Quality outcome onder 'meaningful use'
  - Meerdere in de pijplijn
- Consultant Terminologist Programma
- RF2 nieuw release format



## Vragen?