IT in hospitals

SNOMED CT

WHY TRANSLATION?

Implementation

User interfaces

Annika Sonne Hansen, RN, MI

Seminte

Adopting & Adapting SNOMED CT - 3 Translation approaches

➔ Goal VS. Challange

➔ IHTSDO Translation Material

➔ Word to word translation VS. Concept Based translation

➔ Resources & Skills required

➔ Background reference material

➔ 1. approach - Translating the whole terminology

➔ 2. approach - Use Case driven translation

➔ 3. approach - Best practice evidence based

➔ Questions

Seminte

SNOMED CT as a national reference terminology

The goal

To develop a practical reference terminology supporting eHealth & ICT infrastructure to enable exchange of semantic understandable patient health information, between healthcare systems in a country - maybe even cross boarder.

The Challenge

One major challenge in non-english speaking countries is to translate and quality assure relevant concepts for/ used in Patient health information in order to exchange patient health information understandable of both clinicians and IT-systems.
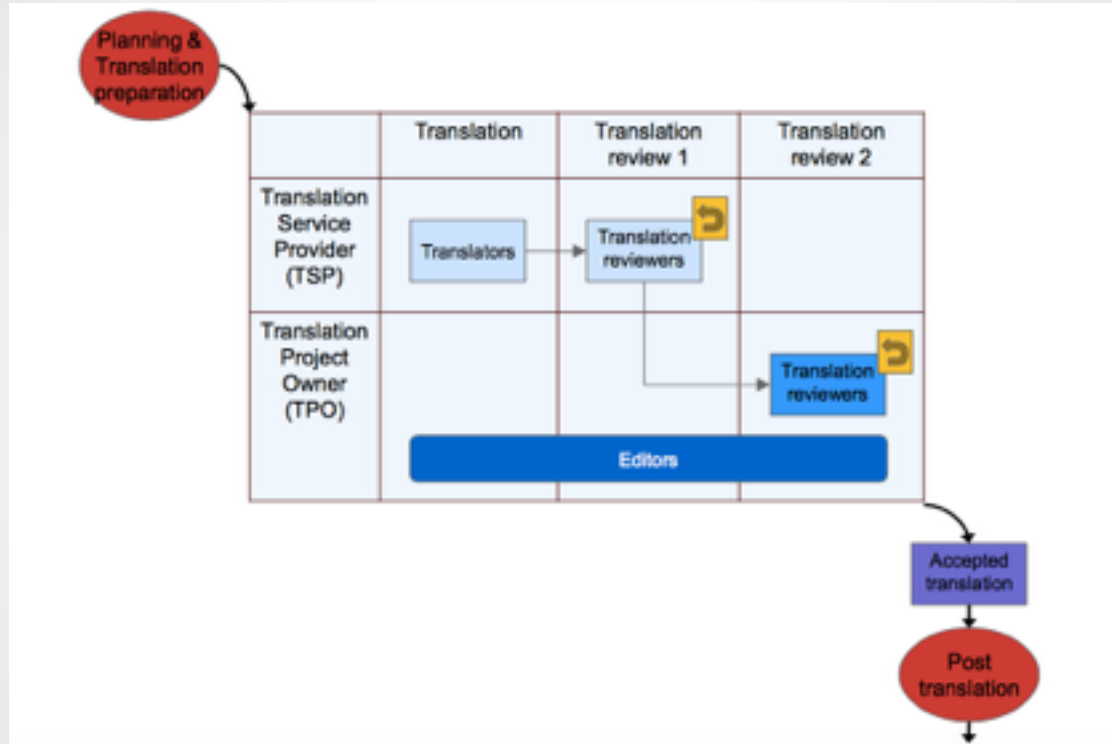
seminte

IHTSDO Translation material

- IHTSDO Guidelines for translation:
  http://www.ihtsdo.org/fileadmin/user_upload/Docs_01/Publications/Quality_Assurance/IHTSDO_Translation_Guidelines_v2_02_20121211.pdf

- IHTSDO Guidelines for Management of translations:
  http://www.ihtsdo.org/fileadmin/user_upload/Docs_01/Publications/Quality_Assurance/IHTSDO_Guidelines_Management_Translation_SCT_v2_02_20121211.pdf

- IHTSDO Methodology and toolkit for evaluating SNOMED CT® Translation Quality:
  http://www.ihtsdo.org/fileadmin/user_upload/Docs_01/Publications/Quality_Assurance/TQA_methodology_and_toolkit_20121211_v1_00.pdf

- IHTSDO Translation SIG - replaced by the future IHTSDO User group

- IHTSDO Translation tool Assessment report (in review)

Seminte

IHTSDO Translation Workflow

CONCEPT-BASED VS. Word-to-Word translation

- Concept-Based Translation:

  - A target language word or phrase chosen in a translation that is an exact representation of the source language concept

  - Ensured by:

    - understanding the meaning of the source language term,

    - including consideration of the hierarchical position of the concept, and

    - the relationships of the concept to other concepts

- Word- to-Word Translation:

  - A translation based solely on linguistic and morphological-syntactical analysis

  - Risk of translations resulted in seemingly correct terms not adequately representing the concept in question, nor be used by healthcare professionals

Seminte

RESOURCES & SKILLS Required

- Ressources:
  - Translators
  - Clinical domain experts
  - Terminologists
  - CAT tools (computer assisted translation tools)
- Skills:
  - Translation from English language to target language
  - Preferable with experiences in medical translation
  - SNOMED CT knowledge
  - Concept Based translation
  - Linquistic knowledge

Seminte

- Clinical code systems in used in the Healthcare sector (translated, national, regional)

- Medical dictionaries

- Linguistic guidelines

- Policy documents

- Specialty articles

Seminte

1. APPROACH - Translating the whole terminology

- Reference projects: The Danish and Swedish translation of SNOMED CT
- Content to translation: All current concepts in SNOMED CT
- Scope:
  - To have a terminology to use in a structured EHR- system
  - a national resource of terminology and classifications which supplies the needs for concepts, terms and classifications within health and social care
- Process: Workflow based translation of hierarchy subsets (10.000 concepts pr. month)
- Challenges:
  - Handling errors and inconsistencies in SNOMED CT®
  - Managing subset creation
- Leason learned:
  - Involving clinicians in external health sectors in the review process earlier
  - Translating the defining relationships earlier

Seminte

2. APPROACH - Use case driven translation

• Reference projects: The Canadian translation project & the epSOS project

• Content to translation: Dataset's selected by the projects

• Scope:

  • With use of terminology ensure the exchange of specific Healthcare informations

• Process: translation of the identified subsets by the use of 2 workflow types

• Challenges:

  • Handling errors and inconsistencies in SNOMED CT®

  • Managing subset creation

• Leason learned:

  • Getting clinicians involved in the review process earlier

  • Not possible without tooling and adaption to the tool

  • Identification of subsets

Seminte

3. APPROACH - Best Practice Evidence Based Translation

- Reference projects: None (or maybe some vendors?), but countries are considering

  Content to translation: Frequency data from the Convergent Medical Terminology, CMT (top

  2500 problem list created based on best practice the last 10 years in KP)

- Scope:
  - Accelerate the adoption of terminology in Healthcare systems by providing generic minimum dataset in the national language

- Process: translate the frequency data list using the IHTSDO translation standards

- Summary: A small generic evidence based dataset ready for translation and proof of

  concept implementation in a EMR or EHR

Questions? Comments?

Annika Sonne Hansen
SEMANTIC INTEROPERABILITY CONSULTANT
RN, MI

✉ ash@seminte.dk

📞 +45 5383 0702

www.seminte.dk

seminte