Supporting Jargon of Different Specialisms

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Contents

• Why support jargon?
• Proposed solution
• Specification
• The translation process
• Result
• Consequences for implementation
• Conclusion
Why support jargon?

• One concept, multiple descriptions
  • Ablatio retinae <-> Netvliesloslating
  • Neovascularisatie van cornea <-> Corneapannus
  • Milia <-> Gerstekorrel
  • Verruca vulgaris <-> Virale wrat
  • Ehlers-Danlos syndrome <-> India rubber skin <-> Cutis hyperelastica dermatorrhexis

• Which preferred term?
  • Heuristics not always sufficient, or contradictory
    • Most descriptive or most widely used?
Why support jargon?

• One description, multiple concepts
  • Infarct
    • Cardiology = myocardial infarction
    • Neurology = cerebral infarction
  • Syndroom van Silver
    • 15069006 |Russel-Silver syndrome (disorder)| (type of dwarfism)
    • 76043009 |Hereditary sensory-motor neuropathy, type V Type 5 (disorder)|
What do we use descriptions for?

• Registration
  • Different specialisms search by different descriptions
  • Supported by SNOMED CT through synonyms

• Presentation
  • Use different descriptions to present the same concept to different audiences?
  • Currently unsupported by SNOMED CT
Risks

• Miscommunications between specialisms
• Lengthy disputes over preferred terms
• Cannot flag descriptions as suitable ‘layman terms’ for communication with the public
• Unwilling end users?
We propose...

• Each specialism its own preferred term
  • Only for those concepts they expect to use
  • Fewer people have to agree
  • All preferred terms are valid synonyms in all specialisms

• Co-creation of content
  • By groups of medical specialists
  • NRC provides tooling, advice, guidelines, supervision and mediation
How?

• How do we achieve this without:
  • Enormous increase of size of SNOMED CT?
  • Loss of compatibility with international standard?
  • Implementation difficulties for IT-suppliers?
Option 1: Add column

- Add a column ‘Specialism’ to the specialism for which the description is ‘preferred term’

- Advantages:
  - Small increase of size
  - All information in a single language refset

- Disadvantages:
  - Format of language refset differs from core
Option 2: Add language refsets

• Dutch language refset in original format which contains:
  • The default preferred term
  • All synonyms used in all specialisms
  • (Eventually) Translations of each concept in SNOMED CT

• Add specialism-dependent language refsets which contain:
  • The preferred term for that specialism
  • Only for concepts used in that specialism

Supporting Jargon of Different Specialisms
Option 2: Add language refsets

- Advantages:
  - No deviation of core format
  - One language refset to find all suitable synonyms

- Disadvantages:
  - Duplication of information -> increase of size
  - May need two language refsets to find suitable preferred term for presentation
Chosen solution

• Prefer size increase over loss of compatibility

-> Option 2 it is!

... but what does that entail?
Specification of Dutch Extension

• One file with all Dutch simple refsets
• One file with all Dutch language refsets, containing:
  • One generic Dutch language refset with:
    • One (default) preferred term per concept
    • All Dutch synonyms
  • For each simple refset a language refset with:
    • A preferred term for each concept in the refset
    • No synonyms!
The translation process

• Co-creation
  • Authors: groups of specialists
  • Tooling: Nictiz refset editor
    • Creation of simple & language refset
• First translation -> default preferred term
  • Only NRC terminologists can change default preferred terms
  • NRC supervises translations
  • Also added to corresponding language refset

Supporting Jargon of Different Specialisms
The translation process

• If another editor adopts the same concept:
  • Show the default preferred term and all synonyms
  • New synonyms are added to generic Dutch language refset

• If preferred term is changed
  • Add to generic Dutch language refset as synonym
  • Add to specialist refset as preferred term
  • Keep original default preferred term in generic refset!
Result

• Generic Dutch language refset contains all Dutch descriptions
  • And one default preferred term per concept

• Dutch module contains a series of ‘specialist’ language refsets:
  • Each corresponds to a Dutch simple refset
  • With one preferred term for each concept in that simple refset
Consequences for implementation

- Search application across all SNOMED CT concepts:
  - Retrieve all valid Dutch descriptions from the generic Dutch language reference set
- Registration application for a single simple reference set:
  - Retrieve all valid Dutch descriptions from the generic Dutch language reference set
  - Use the corresponding language refset to identify the preferred term for this specialism
Consequences for implementation

• Present registered concept to other user:
  • Identify specialism of user
    • E.g. ‘Layman’?
  • Retrieve specialism’s language refset
  • Retrieve specialism’s preferred term
  • Or retrieve default preferred term from generic language refset
Conclusion

• Support the use of jargon when registering and viewing clinical information

• Method:
  • Specialism-dependent preferred terms
  • Created by specialists
  • Supervised by NRC
  • Compliant with core format