

CoMeTT

Computer supported **M**edical **T**erminology **T**ranslation

Presentation for
Translation User Group Meeting, Confluence

CoMeTT / 2steps Snomed translation

- Based on (1)
 - Snomed structures
 - Medical specialists as translators
 - Linguistic support and supervision
 - Two-steps translation
 - Lexical translation >> automatic translation of terms
 - Terms revision / translation

Efficiency depends of nr of words processed together

	Terms	Words (W)	Unique words (UW)	Words / term (1)	Unique Words / term (2)	Words / UW (3)
Group	n	n	n	(mean)	(mean)	(ratio)
A	362	1.553	390	4,29	1,08	3,98
B	253.330	1.229.004	91.443	4,85	0,36	13,44
C	336.893	1.383.163	68.473	4,11	0,20	20,20

Group A = auto-immune diseases from 2018 jan 31 release

Group B = first 253.330 terms from 2009 release

Group C = all terms from 2018 July 31 release

- (1) The mean nr of words per term
- (2) The mean nr of unique words per term
- (3) The mean nr of words covered by one unique word

Evaluation of Google translation of unique words.

Google translation of the 390 unique words from the 362 auto-immune disease terms.

Results:

Tot.	Correct n (%)	Synonym? n (%)	Wrong n (%)	Time (min)
390	297 (76,2)	40 (10,3)	53 (13,6)	28

24% of the unique translated words must be revised,
= 16.433 of the 336.893 in group C.

CoMeTT / Lexicon steps

1/ Importing RF2 Snomed files / other files

2a/ Importing (new) terms in Comett translation DB

2b/ Parsing (new) terms

3a/ Extracting Lexicon from parsed terms

3b/ Automatic translation of lexicon

3c/ Revision of translation of lexicon

4/ Defining the nested terms to prioritize their translation

CoMeTT / terms (FSNs)

- 1/ Automatic translation of terms based on lexicon
- 2a/ Review 1 of translated terms; creation of multi-words
- 2b/ Review 2 of translated terms ; creation of multi-words
- 3/ Revision of problems by med.supervisors & linguists
- 4/ Exporting translated terms

CoMeTT / the job assignment

1. A list of FSNs is sent in for translation
2. The list is divided into batches
 - nr of terms: suggested by translators
 - specialization of translators depending on content
3. Review of Lexicon by separate group (medical/linguistics)
4. Who wants to work in which function for the terms?
reviewer1 / reviewer2 / supervisor1 / supervisor2

Translators can work successively or in parallel.

The system is open for workers in orgs (NRC, hospitals, research inst., gov. ...). They can be part of the network.

CoMeTT input-output

RF2 import files

Parsing Units

Lexicon

- Single words
- Multi-words
- Nested terms

Lexicon translations

Evaluations of Lexicon translations

Source Terms (Snomed terms in Comett DB)

Translations of Source Terms

Evaluations of translations of Source terms

CoMeTT

- Also based on (2)
 - Interaction between translators (peer-reviews)
 - Networking (working to setting up Communities of Practice and Translation)
 - Development in close connection with the field
 - Delivering formats in agreement with the users (NRC, other local or (international) orgs or care givers, research institutions etc...) (“Open source” as for the data)

CoMeTT / WELCOME

If you are interested, for any reason, please contact us

Comett wants to integrate the needs of the field

You can organize your own Comett group.

Comett is not language restricted.

We want to help you make your Comett part of an international network in your language. (1+1 >2!!)

The EU is absolutely interested in such cooperations!