An iconic language for the « CISMeF Bonnes pratiques » website

Authors

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Introduction

For users facing large amounts of medical information, readability is a key factor. In the context of a guidelines repository website, we try a new approach based on icons to ease information selection and retrieval.

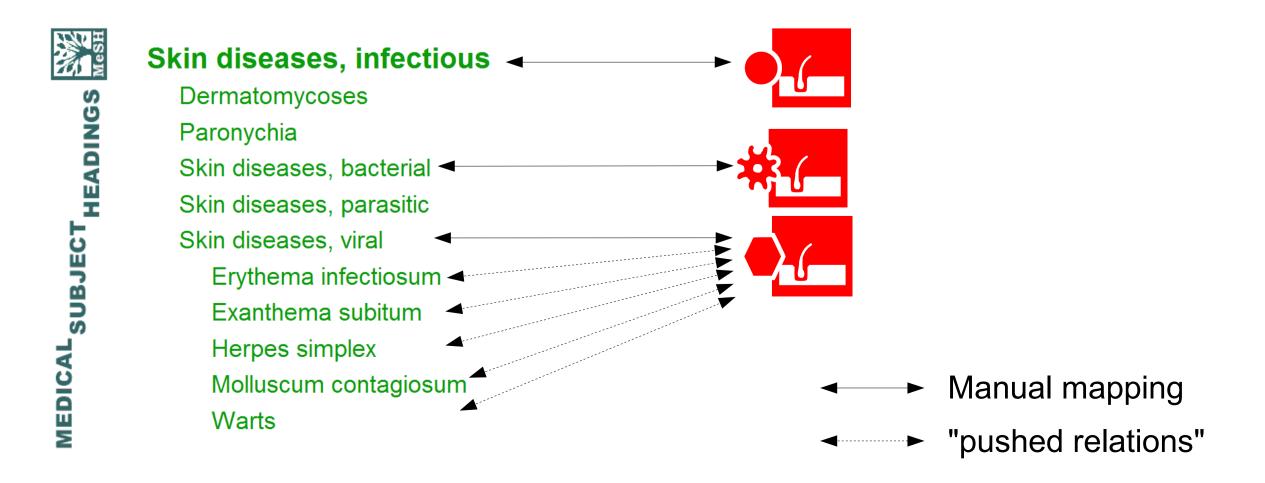
Material and Methods

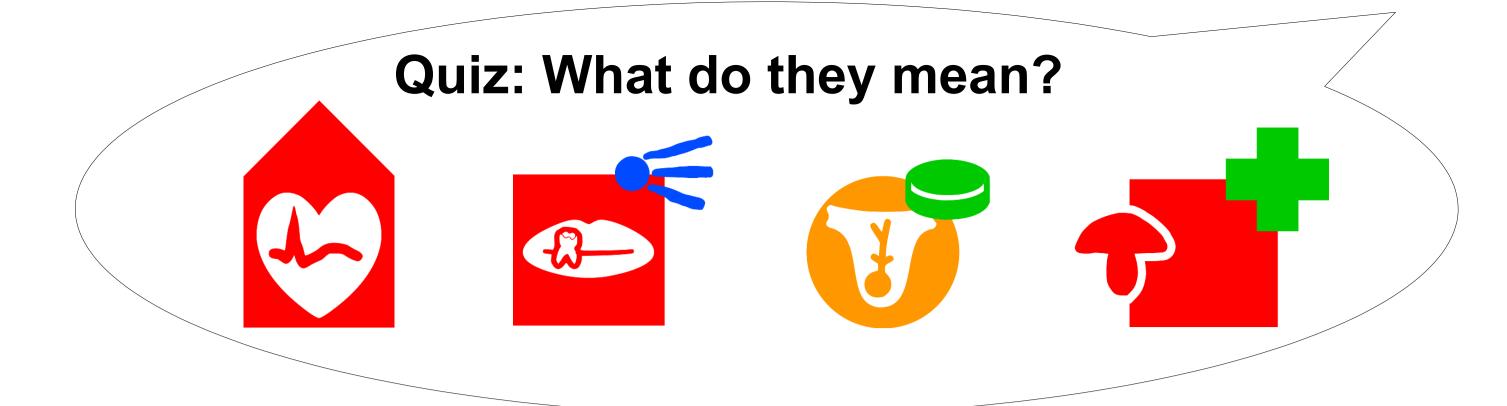
VCM (Visualisation des Connaissances Médicales; Visualization of medical knowledge) is a language which can represent various signs, diseases, physiological states, drugs and medical tests. Grammatical rules make it possible to generate many icons by combining a small number of primitives and reusing simple icons to build more complex ones.

| Colors | Shapes | Central pictograms | Top right pictograms |
|------------------|---------------------|------------------------------|------------------------|
| Actual condition | Pain | Heart | Pill |
| Treatment | Viral infection | Central Nervous system | Clinical monitoring |
| Risk | Diminished function | Diet | transplant |
| Etc. | Etc. | Etc. | Etc. |

CISMeF Bonnes Pratiques (http://www.chu-rouen.fr/cismefbp) is a website providing a directory and a search engine of medical guidelines in French language. All its resources are precisely described with a large amount of metadata including MeSH descriptors.

In order to translate these descriptors into icons, we mapped the most generic MeSH descriptors to VCM and we "pushed" these icons to more specific terms in a second time.





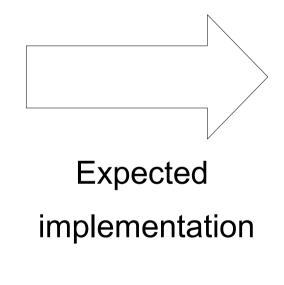
Results

More than a thousand relations between MeSH terms and icons were established, thus concerning one third of the 25588 descriptors from MeSH 2010. New icons were implemented in VCM for concepts not represented so far such as cysts or abnormalities. Descriptors left out belong to domains irrelevant to VCM in its actual form, such as veterinary medicine or are too specific such as proper names for substances and places. The newly developed Health Multi-Terminology Portal (http://pts.chu-rouen.fr/) already displays these relations and icons.

Conclusions

The next step of this project is to implement the icons in our search engine and to assess its usability. We also hope that this work opens doors to a future use of VCM internationally thanks to the multiple translations of the MeSH thesaurus and to its relations to other medical terminologies.







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Project Website: http://projet4-limbio.smbh.univ-paris13.fr

