ALIGNMENT of WHO-FIC CONTENT WITHIN A UNIFYING MODEL: PRELIMINARY STEPS

5-11 October 2019
Banff, Canada

Poster Number
WHO/CTS to insert

Andrea Martinuzzi, Vincenzo Della Mea, Samson Tu, Huib ten Napel, Nick Hardiker, Lucilla Frattura, Richard Madden, Warrick Sive, Luisa Whitelaw, Catherine Sykes, Christopher Chute, Soraya Maart, Coen Van Gool
WHO-FIC Collaborating Centres of Italy, Stanford (USA), The Netherlands, United Kingdom, Australia, South Africa, Mayo (USA)

Abstract At the Seoul WHO-FIC Network Meeting, a discussion was held on the possibility of developing a generalized Content Model and Foundation that encompass all WHO-FIC core classifications. After that, a working group has been started to pursue the following vision:
-Development of one single Foundation from which all variants of WHO-FIC classifications are derived as linearizations;
-The Foundation should be based on a core WHO-FIC Content Model shared and extended by different classifications;
-The Foundation content should be harmonized, without duplicates and with mutual references, that serves the requirements of all classifications;
-There should be a clear relationship to underlying ontologies, i.e., concepts represented in classifications should be well defined;
-Finally, there will be a need for integrated tools that facilitate the development, maintenance, versioning, and publication of all WHO-FIC classifications.
Two main lines of work have been identified: one dealing with the model and the other addressing the harmonization of the content. This latter group will concentrate on the existing entities now represented in the three reference classifications. The working group meets regularly by teleconference and had also an in-presence meeting in Conegliano, Italy. In the latter, the basis for the first concrete steps have been set, starting from a preliminary work about the content models of the current classifications, to find similarities and differences at the present time and suggest further developments.

Introduction

The joint use of the WHO FIC elements would greatly benefit from the definition of a common foundation where all the concepts included in the various classifications would be aligned and provided with univocal labels and identifiers. Such alignment would not only foster the implementation of the WHO-FIC products, especially in an electronic environment, but also ease their maintenance and future further development. A long term plan and inputs from multiple sources are required to tackle this commitment. The task falls well within the FDC strategic work plan but requires also inputs from other Committees and Reference Groups (e.g. ITC and FDRG).

Methods & Materials

During the FDC mid year meeting held in Conegliano last April a general discussion was held on the topic, including contributions from ITC, FDRG, EIC members. Proof of principle tests were run starting from the ICD11 content model to probe several approaches and to test the feasibility of the project.

Results

General agreement was reached on the need to work from two complementary approaches:
1) Drafting a common content model where the various elements from the three reference classifications are harmonized and fully accounted for;
2) Reconciliating the single content elements of the three reference classifications wherever they diverge in any of the signifying labels.
Accordingly, two work groups where established, each tasked with addressing one of the two approaches. Next steps in the process have been tentatively identified and discussed via e-forum.
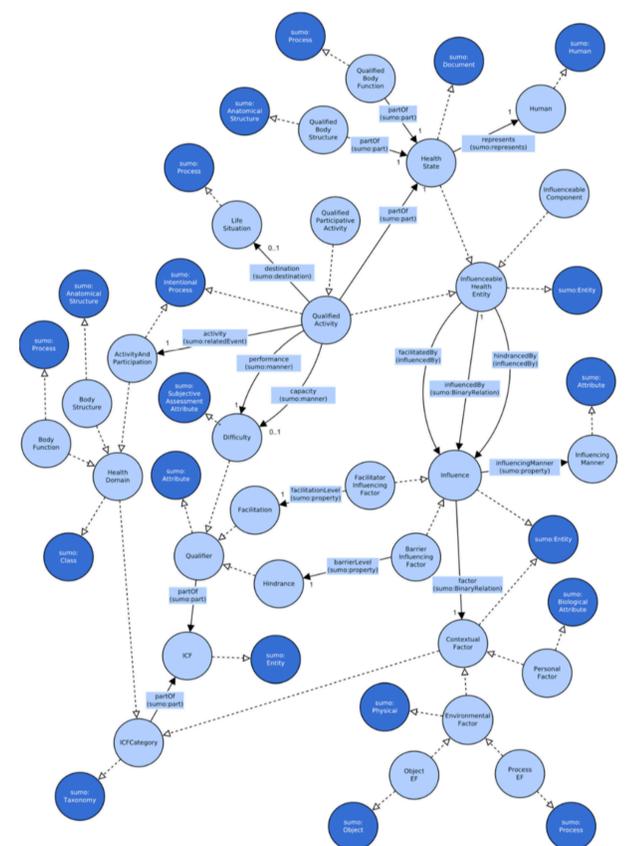The content model part of the work, it can be seen in the poster describing it (Samson Tu et al.: Toward a Harmonized WHO-FIC Content Model)

Regarding the second task, an analysis of possible terminological overlaps among classifications will be needed as a basis to reconciliate entities represented with similar terms in the three classifications. From this point of view, the most compelling classification is ICF because it is, at present, the oldest one of the family, with ICHI being developed also starting from ICD-11 principles and with part of the content already shared with ICD-11 (namely, part of the extension codes). Regarding ICF, this effort could be accompanied by a long-time needed logical update of its model and contents. An example of the works in this direction is provided in the schema.

Conclusions

The full alignment of the three reference WHO classifications requires a long term planning where at least two complementary approaches have been identified.
The two streams of work will be followed by two small working groups within (but not limited to) the FDC. WHO-FIC Members interested in joining the groups could contact Samnson Tu for task 1, Andrea Martinuzzi for task 2.

S.Cozzi. Formalization of an Ontology for the International Classification of Functioning, Disability and Health (ICF). Master Thesis in Computer Science, University of Udine, 2017

Acknowledgements or Notes