Metadata for clinical knowledge resources

Gunnar O Klein

Dept of Microbiology, Tumour and Cell Biology, Karolinska Institutet, Stockholm, Sweden

Abstract and Objective

Both health professionals and patients/citizen today firstly turn to the world wide web to obtain health related knowledge. Important issues are: 1) How to find relevant documents that are appropriate for the reader and situation and 2) How to ensure that the found knowledge documents have a sufficient or at least declared quality control process? One way to address these questions is to use a standard set of metadata to be provided for each knowledge resource. A standard first developed in Europe CEN/TS 15699 *is further developed into ISO 13119. In this paper the following questions are raised:*

- *What are the possible uses of a standardised set of metadata for knowledge resources in health?*

- *What are the basic principles of the new standard*

Methods

This study is based on a literature review on the use metadata for various health care purposes and the general development of metadata for intersector use, the Dublin Core. The author was the project leader in the standardization project which with input from many experts developed the international standard.

Results

The scope of the metadata standard

This standard defines a number of metadata elements that describe documents containing medical knowledge, primarily digital documents provided as web resources, accessible from databases or via file transfer, but can be applicable also to paper documents, e.g. articles in the medical literature. It is based on the ISO 15836:2003 Information and documentation-Metadata – The Dublin Core metadata element set.

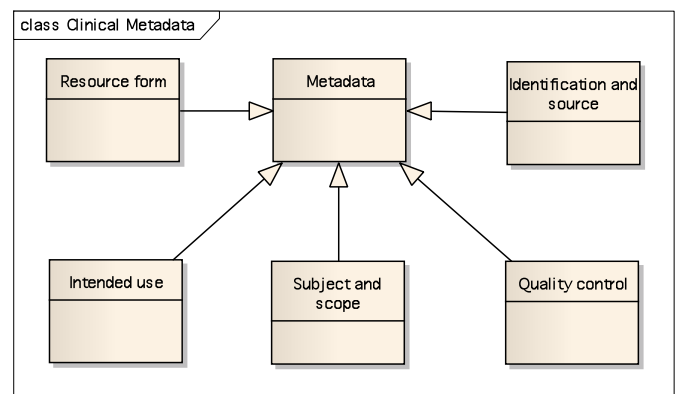The metadata for this purposes are grouped into following classes according to Figure 1.

Figure 1-Overview of the Metadata elements

Example of health specialization

In some areas the standard contains an enumerated list of specializations to be used e.g. for Clinical process stage:

This is defined as: Stage in the clinical process where knowledge is intended to be applied (HC).

- Risk_assessment

- Exception

- Diagnosis

- Treatment_selection

- Treatment_delivery

Conclusion

An international standard for metadata of clinical knowledge resources has been developed. It is based on the well-known Dublin Core basic metadata set but with numerous important specifications applicable to health or clinical knowledge. It can be useful only within an organisation but the major impact will come when all or many producers or publishers of knowledge resources add metadata to each resource from this set.