Reviewer's report

Title: Development of an integrated system for classification, assessment and comparison of services for Long-Term Care in Europe: The eDESDE-LTC Study

Version: 3 Date: 22 November 2012

Reviewer: Dirk Colaert

Reviewer's report:

This paper poses the problem of interoperability between regions on the definitions of long-term services and proposes a solution in the form of a classification, together with the evaluation of this classification. The methodologies, used for the evaluation are referenced and not fully explained in the paper, which is ok. Results are given and seem to support the conclusions of the paper.

Minor essential revision:
1. Tables and figures should be put on the right place

Discretionary revision
2. English phrasing can still be better. Suggest last text review

Minor Essential Revision
3. On Semantic Interoperability and Ontology design (issues on page 8 and 12)

Semantic interoperability is not only at the level of domain concepts, but also on the level of relations between the domain concepts. Only concepts + relations (more than mere subsumption) constitute in a full understanding of the domain. It may be less relevant for the classification of the domain but as a general statement, even coming from an outside reference (11) it will be perceived as incorrect by many. The ontological coverage seems to be limited to a DL level, typically using only part-of and is-a relationships. Reality is much more complex than a tree-based description of a domain. Much of the semantics lay in a rich set of properties, connecting the concepts. Look at what SNOMED already has and still some people state that SNOMED is not an ontology. The problem of semantic interoperability cannot be reduced to a classification/coding/terminology problem! Was there any attempt to also describe and formalize different contexts?

As long as the aim of the work was to make a classification this is ok, but expecting full semantic interoperability just by using a classification scheme looks to me too optimistic.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being
published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests