Author's response to reviews

Title: Analysis and classification of oncology activities on the way to workflow based single source documentation in clinical information systems

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Dear Sir or Madam,

Thank you for your feedback and comments on our paper.

I have revised the manuscript and expanded the section “Background” to stress the rationale for the approach more clearly as well as the “Methods”-part to describe the process in more detail. Please contact me again if you have further questions on these points.

Herewith we proudly submit our article to your journal for review and publication. Our paper refers to the section “Healthcare Information Systems”.

The study we report on deals with the design, development, implementation and use of health information systems for the medical documentation of all process steps of a wide range of tumour entities at comprehensive cancer centers during diagnosis and therapy. We provide a solution on performing the implementation of a single-source documentation approach and describe our methodology of classification and grouping tumour entities according to the goal of a simplified oncological documentation solution which reduces time spent on documentation processes and even costs. Our model supports the needs and the requirements of quality management as well as cancer registries.

Please let me give you a short background of the chosen topic and an explanation why it is central in the field of medical documentation:

Cancer is getting more and more significance in hospital environments and data collection as well as documentation gain importance constantly. Therefore smart and somehow flexible workflows in health information systems are needed for diagnostic and therapeutic processes which are able to provide guidance through the process steps and help clinicians to deal with documentation of all clinical tumour information at one time for further usage later on, for example for cancer registries or bioinformatics or even studies. Existing guidelines and literature workflows are still not able to
solve this completely as they are focused on single entities or special fields. This motivated us to answer this question.

To achieve workflow-based unified and simple tumour documentation at a comprehensive cancer centre classes of tumour entities are required which are similar in documentation and medical aspects. Moreover they have to be transferable to other entities not thought about before. In order to solve these problems a model with three main classes and addable sub-classes was developed.

The results of this paper are based on a doctoral thesis at the Chair of Medical Informatics at the Friedrich-Alexander-University Erlangen-Nuremberg in Erlangen, Germany. All results and workflows were originally created in German language as part of this work.

We provide contact details of potential peer reviewers for our manuscript, as requested online:

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The authors declare that they have no competing interests.

We are looking forward to your feedback and comments on our paper.

Yours faithfully

Stefan Wagner (corresponding author)