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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Author's response to reviews:

Resubmission of an revised article for “BMC Medical Informatics and Decision Making”

Dear Sir or Madam,

Dear Editors,

Dear Reviewers,

Thank you for your feedback, comments and helpful hints on our paper.

In the revised version the following changes have been made according to your hints and suggestions:

Changes regarding Reviewer: Brigitte Seroussi

“The sentences are very long which makes the article difficult to read. A lot of typos should be corrected.”:

Sentences have been shortened and typos have been corrected in the whole text (lines 64-453).

“Finally, the last paragraph of the Results section should be in the Discussion.”:

The position of the mentioned text was changed. The new position: lines 377-383.

“New contributions as far as the methods are concerned have not been described.”:

New is the combination of process analysis, workflow modelling and the focus on a large number of cancer entities instead of single ones (lines 152-154 and
“It would have been possible to generalize more and get only one class.”:
This point is now explained/discussed in detail in the text (lines 274-278 and
355-360 and 409-411).

“In addition, clinicians are said to deploy
great efforts in the “jungle of treatment” to access the information about the “right
actions at the right time.”: This fact is now argued as suggested (lines 416-423).

“If their contribution concerns the results,
they should evaluate the results and describe the impact of the solution
developed on clinicians and/or patients and/or the hospital organization. The
authors should more explain how their work is useful.”: New part of the results
section with detail information (lines 335-350).

“letters for affiliations are not in the right order of authors”: was fixed (lines 4-35
and 490-495 and 498-508).

“some results given in the abstract are not found in the document ("130 figures,
94 tables and 23 tumour classifications, 12 follow-up tables")”: was fixed (lines
297-301).

“in the Conclusions of the abstract, "of a comprehensive cancer" is not clear”:
was fixed (lines 58-60).

“lot of typos should be corrected”: was fixed in the whole text (lines 64-453).

“authors should say if the experts consulted in the first and second rounds of
interviews were the same”: They were the same, now mentioned in the Methods
section (lines 180-187).

“the 13 cancer entities should be labelled the same lg 130-131 and lg 190-191”: was fixed (lines 232-234 and 137-139).

“the calculation of lg 200 is not clear”/"similarity/conformity coefficient should be
normalised otherwise the absolute threshold at 6 does not work for long
sequences": The coefficient was removed because multiple interpretations would
have been possible.

"The above identified three classes should be treated separately when
implementing clinical documentation modules because they are so distinct in
their course and order of inpatient and outpatient episodes“, lg 242-243 should
be reworded to show moderation (otherwise, this has to be proven)”: The text
was reworded in order to show moderation (lines 302-312).

Changes regarding Reviewer: Habib Pirnejad
“Introduction is too long and can safely be shorten by moving the context of the study into the Methods section”: Two paragraphs were moved to the Methods section from the Background section (lines 122-126 and 127-134). But I think you need some background information before we talk about the methods and the results in detail if you are not an expert in our topic. In addition, the structure of the Methods section was improved according to readability (compare lines 135-221).

“In the Methods section: no detailed information about the interview such as how many interviews have been performed.

Why other role players in the workflow processes (for example nurses) were not interviewed?

I would suggest the presented steps, e.g., steps 4 and 5, separated and defined clearly.”: All suggestions are now integrated in the new Methods section which has been modified (lines 180-187 and 188-195).

“In the result section line 207: what is similarity/conformity coefficient? The definition of the coefficient and the way it has to be interpreted were not presented in the methods section”: The coefficient is now removed from the whole text.

“Although presented in abbreviation list at the end of the manuscript, for the sac of readability, abbreviations should be defined at first place they appear in the text.”: was fixed in the whole text (lines 64-453).

“Answers to the research questions should typically be provided (clearly) at the first part of the Discussion section of the paper.”: was fixed (lines 354-376).

“the Vancouver style was not followed carefully in many references.”:

The literature of the whole text was modified according to the following EndNote style file from: http://www.biomedcentral.com/download/endnote/SpringerVancouverNumber.ens

“Considerable part of the literature is not in English. As a result their meaning, relevancy, and etc. is not understandable for an international audience.”: Most of the literature in German language has been removed as far as possible (lines 530-675). But the literature part dealing with the medical expert literature in German used for the analysis is necessary.

Further main changes of the content of the manuscript:

Explanations of the methods in greater detail, compare the part about process analysis:
lines 143-151.

Lines 156-169: improved readability through list structure.

Lines 175-179: improved readability through list structure, style improvements.

Lines 192-195: improved readability through list structure.

Lines 200-207: more detailed background information about the program solutions for workflow modelling.

Lines 212-214: improved readability through list structure.

Lines 218-221: improved readability through list structure.

Lines 279-284: new information about the two main classes used for our classification process before going on to the subclasses.

Yours faithfully

Stefan Wagner
(corresponding author)