Reviewer's report

Title: Development and formative evaluation of the e-Health Implementation Toolkit (e-HIT).

Version: 2 Date: 8 July 2010

Reviewer: Jan Talmon

Reviewer's report:

I have mixed feelings with this paper.

Firstly, the topic is highly relevant. The problem of implementation of eHealth solutions is well known. As the authors state, in many cases there is partial or complete failure and poor adoption. Hence having a tool that will assist decision makers to identify risks associated with eHealth implementation as to be able to deal with that risk is of great value.

The approach taken demonstrates that the authors understand how to develop software/systems/toolkits. In particular the user testing shows that they are committed to developing some tools that are of real value for the intended users.

On the other hand, the paper does not provide much insight in the underlying mechanisms. There are references to a SDO report [ref 12], but a more extensive summary would have increased the value of the manuscript. Also the literature review of reviews could have been more extensive. It is not clear what the inclusion criteria where (at least that is not described in a clear way), a listing of the 19 included papers could have been included in the text as well as an overview of the conclusions of these 19 reviews and how they have informed the design of the toolkit. (minor point: on page 7 you state that you searched Medline etc for reviews of reviews. I expect that should be only reviews).

A second concern about the generalizability of e-HIT is that it is mainly focussed on the NHS. Also the screens in the toolkit make explicit references to the NHS. Hence it is not clear how valid the advice is outside this context. How much of the underlying knowledge is context (i.e. NHS) dependent? This is a limitation that has to be discussed, in particular since the paper is published in an international journal.

A third concern is that the toolkit is based on the Normalisation Process Model, a model developed by one of the authors (that is not clear in the text!, only when you look to the references). I haven't checked the references in detail, but it is not clear from the text that the model has been validated independently (it is only mentioned that its initial version has been refined and expanded to cover all complex interventions in health care).

Unfortunately, I was not able to run the full toolkit. I could enter scores, but when it came to reporting, there was an error (reference is not valid). I ran the toolkit on
a Macbook with Microsoft Excel voor Macs 2008).

In summary: A nice and relevant piece of work based on sound scientific principles. The paper should be expanded on the review of reviews and other relevant details that explain how the toolkit works (BTW that is only a spreadsheet doesn't mean that it may not be complex what is happening under the hood). And the authors should address the generalizability outside the NHS and their involvement in the development of the underlying model.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.