Reviewer’s report

Title: Targeting Artemesinin Combination Therapies for malaria: the design of two complex interventions to support the use of diagnostics by Tanzanian clinicians

Version: 1 Date: 19 March 2014

Reviewer: Lisa Puchalski Ritchie

Reviewer’s report:

Reviewers Report:
Thank you for the opportunity to review this interesting article, which as one of relatively few papers reporting the process of developing a complex intervention to change provider behavior, makes an important contribution to the literature in this area.

Minor Essential Revisions:
In paragraph 1 of the background it would be helpful to include some statistics on the degree of malaria over diagnosis and cost-implications of over diagnosis if available both globally and in Tanzania in particular, in order to provide the reader with a better understanding of the extent of the problem.

In paragraph 1 of the methods section it would be helpful to label the intervention arms using the same description for the intervention components used later in the text (healthworker intervention and patient leaflet).

Please clarify what is meant by “unexpected findings” in the final sentence of Paragraph 1, step 1.

End of paragraph 2, step 1- formative research would benefit from an additional sentence or two describing who conducted the interviews and how, how data was checked for accuracy and how it was analyzed (number of reviewers, approach to analysis, etc.)

Step 4, paragraph 2- please clarify what considerate means in this context?

Second paragraph step 4- please clarify what is meant by number of messages.

Last sentence of Paragraph 1- Implementation theory. A brief description of the trainers would be helpful. Who they are, how they were selected, who they were employed/trained by, etc.

End of paragraph 1- implementation theory references table 1 as including the objectives, which would be a useful addition to the paper. However, the table 1 included with the paper is a list of symptoms.

Overall well written, a few minor language corrections needed: 1) Last sentence step 3 and paragraph 1 step 5, missing a word, ? agreed upon by team?. 2) First
sentence step 4, awkward/unclear. 3) Step five first sentence second paragraph, awkward wording. 4) Discussion paragraph 2 second sentence awkward.

Discretionary Revisions:
Consider adding assumptions and external factors to the logic model.

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

**Declaration of competing interests:**
I declare that I have no competing interests.