Reviewer’s report

Title: Time motion study using mixed methods to assess service delivery by Frontline health workers from South-India: Methods

Version: 1 Date: 06 Feb 2018

Reviewer: Norbert Dreesch

Reviewer’s report:

Comments:

HRHE-D-17-00154R1

The article received is of interest to field level HRH managers at various levels of health systems and services in particularly complex administrative and geographical contexts. The mixed method approach using a quantitative approach checked against focus group discussion results is likely to yield reliable results for directing HRH management decisions.

Language:

Prior to publication, a number of misspellings and English language corrections need to be undertaken.

Throughout the document, utilization of direct and indirect articles need to be corrected. For example, in the section "Abstract" under "Methods", line 14, the sentence starting: "In formative phase, ……" should read "In the formative phase, ...." or on the next line the sentence: "The main study involved deductive approach …." should read: " The main study involved a deductive approach ....". The document needs to be checked and amended accordingly throughout the entire text.

Furthermore, the text needs to be checked for employment of correct singular or plural noun forms. For example, page 5, line 5, the word "setting" must read "settings". Please check for correct plural or singular form throughout the document. The same needs to be applied to verb forms (for example, page 5, line 18, the word "was" should be replaced by "were").

Terminology: please replace "manpower" with "health workforce" and/or "human resources" throughout the text.

Contextual and text clarity observations:

Page 7,
line 2: explain "before bifurcation", perhaps in a footnote.

line 17: "PHC medical officer": should this read: "PHC medical officers"?

Page 8, line 20: replace "breech" with "breach"

Page 10: line 5, separate the word "atleast"

Page 11, line 1. The sentence starting with: "The two pilot testings ...." and ending on line 3 as ".... a month that were added to observation check-list." is not clear. Please re-word.

Page 13, line 14, please replace the word "synched" with "synchronized". Please re-word the sentence to add clarity: do you mean data were uploaded on a central server?

Line 21: unclear "... we present the revised in ..." please change and add clarity.

Page 14: please review sentences like the one on line 13:

"Overall, triangulation of information was done to drive meaningful interpretations." In a scientific publication, might it not better read:

"Overall, triangulation of information was undertaken to arrive at meaningful interpretations."?

Line 22: The first sentence lacks the verb.

Page 16, line 19: please review the word "peculiar". Do you mean "special"?

Page 17: you mention the "Hawthorne effect". Please describe this phenomenon in a few words in a footnote for those not familiar with the concept.

Page 18, Table 2 (cont.)

"GPS enabled android base app" should probably read "...based )?

"Voicing the concerns of the lowest most ... " replace with " .... most lowest ..."

Page 19:

Review list of abbreviations and add missing one e.g. ICDS

**Level of interest**
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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