**Reviewer’s report**

**Title:** The Human Resources for Health Effort Index: A Tool to Assess and Inform Strategic Health Workforce Investments

**Version:** 0  **Date:** 08 Apr 2017

**Reviewer:** Nandini Sharma

**Reviewer’s report:**

The Human Resources for Health Effort Index: The tool developed and tested by the authors is promising as it intends to measure the neglected HRH status and progress in low and middle income countries qualitatively. The following points may be considered for a better yield from the tool.

Overview

The score needs further analysis and refinement to become a tool for assessing and informing strategic health workforce investments. The perception of respondents has been considered leading to scores aggregating in the mid level for all dimensions. To use the scale for judging progress may be difficult after strategic interventions have been made.

Objectives:

Are not mentioned separately nor clearly specified.

Methods:

Method of selection of respondents needs to specify why the proportion of Government employees selected is higher and males predominant (more males in health sector particularly in 3 African countries?). Table 1 clearly shows the disproportionate representation of positions held by respondents. This makes inter-country comparison questionable.

It is mentioned that three formats were applied for data collection but the criteria for selection of the format to be used are not mentioned. It is important to specify this in view of the fact that scores in each dimension are averaging to midpoint, and it has been observed by researchers that if respondents are briefed well the scoring in scales is more specific. The results using manual filling of hard copies handled by a consultant (One of the methods used in the study) may have yielded better results. This information is important in view of the perception bias observed.

Results
The sampling method has not been specified. It appears that purposive sampling has been done and as a result the observation is "As expected majority of respondents were managers or directors "(Line 190). This however would not fulfill the objectives of the study.

The observation that prominence of HRH within the MOH scored highly could also be attributed to the fact that majority were managers or directors and 1/3rd respondents were MOH employees in the 3 African countries.

Discussion

The limitations have been accepted and discussed well. The authors have stated in their objectives that "Further by not knowing the importance of inputs, processes and outputs on HRH interventions, their effect on health outcomes is not known" (Line 102). This implies that some measurable output indicators should be mentioned and measured at baseline, and the changes in these indictors after interventions would enable measurement of the progress made. No such indicators have been mentioned.

An implied objective (Line 119 -121) was that" though good management of HR role in ultimate delivery of health care services is undeniable the status and inputs in countries that influence other dimensions such as leadership, finance or policy is less known". This objective does not seem to have been fulfilled by the scale as the leadership dimension scored well but was not tied to low scoring area of financial resources. This has been accepted by the authors (lines 365-373). In order to use the tool for assessment of HRH and measure progress after intervention this point may need to be sorted out by checking on selection criteria for respondents to assess bias. Respondent bias in answering any one dimension may lead to erroneous overall score.

Conclusions

The recommendations are based on the responses to the scale only and do not consider the outputs expected by following these.

Recommendation 1(line 387-391) is a general statement and cannot be concluded from the results of the scale responses. A comprehensive approach to strengthening health workforce cannot be inferred from the results as all dimensions are scoring about midline and overall scores are not conclusive. The items however are scored differently so a brainstorming session including various stakeholders would be needed to formulate any meaningful intervention.

Recommendation 4 (line 401-404)"Countries should invest in developing greater decision making capacity among HRH leaders "cannot be recommended as the scores captured in the leadership dimensions are high and indicate no deficiency necessitating such intervention.

It is mentioned in the results that the Monitoring and evaluation dimension was responded to by a small number of respondents which was attributed to its specialized nature by the authors. This
dimension clearly needs a reanalysis to see whether it has universal applicability or should be restricted to specified respondents only.

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

An article of importance in its field

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

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.
I agree to the open peer review policy of the journal