Reviewer's report

Title: Strengthening M&E and building sustainable health information systems in resource limited countries: lessons learned from an M&E task-shifting initiative in Botswana

Version: 2
Date: 12 August 2014

Reviewer: Julia V Ershova

Reviewer's report:

This study focuses on the qualitative assessment of the effectiveness of task-shifting initiative with regards to improving health information system and data quality in Botswana. The assessment was conducted three years after the initiative was implemented and was a part of a larger evaluation of the health information workforce established in the country. The researchers described achievements of this new workforce and documented lessons learned during its establishment and implementation. The findings of this study demonstrated that on-job training of university graduates can be an effective approach for developing a professional workforce within a national health program. The results of this study are very important and timely for developing countries that experiencing a high demand of the trained specialists in the area of health informatics to support long-term sustainability of health information systems.

Major Compulsory Revisions

Question posed by the authors was well defined and objectives of the study were clear. However there are major recommendations to Methods, Results and Discussion sections.

Methods

More information about study design is required, including clarification on sampling strategies for in-depth interview and focus groups discussions.

1. If the interviewees were purposively sampled, what was the sample size? Why only 12 senior officers were interviewed?
2. If the saturation strategy has been used for the interview sampling, it should be clearly described along with the major questions used for this strategy
3. Is the response rate (67%) related to 12 officials who was interviewed or to all officials who participated in the development of the new cadre?
4. How many districts were within 80 kilometers radius of the two districts selected for the focus group discussions?
5. What was the representativeness of rural and urban districts during the focus group discussions?

Results
More details are required to adhere to the relevant standards for reporting and data deposition; the provided results are not supported adequately by information received during the interview and focus group discussions.

1. Information about the interviewees and focus group discussion participants should be provided:
   №-What is the total number of officials involved in the recruiting the new cadre (a pool for interviewees)?
   №-Which organizations interviewees represented and how many interviewees from each organization participated in the interview?
   №-How many district M&E officers, program officers and health managers participated in focus group discussions?

2. More details on each topic of the Achievements and Lessons Learned sub-sections are needed. It may be reasonable to separate results of in-depth interview and focus group discussion, since the objectives of those were not 100% overlapped.
   №-It should be described how the provided topics were derived from the common themes identified during the in-depth interview and focus group discussions
   №-Each topic should be supported by data in terms of number of respondents provided the information
   №-It may be useful to have a table(s) with the list of common themes/topics and the major responses with the number/percentage of respondents to support the results.
   №-For district-led operational research activities it would be helpful to know how many projects were initiated/completed per each district

Discussion
1. The discussion section should be enhanced with the data from the result section (recommendations are above).
2. The limitations of the work are stated, but should be properly addressed
3. The generalizability of the results should be discussed, since only 33% of the health districts were represented in focus group discussions and it is unknown how many rural districts were among them.

The authors clearly acknowledge any work upon which they are building, both published and unpublished.

The title and abstract accurately convey what has been found; minor comments to the title of the manuscript and the abstract are provided in the next section.

Minor Essential Revisions

Title:
1. M&E should be spelled out in the title
Abstracts:
1. Background: It would be useful to include information on the number of the M&E officers recruited (51).
2. Methods: Spell out number of interviews and fit it in the statement appropriately

Introduction:
1. Change the words order in the 1st sentence of 3d paragraph as follows: 'To improve data quality in resource-limited settings'
2. Although the reference to the previous publication was provided ([28]), it may be helpful to add more information about the established M&E workforce, since the objectives of the study are concentrated on its assessment.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

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