Author's response to reviews

Title: Improving service uptake and quality of care of integrated maternal health services: The Kenya Kwale District Improvement Collaborative

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Author's response to reviews: see over
Response to Reviewer’s

Title: Improving service uptake and quality of care of integrated maternal health Services: The Kenya Kwale District Improvement Collaborative

Version: 2 Date: 10 January 2014
Reviewer 1: Eva Kaltenthaler

Reviewer’s report:
Major compulsory revisions
1. Page 6 “The quality of ANC is very poor.” What does this mean? What would very good ANC look like?

Response: Dear reviewer, thank you for this comment. Antenatal care Services are important entry point to critical maternal and child health services. A very good ANC services would thus entail a pregnant mother attending at least four scheduled clinic visits where no complications are noted and all the necessary clinics advised by the care givers if any problem is noted. A side from the actual clinic visits, from a quality of care perspective this should entail all the necessary ANC services been actually provided to the mother. These include a detailed physical exam and recommended laboratory tests (ANC profile). These are bare minimum in rural health posts/dispensaries setting in low income setting. We have restructured this sentence and segment to better articulate what we mean.

2. The authors define this as a retrospective study which I do not think is correct and this word should be removed.

Response: This study was a pre and post evaluation of whether implementing quality improvement activities/approaches would lead to increasing utilization and improving quality of care integrated maternal and child health services in a rural district setting. We therefore agree with the suggestion and have removed the word ‘retrospective’.

3. There is not enough detail as to how the interventions were developed and implemented. For example, what training did the quality improvement team have? How were the 20 indicators chosen? What exactly was the “collaborative improvement approach”? How were the key change actions deemed “successful”? I appreciate that additional files have been used to provide information but there needs to be enough detail in the paper for the reader to understand how the study was conducted.

Response: Thank you for this important and comprehensive comment.

Training that was offered

The district health management team (DHMT) underwent one week training on quality improvement. This training involved core aspects including applying system thinking as
healthcare managers, using data to identify quality gaps, application of various quality improvement tools (process map, the Ishikawa diagram, Pareto charts among others), developing an improvement plan, how to come up with change ideas and put them through the Plan, Do, Study, Act Cycle, measuring improvement, and how to set up and mentor/coach improvement teams. The facility based improvement teams were not given any formal training but were mentored by the DHMT on all the above.

Choosing the 20 indicators
The indicators were chosen by the District Health Management Team. They primary reflect indicators that are routinely reported for the ANC and related programs especially deliveries in Kenya.

The collaborative improvement approach

A collaborative is whereby many facilities come together to improve same health service indicators. With this approach, working ideas from one facility can be quickly borrowed and implemented by another facility. This way working ideas spread fast and can lead to overall improvement rapidly, within 9-18 months or even faster. This improvement collaborative involved all the public service health facilities in Kwale district.

How the key change actions/ideas were deemed “successful”

After every 3-6 month implementation cycle, a district wide sharing sessions was convened. This was organised by the DHMT and every implementing facility was represented. The purpose of this session was for every facility to share ideas they were trying out and performance of the various indicators. This would be an avenue for spread of working ideas. Furthermore it also enabled the DHMT to start documenting ideas that appeared ‘successful’. Three such sharing sessions were organised. A final meeting was then held to scrutinise all the ideas tested during the implementation period and rank them. Ranking was based on four parameters; i) Number of sites that implemented the specific idea. Therefore an idea that was implemented and shown to be working by more sites scored higher. ii) Simplicity/ how easy the team found the idea to implement. iii) Scalability, how easy the implementing team thought the idea could easily be copied and implemented in other similar setting. iv) Relative importance (its contribution to the results achieved). Each parameter had 5 as the highest score and 1 as the lowest; therefore the maximum score for an idea was 20 and minimum 4.

Dear reviewer, as clearly noted all these details are fully covered in the attached supplementary file. We have further beefed up the same within the manuscript itself to make it clearer.

4. The results are not linked to final outcomes- Did the changes have an impact on perinatal mortality/morbidity, incidence of malaria in pregnancy, rise in Hb levels, change in the incidence of tetanus for example? Outcomes such as these
may not have been measured but this should be mentioned as a limitation of the research and areas for future research.

Response: Thank you for this comment. Indeed this ‘collaborative’ focused on improving the quality of care from the viewpoint of increasing utilization and further ensuring that pregnant women receive requisite services when they attend ANC clinic visits and other maternal health related services. However many other factors may still affect core outcomes such as perinatal mortality and others. For example although a health care worker may ensure that a pregnant woman receives a mosquito net, this may not translate to actually sleeping under the said net at home. Therefore it is important to have longer follow up studies that can measure such outcomes. We have therefore included these constraints under the limitations section in our discussion,

5. It is not clear from reading the paper what the authors would suggest were the most useful interventions and why. What would they recommend to other districts? (and low income countries) as the best interventions to try and why?

Response: Dear reviewer, we actually did outline the key change ideas that were deemed successful and thus could be recommended to other similar settings. We further did provide a table summary (table 1) of these ideas. However, we really appreciate that this comment is germane to this manuscript. Core change ideas described in our discussion which we have expanded upon include:-

   a) How to assist rural pregnant women overcome financial barriers by staggering any required payment, the discussion (page 14, paragraph 2)
   b) Continuous structured dialogues with facility catchment community the discussion (page 14, bottom of paragraph 2)
   c) Discussion page 15, paragraph 3, host of ideas on getting in cooperating feedback from the communities on various issues such as reports of any poor treatment during delivery, changes to allow trusted companions stay with the mothers in labor for encouragement and company, and warming water for mothers to clean up after delivery.
   d) Reducing waiting time by meticulous process mapping to indentify and remove unnecessary steps. Discussion page 15 paragraph 4.

6. Although there were impressive improvements in the outcomes reported we can not be sure that the improvements were due to the interventions as there was no control group. Are there other factors that need to be considered? This at least needs to be mentioned in the discussion section. The only way to be clearer about this would be to conduct a randomised controlled trial and there are of course resource constraints involved with this.

Response: Dear reviewer, this is an important comment and we have mentioned it in our discussion and specifically under limitations.

Minor essential revisions
7. Some grammatical errors are evident in the paper. The paper would benefit from proof reading.

Response: Dear reviewer, thank you for pointing this out. This is now done and we hope such grammatical errors have been corrected.

Reviewer 2: Charlotte Warren

Reviewer's report:
Major compulsory revisions
1. No clear research question posed.

Response: In this study we set out to examine whether quality improvement approaches can be applied to increase utilization of integrated health services (ANC, PMTCT, and skilled delivery) and also improve adherence to clinical standards and guidelines in a rural district. Furthermore we wanted to test if this can be achieved within the confines of routine supportive supervision set up. As per your comment, we have made this clearer under the study design section (page 7 paragraph 1)

2. Method section could be laid out more clearly. the implementation is in the middle or methods - put at beginning or end of section. Kenya context should be in background, district context in methods - more concise.

Response: Dear reviewer, thank you for these suggestions on layout. We have duly reorganised the aforementioned sections as suggested.