Reviewer's report

Title: Evaluating capacity at three government referral hospital emergency units in the Kingdom of Eswatini using the WHO Hospital Emergency Unit Assessment Tool

Version: 0 Date: 13 Mar 2020

Reviewer: Gregory Conners

Reviewer's report:

It was a pleasure to review this manuscript. I am an experienced US Pediatric Emergency physician and leader in EM and Pediatric EM, in the USA, but was not previously familiar with resources in African countries. This manuscript was illuminating to me, making me much more aware of the level of preparedness in Eswatini, and may be of use to those making policy decisions, as well. It was well-written, with excellent English language readability.

Specific recommendations for improvement:

Abstract: Please be sure the aim matches the Conclusions. In this case, perhaps you could add to the aim something like: "and provide recommendations to guide future improvements."

Background: The references seemed problematic. They jump from reference 5 to reference 10. Later on, I did see references 8 and 9 cited, but never did see citation of numbers 6 or 7. Some of the actual references do not seem complete - like #8 for example. Also, several of the references refer to Swaziland. Please note that Eswatini is (or formerly was, or whatever is correct) also called Swaziland, which will help readers’ orientation. I would eliminate the work "back" from "was assessed back in 2014."

Methods

Although there is a brief description of the HEAT tool, we really need more. I did not find any references to its creation, validation, etc.

The text says the four regional hospitals were randomized, with half being selected. What was the randomization method used? Why didn't you just study all four? Were the two you selected different from the other two?

In the long sentence that begins "The HEAT assesses…" and ends with reference #17 - I did not think reference 17 actually supported the information in that sentence. Please double check.

Results

Please give a few more details about the regional hospitals involved. How big is the catchment area of each? Do the populations differ? Why does Regional Hospital #2 have so many more emergency visits per year than the others?

Also, since the results seem somewhat subjective, what training did investigators receive to translate subjective results into un-biased data? Were interviewers trained? Was there any concordance testing to be sure that similar answers were similarly coded?

Conclusions

I would like to see more recommendations, based on the close understanding that the authors got of the data. You should make clear that these go beyond the data, but you are in a position to better inform policy makers.
Please make sure that somewhere you tell the readers whether or not the authors had independence in writing the manuscript, or if the DoH or any other government officials influenced or ordained the content.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**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.