Reviewer's report

Title: Essential trauma management for internally displaced people of eastern Burma: Scaling up the workforce and diversifying health workers' skills to address service delivery needs of communities in active conflict zones.

Version: 1 Date: 11 June 2008

Reviewer: Jeffrey Arnold

Reviewer's report:

Overall, this manuscript reports very interesting data from a very worthwhile international project. Nevertheless, a number of structural changes should be made in order to fashion a report suitable for publication. The following recommendations should be considered as “major compulsory revisions”:

Is the question posed by the author new and well defined?
The authors should decide if they are describing the development of the (Trauma Management Program) TMP or the results of the implementation of the TMP. A report about the development of the TMP (as suggested by the last sentence of the Introduction section) is different than a report about the results from the TMP. My recommendation is that they aim their manuscript toward a report of the results of the implementation of the TMP.

The authors should state the question they seek to answer (or goal of the study) in the last sentence of the Background section of the abstract and the last sentence of the Introduction section.

I also recommend that the authors briefly describe the health care system in their study area in the Introduction section in order to facilitate an understanding of the context for the question they seek to answer.

Are the methods appropriate and well-described, and are sufficient details provided to replicate their work?
Much of the text in the Methods section describes the origin of the TMP and accordingly belongs in the Introduction section. The authors should describe their actual methods for acquiring the information they report. Only the last paragraph of this section addresses their study methodology. Questions that should be answered here include where the study took place, when did it take place, what was the study population, what was the data collection tool, how was it designed, what were its elements, who collected the data, who analyzed the data, how was it analyzed. A table showing the data collection tool would be helpful. A description of these methods should also be encapsulated in the Methods section in the abstract.

Are the data sound and well controlled?
The soundness of the data depends on the soundness of the methodology for
collecting it, which should be described in more detail in the Methods section. The data lack controls – internal, external, or historical. Please see my comments below on comparisons with external data.

In the Results section, the authors report “high survival rates”. I recommend they report the actual overall survival rate here (i.e., 91%) instead. I recommend that the sentence which claims that the TMP “boosts morale” and “contributes to empowerment to care for themselves” be deleted, since no evidence is provided to support this.

I recommend that the authors report survival rates in the subset of patients injured by landmines to enable comparison with other landmine injury patient populations.

The label in Table 1 – “Wait in days…” should be relabeled as “Time to medic arrival (days)”

The fifth paragraph in the Results section should be deleted. The authors present no evidence that “procedures taught during training workshops were implemented effectively”.

If the authors are going to report frequency of medication use or frequency of interventions, then they should address this in the Methods section and describe how they collected this data (which is different than demographic, mechanism of injury, or survival data).

Are the discussion and conclusions well balanced and adequately supported by the data?

I recommend that the sentence in the Conclusions section of the abstract, which claims that “mobile health workers documented their ability to increase survival rates”, be deleted, since the manuscript provides no pre-intervention survival rate upon which the claim of “increase” can be made. I also recommend that the authors delete the sentence “Lessons learned…”, since this is not a conclusion that follows from the data presented. Similarly, I recommend that the authors delete the sentence, which states that report “illustrates a method to address the health needs of remote communities”, since this is also not a conclusion that can be drawn from the results, unless the authors have decided to present a description of the TMP as the goal of their report.

I recommend that the authors refer back to the data in their Results section and write a conclusion based on this – e.g., “Implementation of the TMP in this study population of mixed trauma patients in an internally displaced population in eastern Burma resulted in a survival rate of 91%”.

The authors should be careful not to compare survival rates in their study population of patients with mixed mechanisms of injury with reported survival rates in patients injured only by landmines (i.e., Iraq and Cambodia). I recommend that the authors only compare populations with similar mechanisms of injury. Even with this, there may be numerous confounding factors that
preclude meaningful comparisons.

The authors should state that a major limitation is that they are unable to report injury severity in their study population, since injury survival rates are difficult to interpret without this information.

The last sentence of the Discussion section – “However, we believe…” should be deleted. It is permissible to point out that the data show that many patients survive, however no data are presented re “improved functional outcomes”.

The authors should discuss the implications of Table 2.

The Conclusion section should be re-written to summarize the major result (i.e., survival rate post-TMP).

The last sentence of the Conclusion section – “imbued confidence” etc. is not supported by the results and should be omitted.

Do the title and abstract accurately convey what has been found?
I recommend that the title be shortened and targeted at the major result of the manuscript - “Survival rate after implementation of a Trauma Management Program for internally displaced people of eastern Burma”

Please see multiple suggestions for the Abstract above.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.