Reviewer’s report

Title: Triage vital signs predict in-hospital mortality among emergency department patients with acute poisoning

Version: 2 Date: 31 May 2012

Reviewer: Alan Jones

Reviewer’s report:

This manuscript is a retrospective observational analysis of the value of the triage vital signs to predict in-hospital mortality among ED patients with acute poisoning. There are several points for consideration.

Major Compulsory Revisions

1) After reading the manuscript it is unclear exactly what the importance of the message is or how to incorporate it into clinical practice. If it is simply that abnormal vital signs predict worse outcome in poisoned patients, that information is neither novel or useful. Therefore, it is not clear what the authors feel is contributing to the advancement of knowledge or the medical literature through this report. Further justification as to why this is a suitable report for publication should be made.

2) There is a great lack in detail regarding the methods of patient data abstraction. There have been many previous publications on strategies to improve accuracy and minimize inconsistencies in medical chart reviews. These include a minimum of the following steps:

   (1) Training of chart abstractors,
   (2) Case selection,
   (3) Definition of variables,
   (4) Abstract forms standardized,
   (5) Meetings,
   (6) Monitoring,
   (7) Blinding,
   (8) Testing of inter-rater agreement.

   It is critically important to the validity of the report that all of the issues above be addressed in detail.

3) There is a significant lack of detail in the statistics section leaving one to question the validity of the analyses. Some of the issues include, not providing test for normality for continuous data and using the appropriate follow up test (ttest or M-W-U test), no detail whatsoever about the logistic regression analysis (including the variables included in the analysis, the number of outcomes, the
statistics of the model fit, etc), not reporting AUC for the ROC analysis, etc.

4) There is no good justification for why the paraquat poisoned patients were excluded. This would seem to greatly impact the results and without a strong justification this should not be done. Why not just control for this ingestion in the LR?

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

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

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

**Declaration of competing interests:**

None