Reviewer’s report

Title: Developing process guidelines for trauma care to severely injured patients: Results from a Delphi study

Version: 3 Date: 9 August 2012

Reviewer: Matthew Rosengart

Reviewer’s report:

The authors have conducted a Delphi survey to achieve consensus on several guidelines regarding the processes of delivering trauma care in the Netherlands. The authors should be commended for the apparent rigor and extent with which the study was conducted. Several of the results are informative, and through future validation, carry the potential to change practice.

I have the following major compulsory revisions:

1. Though the authors conduct a rigorous Delphi survey, many of the processes of care for which consensus was achieved are not generalizable to all trauma systems. Furthermore, the specifics of many guidelines (i.e. time), though perhaps appropriate in the context of the Dutch setting, may not be applicable to other geographic regions. Furthermore, many of the ‘Action’ items are already embraced by the trauma community in several countries, if not supported by the evidence (i.e. ABCDE), and thus a systemic questionnaire study seems unnecessary. The same can be said for the transportation of all severely injured patients, the focus of this study, to a level I center.

2. I do not agree with the following statement (page 5, paragraph 3): “ A Delphi study is the most correct method to reach consensus on topics with insufficient scientific evidence.” Furthermore, the reference provided does not support the content of the statement.

3. There are prior studies that have attempted to validate the usefulness of audit filters for prehospital trauma care. Though limited in their retrospective nature, some mention of them in the manuscript is important. J Am Coll Surg. 2010 Feb;210(2):220-7. Epub 2009 Dec 4; J Trauma. 2007 Mar;62(3):708-13.

4. The accomplishments of each round are difficult to ascertain. As described in the first paragraph of ‘Results’, the first 3 rounds primarily developed the specifics of each guideline for which consensus was to be achieved. Round 4 further detailed these guidelines, specifically as it relates to acceptable limits for each guideline, and round 5 was used for final consensus. Is this correct?

5. Results: Time intervals (page 11, paragraphs 3 and 4): how were the time limits developed through consensus? Through each round were the limits or time intervals further specified and submitted for scoring?

6. Results: Time intervals: If consensus determined that a physician is needed to achieve a ‘competent team’ (Figure 2) then the statement (page 12, paragraph 2)
“In trauma systems where a physician is never dispatched to the accident location guidelines 2, 3, 5, 6, and 9 are not relevant.” is incorrect. They are still relevant, and potentially important, but not evaluable. That system would fail to meet each of these filters through default. This perspective is further supported in ‘Actions’ where it is stated “It was agreed that the dispatch center should send both an ambulance and MMT to every severe trauma patient.”

7. Results: Actions: The following statement (page 12, paragraph 5) is misleading, “Actions to ABCDE stabilize the patient that should only be performed in the prehospital setting are application of a cervical collar and application of a backboard.” It sounds like this is all that should be done in the prehospital ABCDE stabilization.

8. Results: Actions: Many of the filters listed in ‘Actions’ are already promulgated by ACSCOT, ATLS, and state trauma systems. I don’t identify how this contributes to or alters the current perspective or practice. Please comment.

9. Discussion: Quite lengthy and could be reduced and still retain content.

I have the following minor essential revisions:

1. There are some grammatical errors.

I have the following discretionary revisions:

1. One method by which to depict “the strength” of consensus is by graphing the sd of mean likert scores against the mean likert scores and in tabular form, detail these data, collectively with the proportion scoring above a certain threshold level of ‘consensus’ (i.e. agree and strongly agree). This additional data may further clarify the results.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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.

**Declaration of competing interests:**

I do not have any financial or non-financial competing risks to declare.