Reviewer's report

Title: The use of Cincinnati Prehospital Stroke Scale during telephone dispatch interview increases the accuracy in identifying suspected stroke and Transient Ischemic Attack

Version: 2 Date: 18 July 2013

Reviewer: James McKinney

Reviewer's report:

The authors present an observational cross-sectional multicenter study assessing the accuracy of emergency service dispatch utilization of the Cincinnati Prehospital Stroke Scale to identify potential stroke patients. This is a potentially important study with significant implications pertaining to early identification of stroke patients and appropriate resource utilization. This is an understudied piece of the stroke “chain of survival”. The authors observed findings highlight the importance of using a validated stroke screening tool, such as the Cincinnati Prehospital Stroke Scale, to appropriately identify stroke patients calling emergency services and dispatch appropriate personnel to care for that patient.

Major Compulsory Revisions:

1. Page 7, line 1: Was information on the data form collected prospectively or retrospectively. If this data was collected retrospectively by chart abstraction, (which I assume it was, as you state there was no change to routine practice) how might this bias your results? Please address in discussion.

2. Page 9, Line 4: Please clarify (probably in the methods) whether the variable of interest was simply performing/documenting the CPSS, regardless of whether positive or negative, or only those patients with positive CPSS.

Minor Essential Revisions:

1. Page 6, last line: Please clarify what you mean by “more or less systematically”. Were dispatch personnel trained on the CPSS? How was use of CPSS documented?

2. Page 10, Last line: You reported no data on true/total negatives, how does this data support a claim that CPSS use increases specificity?

3. Page 11, Line 5: You address the potential selection bias on an individual level of patients identified by dispatch as possible stroke/TIA are likely to be determined by EMS. Please also address the potential bias that using the same screening tool (CPSS) by dispatch and EMS may introduce into results.

4. Table 1. add p-values for analyses of baseline variables.

5. Add abbreviation key to all tables/figures

Discretionary Revisions
1. Figure 1. Consider changing overlap of circles to be more representative of sample size. It appears as if there were significantly more false negatives, while in fact there were 2x’s as many true positives.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.