Reviewer’s report

Title: Why Acute Ischemic Stroke Patients in the United States Use or Do Not Use Emergency Medical Services Transport? Findings of an Inpatient Survey

Version: 0 Date: 29 Sep 2019

Reviewer: Jane Brice

Reviewer's report:

Thank you for the opportunity to review this interesting manuscript. I hope my comments will be useful to you.

Abstract

1. Please mention in the methods that patients were surveyed while hospitalized for their stroke event.

Introduction

1. The first paragraph is a bit overstated. Yes, patients who arrive by EMS have faster initiation of reperfusion. Yes, quicker reperfusion leads to better outcomes. But, relatively few patients receive reperfusion treatments. The relative benefit of arriving by EMS is not large and likely does not "critically determine survival and long-term outcomes. Many, many, many factors play into survival and long-term benefits of which EMS is but one.

Methods

1. I like your conceptual framework. Please tell us how it was developed. Was it based entirely upon the Schroeder and Sen studies cited? There are quite a few other studies that have also examined reasons for EMS activation by stroke patients.

2. Who were the research assistants? How were they trained?

3. 108 subjects in 18 months seems pretty small. To what do you attribute this?

4. When discussing the random identification, please spell out identification rather than use id. Unless you are Freud.
Results

1. When you say "surveyed patients were not substantially different from non-respondents despite some statistically significant differences in age, sex, race, and stroke severity", what do you mean? There were differences, what do you mean when you say patients were not substantially different.

2. I find it interesting that 46% of subjects recommended full insurance coverage of EMS when so few subjects identified that as a concern in calling EMS.

Discussion

1. Nationally, only 53% of stroke patients use EMS. Why do you think you had a much higher EMS utilization rate (69%)? Is this the rate of EMS use in your GWTG database? Or is there some selection bias here?

2. You cite similarity of respondents and non-respondents as a mitigating factor for small sample size and then add "as well as documented nationwide AIS cohorts". What does that mean?

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.

I am able to assess the statistics

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