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

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Reviewer: Alison Porter

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This article is interesting in that it takes a very different stance to most work on decision making about use of pre-hospital care - while much of the literature concentrates on why people call for an ambulance when it's not appropriate, this paper explores why people don't call for one when it would probably be a good idea. It's a well-written piece of work, but I do have some concerns about it.

It is a weakness of the paper that the sample is a very small proportion of the total number of patients admitted (108/1179), and small in terms of absolute numbers - Table 2 reports figures as low as two people, which is really too small to be meaningful. The authors describe a convenience sampling approach, but it's not entirely clear what they did - did they approach all 1179 patients? If not, how were patients selected? How many were approached but did not complete the survey? If a patient was not available, did they try contacting them again later?

In the introductory section, the authors correctly point out that, on average, it's good to use EMS as it can get you to reperfusion faster. It would be useful to have more discussion of this - is it because of shorter transit times, or because patients brought in by ambulance get priority attention in the ED? It would also be useful to flag up at the beginning that, for some patients, it may not be to their advantage to wait for an ambulance - as respondents living in rural areas pointed out in the survey. And can we be confident that all patients would have received an immediate response if they had contact EMS, or might some have been triaged to wait? From the beginning (and in the title) it's worth pointing out that this work was conducted in the US, which has particular contextual issues.

P6, line 24 states that 53% of patients arrive by EMS - where? And this reference is ten years old, so should not be presented as current data.

On p7 the authors state that the survey was informed by the conceptual framework given in Fig 1. The list of factors given in Fig 1 is very comprehensive, but I'm not sure it can be described as a conceptual framework - there's no sense of the sequence in which factors operate, or how they might interact; it would also be useful to see some grouping into, say, intrinsic and extrinsic factors, or predisposing/immediate.
I am confused by the data presented in Table 2, which reports people's priority reasons for their choice - I would expect the numbers to add up 108, but they are way over - but below 108x3, which you would expect if all 'top 3' reasons reported. Needs explanation of how the data were handled.

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?
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Yes

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No

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