Reviewer’s report

Title: Delirium in older hospitalized patients—signs and actions. A retrospective patient record review

Version: 0 Date: 16 Nov 2017

Reviewer: Marilyn R. Gugliucci

Reviewer’s report:

Note on cover sheet it mentions the N was 268 - in the body of the manuscript it states the N as 286. Important to confirm was it 268 or 286.

Abstract: Well done.

Page 3

Lines 61-69 - nicely done

Page 4

Lines 91 and 103 - line 93 mentions that a patient record review happened at one county hospital; but in line 103 it is stated that the sample size is representative of all county hospitals. This sentence needs more a qualifier for me. I looked at the citations (one was not in English) and I am uncertain how this statement is grounded (or true) based on these citations. This sentence is not part of the methods, so may want to delete the sentence or state more directly why this sentence is important and why it is included in the methods.

Line 101 - add 'ly' to random - so it is randomly.

Page 5

Lines 113-115: as both types of delirium were introduced in the literature review (hypo and hyper) it seems important to state in this section of the methods that both types of delirium symptoms were considered.

Line 122-123: This sentence should be the first sentence of the results section. It is not a method-it is the result of the methods of looking through 480 patient records. Again is it 286 or 268?

Page 5-6

Lines 126-137: using the header "Sample Characteristics" was confusing to me. If this paragraph is stating the reason for the hospitalizations for the 78 who were identified with symptoms of delirium then this should be in the results. If this paragraph applies to all 480 pt
records reviewed then it needs to be made more clear how this applies to the methods. Were the reasons for hospitalization one of the determinants to review the pt chart? Regardless of where this paragraph is included, my suggestion would be to rename the sub header: "Reasons for Hospitalization" or Hospitalization Characteristics. This paragraph is not focused on the "sample" per se, but more so on the reason for being hospitalized.

Page 8 - Nice job on describing the analysis. I always question if authors should be so specific to mention what the "first author" or "second author" did - it is more important to show inter-rater reliability which was addressed.

Page 9: RESULTS

As I went through the results what I had hoped to see was what type of health professional each quote was attributed to. For instance (pg 11: Line 240- "The patient replies happily…. Totally incomprehensible.") My suggestion would be to add in parentheses the HC provider position that made the comment in the pt records such as: (Physician). I realize this is not a study comparing which HC profession is better trained, but it does provide some insight into the HPs assessments when they write these notes in the pt charts. It could make a case for a future study or focus on a particular HP training in delirium. Food for thought.

Page 10

Table 2, nicely done.

Lines 216 and thereafter.

For EACH Sub-header: I think it would be really helpful to the reader to identify/link the sub-headers with Table 2. My suggestion is to write: Main Category: Reduced ability to participate….

Line 224: Generic Category 1: Difficulty Describing….

Page 11

Line 248: Generic Category 2: Difficulty taking care….

Page 13

Line 283: Generic Category 3: Difficulty Interpreting…

Line 285: suggest replace "locate themselves" with "identify being in…" the hospital wards.

Page 14

Line 320: Generic Category 4: Difficulty handling….
Page 16

Line 356: Maine Category: Variation in Actions

Line 362: Generic Category 1: Adapted Care

Page 18

Line 401: Generic Category 2: Deficient Care

Page 19

Line 438: Generic Category 3: Beyond Usual Care

FIGURE 1: This figure is not clear to me. It states in Line 471 on this page that results reveal a variation in actions taken by healthcare professionals and that the figure shows the relationship between actions and signs of delirium. Either please explain or make more explicit how Figure 1 addresses this (as of now all actions appear to be linked with all signs of delirium) or show the variations of actions possibly taken by each health profession (OT, Physician, etc). My sincere apology for not getting the point here, but it is so important that tables and figures are self explanatory. I am quite sure I missed what the authors were trying to convey.

Page 24

Lines 552-563 - Nicely done!

Really enjoyed reading your article. This is such an important contribution to the field!

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.

Unable to assess

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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Please indicate the quality of language in the manuscript:

Acceptable

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