Reviewer's report

Title: Elderly surgical patients and hospital bed occupancy

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Reviewer: Lixin Ou

Reviewer's report:

This manuscript investigated delay in discharge (particularly amongst elderly patients) and its impact on hospital bed occupancy, and identified some causes contributing to the delay. The study raised questions somewhat properly and presented findings that some potential delay, such as waiting for consultant opinions, tests and procedures, may not lead to prolonged LOS. Although the study was performed in a consultant surgeon at a district general hospital and sample size is small, the unique measurement and insight on prolonged LOS may add something new in its field. However, major compulsory and minor essential revisions are required before it is ready to be accepted:

Major compulsory revisions

1) Title:
   The study analysed discharge delay between acute and elective groups and also age groups, and discussed the delay that not lead to prolonged LOS. The title seems too narrow to convey the findings. My suggestion is that authors may change it to “Delay in discharge and its impact on unnecessary hospital bed occupancy”

2) Method section
   There are several issues within the method section. Firstly, it is not clear when the study data was collected as the authors only mentioned 4 month period of the study, but did not present the month and year when the collection started. This is important for policy implication and initiative if the study has not dated or circumstance has not changed.

   Secondly, outcome variables and some items need to be clarified. For example, a) there was no detailed explanation for outcome variables of causes, e.g. what did the team errors include? b) It is also not clear for the variables which authors talked about with the sentence “Delays prior to discharge planning due to … waiting for consultant opinion…” . c) Do “all day case patients” means patients
with day only LOS? d) What was the definition of “pre-discharge planning”? 

Also, the sentence “A predicted date of discharge (PDD) was used for all patients staying five days or longer” need to be explained why PDD was used for only five days or longer?

3) Result section
Firstly, it would be better to describe the total number of patients in the first paragraph, and then, bed day number in the second paragraph. For the total number of patients, it is needed to describe the number and percentage not only for admission type, but also for elderly patients. For the total bed days, authors may further describe the number and percentage for admission groups and elderly patients separately.

Secondly, the comparisons of bed days between admission groups, e.g. 232 vs 39, 22 vs 4, 11 vs 39, etc., do not make sense, as the number of patients was different between the two groups, thus the bed and delayed days are certainly different. This was also the case for the comparisons of bed days between age groups. However, it would be meaningful if authors could compare mean or median, rate or percentage of delay between the groups. I would suggest to attach percentage in brackets to the number of delayed or lost days, e.g. 232 (?%), and the statistically testing should be made for the mean or percentage but not for the number.

4) Discussion section,
In this section, the second paragraph, authors discussed that there were many limitations in measurement by previous study studies. It would be better to provide some examples or details of these limitations in the previous study, and to discuss the strength of your study in the measurement in comparison.

There are also some issues regarding missing references for discussion. For example, in this section, paragraph 6, authors mentioned the assumption of an average LOS of 7 days. I wonder what the “7 days” referred to. Is there any reference for this? Paragraph 10, need references for the state “Patients requiring multi-disciplinary input, particularly elderly patients and those with peripheral vascular disease can highlight deficiencies in healthcare that lead to delays in discharge”

Also, the limitations of sample are not stated efficiently, e.g. small sample size.

5) Tables
In Table 1, within the admission type columns, bed days should be given following the patient number.

All sum items need to put percentage in brackets.

For each cause of delay, replace all abbreviations by full names except COTE and SD.

There is an error of sum for COTE in the elective column. I guess it should be 4.
The blank cells at the left of causes should be merged.

In the table 2, a) there is no title; b) need to add percentage to sum items within brackets.

Minor compulsory revisions
1) It’s hard to follow between the paragraphs in the manuscript without spaces. There is a suggestion of adding spaces between the paragraphs.
2) There are grammatical errors needing to be checked and corrected
3) No page number.
4) In result section, Paragraph 2, line 2, “ten’ and “42” should be consistent in its format.
5) In the result section, subtitle “Cause of delay’, the number “139 (of the total 271)” for whom is not clear.
6) Misused abbreviation, e.g. TBO.
7) In the discussion section, the sentence “In the current financial climate, healthcare cost is a dominant issue and LOS is directly related to cost containment” seems unnecessary as healthcare cost have been commonly acknowledged as ever a key issue due to increasing demand and limited resources but not only in the current financial climate.

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 declare that I have no competing interests