Reviewer's report

Title: HIV/AIDS length of stay in Portugal under financial constraints: a longitudinal study for Public hospitals, 2009-2014

Version: 1 Date: 17 Oct 2018

Reviewer: Alberto Freitas

Reviewer's report:

The majority of my comments were somehow considered or discussed in the limitations of the study.

Some remaining concerns:

Reviewer 2 [R2]: The number of secondary diagnosis was included in the analysis. Why not a comorbidity measure/score?

Authors [A]: We adopted a similar methodology as other studies.

[R2]: --> Please provide adequate references for the referred other studies, and further discuss that methodological option.

Reviewer 2 [R2]: The number of procedures were also included in the analysis. What does this measure? There are many differences between procedures, e.g. between medical and surgical procedures.

Authors [A]: We do agree. The number of procedures, also used in other studies, was used as variable to measure severe hospitalizations.

[R2]: --> Please provide adequate references for the referred other studies, and further discuss that methodological option.

[R2]: p.7, "The number of secondary diagnoses and the number of procedures both increase estimated HIV/AIDS LOS". How can we be sure of the direction of the association?

Authors [A]: The estimated coefficients related to these covariates are positive and significantly different from zero.
Results show a positive association between the number of procedures (and also the number of secondary diagnoses) with LOS. That does not necessarily mean that the number of procedures increases LOS; why not the opposite, i.e., why not say that LOS increases the number of procedures?

**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

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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