Reviewer's report

Title: Using the LACE Index to Predict Hospital Readmissions in Congestive Heart Failure Patients

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Reviewer: Armando Pucciarelli

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Minor essential revisions

This study is very interesting, however it shows some shortcomings that are briefly outlined below.

Abstract:

LACE: Please indicate the literal meaning of an acronym, whenever it is mentioned in the text on the first occasion

Please clarify the meaning of the acronym CHF: "in chronic heart failure (CHF) patients".

Please indicate the literal meaning of an acronym (ED), whenever it is mentioned in the text on the first occasion: "...emergency department (ED) visits..."

Background, row 61: In my opinion, the explanation of the principles of the LACE index shows a paramount shortcoming, consisting in the fact that a detailed representation of the way for making the pertaining calculations is lacking. In this regard I suggest to consult one of the various papers where an in-depth study of this modality of evaluation of the risk of rehospitalization has been made (e.g. van Walraven C et al. Derivation and validation of an index to predict early death or unplanned readmission after discharge from hospital to the community. CMAJ. 2010 Apr 6;182(6):551-7), in order to reproduce a scale able to represent the criteria for building the LACE score. For instance, a length of stay >14 days provides a partial score of 7, whereas a Charlson comorbidity index score # 4 implies an adjunct of further 5 points to the LACE index, etc. These details should not be omitted in the text, so as to enable the reader to understand the criteria used for computing the final LACE score. Please add these very important criteria in the text or alternatively please build a table containing this information.

Results, row 120 These patients were severely ill on the whole, judging by the average Charlson comorbidity index. If possible, I would like to receive more detailed information about these comorbidities.

Results, row 170 “The C statistics associated with the LACE index were 0.66, 0.63, and 0.60 respectively”. Please provide the respective ROC curves, by building them with the available data, if possible.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

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