Reviewer’s report

Title: Prevalence of heart failure in Australia: a systematic review

Version: 0 Date: 08 Dec 2015

Reviewer: Pupalan Iyngkaran

Reviewer's report:

This is a timely and important article as the previous work on population level HF data is nearing a decade. Like previously all work was retrospective. This work is unique as it is the first systematic review on the topic. It also appears similar in theme but vastly improved from an earlier submission. The articles ticks many boxes that qualifies it for publication. As it is a complicated area and this body of work is likely to be highly cited in the foreseeable future it is important to ensure a significant degree of accuracy in the data presented and sensitivities (including culturally) in the discussion that presents an explanation to the viewpoint. The results are the highlight and are strong. Some of these points are:

Abstract - well constructed and worded. I am not sure I fully agree with conclusion stating a 'lack of uniformity in the definition and methods...' when there has never been a single comprehensive prospective study. The authors should simply state there are grounds for a population level study with a standardised approach.

Keywords should be broadened to include Australia, Indigenous. The reason for this is many studies fail to capture the actual need for HF epidemiology data in Australia, which is an OECD nation. The demographics including Indigenous population is key differentiating factor in these types of publications.

Introduction: Adequate

Methods: standardised and adequate. Authors should have also searched in DOAJ as many smaller studies may not be pubmed indexed (accepting limitations of these sources)

Results: Good

Discussion and conclusion - adequate for the available data. The authors have to be careful in the discussion of not overstating facts e.g. HF in women related to greater risk factors or rural HF greater due to more older inhabitants and lower access to health care. While some of these may be correct however access to healthcare relates to service and not disease prevalence. Similarly no mention is made on rates of HF in older females (who live longer). I think it is important to use generic descriptive language rather than firm definitive statements in the discussions i.e. the raising of possibilities to explain the data rather than as a given fact. As one of the authors
conclusion are for a standardised approach they should perhaps reference the work of Krumholz et al and the ACC on conduct of HF studies as a template to build from

Table 1 & 2 McGrady misspelt as 'McGredy'

**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 recommend additional statistical review

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

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal