Reviewer's report

Title: Impact of population ageing on the costs of hospitalisations for cardiovascular disease: A population-based data linkage study

Version: 2
Date: 7 July 2014

Reviewer: Frances Horgan

Reviewer's report:

1. Is the question posed by the authors well defined? - yes
2. Are the methods appropriate and well described? - yes
3. Are the data sound? - yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? - yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? - yes
6. Are limitations of the work clearly stated? - yes
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? - yes
8. Do the title and abstract accurately convey what has been found? - yes
9. Is the writing acceptable? - yes

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Title page - line 8 capital s Science
Abstract - line 23 add full stop at end of sentence Abstract - line 30 add full stop at end of sentence Abstract - line 28 add s at end of episodes Key words - check data linkage vs record linkage terms to ensure consistency Background - line 64-68, need to explain differences in costs between France, Korea and Australia in more detail Background - line 80 - explain component decomposition method in more detail Methods - line 85 standardised CVD codes, link more to details on lines 88 and 101-102 Methods - line 87 add a brief description of the WADLS system, how many hospitals involved, what is the data coverage?
Methods - line 104, explain inter-hospital transfer Methods - line 106-107, add more details on the 17 age groups, the intervals do not seem standardised e.g. 18-19, 20-24 how are they selected?
Methods - line 109 how was the cost of care episode assigned?
Methods - line 111-112 multiple records to form an episode of care, this is a little unclear, what is the timeframe involved?
Statistics - Line 136-7 were medications, investigations and rehabilitation costs included?
Results - line 190-3 was sensitivity analysis conducted for all the results? this is not specified Discussion - 223-224 - more explanation on the variation between men and women would be helpful in relation to health policy / service planning Discussion - line 254, further decomposition, what is this in relation to, eg rehab, cost of medicayions, perhaps add more detail here Limitations and recommendations - are appropriate Conclusion - is clear

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests