Author's response to reviews

Title: The impact of early emergency department allied health intervention on admission rates in older people: a non-randomized clinical study

Authors:

Glenn Arends (glenn.arendts@uwa.edu.au)
Sarah Fitzhardinge (sarah.fitzhardinge@gmail.com)
Karren Pronk (kispagnolo@gmail.com)
Mark Donaldson (mark.donaldson@health.wa.gov.au)
Marani Hutton (marani.hutton@health.wa.gov.au)
Yusuf Nagree (yusuf.nagree@health.wa.gov.au)

Version: 2 Date: 28 November 2011

Author's response to reviews: see over
Dear Editors

Re: The impact of early emergency department allied health intervention on admission rates in older people: a non-randomized clinical study

On behalf of my co-authors thank you for the opportunity to re-submit this article to BMC Geriatrics for your consideration as an original research paper. We thank the reviewers for their insightful comments. Because of the very large number of comments and suggestions, the paper has been considerably lengthened in the rewrite because of reviewer requests for more detail.

I attach below a point by point response to the reviewer comments, indicating where changes have been made.

This paper has not been previously published nor accepted elsewhere for publication.

Please feel free to contact me with any queries.

Yours Sincerely

Dr Glenn Arendts MBBS MMed FACEM

Centre for Clinical Research in Emergency Medicine
Western Australian Institute for Medical Research
Email: glenn.arendts@uwa.edu.au
Reviewer Crilly

Major

1. A table (table 2) has been inserted as suggested to better describe the study population and show the breakdown in intervention vs control groups.

Minor

2. 1st paragraph of methods section now contains these descriptions, though we have not included reference to services such as neonatal services or burns that are peripheral to this study
3. Date range now included in 1st paragraph of methods
4. Now included in methods section paragraph 3
5. Now included in methods section paragraph 3
6. Now included in methods section paragraph 3
7. A more detailed description of CCT assessment is now included in methods paragraph 4. Essentially we used ADL, Blaylock and AMT incorporated into our own assessment form as described in the paragraph. We would be happy to include this whole form as an online supplement if this is desired by the editors
8. As described, control patients were not retrospectively selected

Discretionary

10. The limitations section of the discussion has been rephrased as suggested

Reviewer Salvi

Major

1. The presentation of numbers in the abstract and results section is now the same. We have detailed in the 1st paragraph of the results section ED visits by older patients in the study period. As outlined in query 1 of Dr Crilly, we have now included a table with summary descriptive data
2. See query 7 of Dr Crilly
3. We agree with Dr Salvi that observation ward admissions may be used where there is an anticipated short stay (typically less than 24 hours) and Dr Salvi makes a good point as to whether CCT could actually have an additional effect of directing the admission to an observation unit rather than an inpatient bed. We cannot agree, however, that these patients should not be included as admissions even though they have short lengths of hospital stay, they are fundamentally different from discharged patients and it is widely
accepted for ED studies, and healthcare funders that fund on a casemix basis, to count an observation ward short stay patient as an admission. We have included and expanded on his comments in the discussion section (paragraph 4)

Minor
Reference corrected

Discretionary
1. It has been clarified that the physician usually co-opted was a geriatric trainee or geriatrician
2. Additional references have been added
3. We agree with Dr Salvi that a number of approaches are used, but largely they have been the subject of the reviews referenced in our article. Paragraph 2 of the discussion now contains additional detail in this regard

Reviewer Naughton
1. Additional detail has been provided in the background section regarding the cited papers
2. See query 7 of Dr Crilly
3. See query 1 of Dr Salvi
4. An explanation and reference for propensity scoring has been added. Effect modification is statistical interaction where the effect occurs in strata, it was not found in our study.
5. As we have stated in the discussion (especially paragraph 6) and the rewritten limitations section, there have been a number of studies on other outcomes post discharge, and we sought to answer a specific question about whether allied health teams impact admission. We have clarified that in the end, the decision to discharge is still always made by medical staff but our study shows CCT can clearly influence this to a small degree in some diagnoses
6. Change made as suggested in the abstract, results and discussion
7. Our original estimations are included in the final paragraph of the methods section, as can be seen this estimate assumed equal distribution of control and intervention cases which did not eventuate in our study, but the study is still more than adequately powered to detect the anticipated small differences found
8. The discussion has been rewritten as suggested
9. This issue is now addressed in paragraph 4 of the discussion
10. These phrases have been rewritten or removed
11. The sentence has been removed, we agree it was speculative
12. The sentence has been reworded to hopefully make it clearer
13. We have re-read the article and made changes where we could find them.

14. See query 1 of Dr Crilly re table 2. We have clarified in paragraph 6 of the methods the confounders that we adjusted for in the analysis. The adjusted OR is listed in tables 4/5 as being for the intervention group and hence the control group was the referent group.