

Reviewer's report

Title: Ageing medical workforce - where will our leadership come from?

Version: 1 **Date:** 3 September 2009

Reviewer: Niki Ellis

Reviewer's report:

Comments in response to the questions posed to reviewers.

1. The question posed by the authors is new and well defined. As well the subject of the research is of high relevance to current health policy development.

2. The methods appear to be appropriate but at times are not well explained, especially to a broader readership (ie other than demographers). Minor essential revisions have been recommended.

3. The data are sound. Sources of data not previously used have been accessed, so the study is a useful addition.

4. The manuscript adheres to relevant standards for reporting and data deposition.

5. The discussion and conclusion are lacking in some areas. Minor essential revisions have been recommended.

6. The title and abstract are good.

7. Overall the writing is acceptable, but the methodology needs more information and I have a suggestion re terminology; both of these points are addressed in minor essential revisions I have recommended.

8. The following are the minor essential revisions I have recommended:

8.1 Provide additional explanation on how the net attrition and cumulative attrition were calculated. I don't really understand how the cohorts were formed. Are we looking at a period of time, ie two five year blocks (1995-2000 and then 2000-2005), and counting the number of doctors in each five-year age bracket, for each of those two periods of time? Or has a cohort been created in 1995 that we follow over 10 years (with extrapolation of the specialists in the second five years. I am sure demographers would understand this, but the readership is broader. Similarly more information is needed to understand how the attrition rate is calculated. For example I do not understand what Nti is. Is it some average of all people in the 45 year old group over five years? Is it the number of people in the 45 year old group remaining at the end of the five year period? The explanation of the method for projecting attrition rates is clear on the other hand.

8.2 Some terms need further explanation or definition. The term medical educators is introduced for the first time in results. How were medical educators defined and identified? The phrase 'no workforce exit' appears in results. I find this confusing in an article on attrition. 'Assuming that there is no workforce exit'

as stated on page 6 is an example. It needs explanation. Finally I would like to query the use of the term 'physician' to describe the generic medical workforce, ie GPs plus specialists. This is American terminology, not Australian. Suggest define, or better still use an alternative - doctors, medical practitioners.

8.3 Page 6, suggest change the heading 'The medical workforce in Australia' to 'Gender of the medical workforce in Australia'.

8.4 Top of page 9 - The most striking feature of figure 1, discussed here, is the blip of specialist retirements in 2005 - 2010. This presented without comment, but I think needs some explanation.

8.5 I think the discussion should do more to position these findings in context. The article opens with reference to ageing of the pop more generally, so do we know how the medical workforce compares? Is it the same? Arguments have been constructed that the attrition in the health workforce is higher, ie people leave it earlier, because the working environments are of poor quality (from a human factors point of view) and so we should be focussing on retention to a much greater extent than we do, ie compared to recruitment, so this is quite an important point.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have not competing interests