Reviewer's report

Title: Who pays and who benefits: How different models of shared responsibilities between formal and informal carers influence projections of costs of dementia management in Australia.

Version: 1 Date: 22 February 2011

Reviewer: Samantha Hollingworth

Reviewer's report:

This paper is about how different models of shared responsibilities between formal and informal carers influence projections of costs of dementia management in Australia. This is a major and increasing issue in Australia and so this paper is a timely exploration of the area. The modelling is a good way to project costs (hours, $) into the future.

1. Is the question posed by the authors well defined? Yes it is clearly set out in the aims in the introduction.
2. Are the methods appropriate and well described? Mostly (see queries below)
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 these are adequately supported by the data presented.
6. Are limitations of the work clearly stated? No – more needs to be included in the study on limitations, and possibly some areas for future research.
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? I think this needs to be more clearly stated (see comment 2 above).
8. Do the title and abstract accurately convey what has been found? Yes they are fine.
9. Is the writing acceptable? Yes it is clear and well written.

Minor Essential Revisions

1. Pp2-3 Abstract seems long. Is there a word limit for the abstract?
2. Need a general aim in the abstract
3. P4 define ADL at first appearance
4. P4 typos ? in “No one has attempted to estimate the future cost of dementia care in Australia by taking into account the influence of person with dementia
location, type of care, and dementia severity over time.”

5. P7 Be more specific that the low ($27) and high ($33) costs are for informal and formal care. What are these costs? What were they derived from? Salaries (direct)?, indirect?, or both?

6. P15 typo “career”

7. Fig 2 – use black and white ‘colours’ for different bars (e.g. white, grey, black). Explain arrow and lines on 2040 bars in figure legend or as subscript

Major compulsory revisions - more general comments which need to be addressed.

This paper relies on the model developed previously by the authors (ref 1). Some of the following questions may have been dealt with in that paper but the issues still need to be addressed in this one:

8. What current interventions are there to delay onset/delay progression? Are there any on the horizon? Cognition enhancing drugs are unlikely to provide these.

9. Interventions to slow disease progression and delay disease onset will save 5% and 14%, respectively but what are the costs of those possible interventions? Have they been included?

10. Why two years for these scenarios? Based on what?

11. Did you do sensitivity analyses based on costs, prevalence? None discussed.

12. What is the perspective of the modelling? Health system? Government? e.g. costs of care $27 for low and $33 for high? Who pays these costs (see above)?

13. No clear discussion of limitations of the research/modelling.

14. On p14 you refer to costs of screening using biomarker technology to possibly delay onset. These are likely expensive. Have these costs been included? Who would you screen?

15. How do your estimates compare with other studies (e.g. Access Economics)?

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

**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.