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: 16 February 2011

Reviewer: Laurie brown

Reviewer's report:

Major Compulsory Revisions

1. The paper assumes the reader has significant prior knowledge of the Australian aged care system and especially dementia care. Given the research is based on changes in ‘location’ and type of care (informal/formal care), these terms need to be described in more detail - this can be achieved by providing an overview of dementia care within Australia in the background.

2. The dementia prevalence model needs to be described in sufficient detail within the paper so a reader understands the modelling approach and methods used and not simply referenced.

3. Data sources used should also be made explicit and again not just referenced.

4. In methods, the interventions are described as ‘feasible’. More justification of the two interventions need to be provided – both are very illustrative but they are hypothetical interventions (or the authors should describe what real-life strategies they are based on).

5. Tables 1-3 really provide results and in my opinion do not belong in the methods section and should be re-located to the results section.

6. Some of the results aren’t immediately intuitive e.g. delaying progression by 2 years leads to increased prevalence. I assume this is because of reduced mortality (fewer people progress to moderate dementia, hence to severe dementia and then to death). The authors should provide more explanation as to why they observed the results they did.

7. Can confidence intervals be calculated from the modelling methods used and attached to at least some of the results? Is a 10% relative shift a statistically meaningful change?

Minor Essential Revisions

1. The paper needs ‘internationalising’ – how does dementia prevalence now and in the future and dementia care compare with what is happening in other countries?

2. What data are re-calculated (are datasets recalculated or are parameters in the model changed?)

3. I agree with the authors that the absolute values produced by the model are a
“best guess” and what is more ‘accurate’ and of interest are the relative shifts. Despite this, the authors seem very emphatic in the way they have reported their absolute values and may want to use language that better indicates that these are estimates only.

Discretionary Revisions

1. Figure 1 is visual but a table providing these results would be space-saving.

2. Many of the actual results are repeated in the discussion – this is repetitive and not really necessary (if new numbers are introduced then shift these back to the results section).

**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.