Reviewer's report

Title: Sampling and coverage issues of telephone surveys used for collecting health information in Australia: results from a face-to-face survey from 1999 to 2008

Version: 2 Date: 14 April 2010

Reviewer: Joanne O'Toole

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Major Compulsory Revisions

1. Abstract: Throughout the Abstract the ‘White Pages’ is referenced on multiple occasions. In the results section of the Abstract, reference is made to the EWP. This leads to some confusion. Are the authors referring to the Electronic White Pages (EWP) throughout? If so, this should be clarified. The abbreviation EWP should be defined.

2. Abstract: ‘Conclusions’ section, 2nd sentence: As it stands there are grammatical errors with this sentence (missing words?). Should it read as follows: ‘At present, the exclusion of mobile only households from the sampling frame may have a low impact on health estimates obtained a from telephone listing population surveys.’?

Nonetheless, I have problems with this sentence. At present mobile only households are not totally excluded from the sampling frame and this may be inferred. There may not be a high proportion listed, but as noted by the authors in the Background section, ‘Mobile numbers are not routinely listed in the EWP, so owners can choose, at a cost, to have their mobile number listed in the EWP’. Wording of the 2nd sentence in the conclusion of the Abstract needs to be ‘tightened up’ so that the impression is not given that mobile phone numbers are (totally) excluded from the sampling frame.

3. Background: In the second paragraph it is stated that: ‘There are two main population sampling methods used in Australia…..Both of these methods exclude households from the sampling frame who do not have a telephone landline connection.’ However, later in the same paragraph this statement is contradicted to indicate that households who do not have a telephone landline connection but have a mobile phone only can list in the EWP, as shown by the following statement: ‘Mobile numbers are not routinely listed in the EWP, so owners can choose, at a cost, to have their mobile phone listed in the EWP.’ I do agree that even if mobile telephone numbers are listed, households with a mobile only are effectively excluded where a the telephone number prefix is used to identify areas/ households of interest but where particular prefix numbers are not targeted, some mobile only households may be part of the sampling frame.

4. Results: 5th paragraph: It is stated that: ‘When examined for selected
demographics for 2006, 2007 and 2008 (Table 2), respondents who lived in a mobile (phone) only household were statistically more likely to have a bachelor degree or higher, and statistically less likely to have at least obtained secondary schooling.

Table 2 shows that mobile phone only households are statistically more likely to have ‘None to secondary schooling’ and are statistically less likely to have ‘a Bachelor degree or higher’.

5. Results: 6th paragraph: It is stated that: ‘Respondents from households with a mobile or landline telephone number listed in the EWP (Table 3) were statistically significantly more likely to be…………..They were also statistically significantly more likely to be classified as being overweight, to have arthritis, osteoporosis………’

Results show that for 2006 and 2007, households are statistically significantly more like to have osteoporosis but not so for 2008. Also, test for trend is significant (downwards).

6. Discussion: 2nd paragraph: The statement: ‘From this study, using landline telephone numbers as the sampling frame (LA-RDD) excludes approximately 9% of the population from the sample results.’ is incorrect. True, 8.7% of households are mobile only in 2008 and thus would be excluded from the LA-RDD sampling frame. But this fails to mention the other exclusions from this sampling frame, namely those landline households not listed (which we can deduce may be around 30% as we know that in 2008 31.3% of households did not have a listing for landline and/or mobile phone)

7. Discussion: 4th paragraph: Error bookmark at end of paragraph

8. Conclusion, last paragraph, 3rd line ‘At present, the exclusion of mobile only households from the sampling frame may have a low impact on health estimates obtained from population surveys using telephone listings as the sampling frame’. Mobile only households are presently not totally excluded from the sampling frame. Statement needs to be ‘tightened up’ to acknowledge this.

Discretionary Revisions

9. Discussion: 1st paragraph: The statement that: ‘However, the mobile only prevalence may increase in South Australia over the next few years since over 20% of survey respondents indicated that they were very likely or somewhat likely to become a mobile only household’ It is suggested that this potential ‘conversion’ is qualified – i.e. it will be contingent upon not just the ‘preference’ of respondents but also on the availability of infrastructure etc (e.g. wireless technology as a substitute for landline Internet access via ADSL and dial up etc).

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