Reviewer's report

Title: Developing the design of a continuous national health survey for New Zealand

Version: 1 Date: 12 October 2013

Reviewer: Catherine W Gillespie

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Title: Developing the design of a continuous national health survey for New Zealand

Date: October 11, 2013

Reviewer: Catherine Wetmore Gillespie

- General comments:
  1. Is the question posed by the authors new and well defined? Yes. The motivation for conducting a continuous national health survey, which in this case includes a self-report (or parent report) questionnaire capturing information on perceived health status and risk factors, a physical examination component, and plans for integration with a variety of existing health-related administrative databases through direct linkage methods, is clear, and the paper will be an excellent resource for anyone seeking to learn from the experience of this team.
  2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work? Yes.
  3. Are the data sound and well controlled? Yes (note that this is a methods paper, rather than an analysis of data to address a specific research question).
  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.
  6. Do the title and abstract accurately convey what has been found? Yes.
  7. Is the writing acceptable? Yes. The paper is very well-written. The authors did a great job articulating the rationale behind the myriad methodological issues involved in a project of this scale and scope.

- Major Compulsory Revisions
  1. None

- Minor Essential Revisions
  1. Section 1.2, Health Survey for England, 2nd paragraph: The authors state that children aged 13-15 are interviewed directly, and parents completed a proxy-survey for children “younger than 12”. What about the 12-year-old
children? Are they interviewed directly, or are their parents asked to complete a proxy interview on their behalf? Did the authors mean to state that proxy-surveys are completed for children “12 or younger” (rather than “younger than 12”)?

2. Section 2.3: The authors have indicated that they sample from the Electoral Role in order to enrich their pool of survey respondents with individuals of Maori descent. What fraction of the sample was from the address-based sampling frame, and what fraction was identified via the electoral role? Is this expected to vary from year-to-year? Does the sampling methodology include ethnicity-based quotas?

3. Could the authors please comment on whether or not Maori individuals are preferentially selected to complete the full questionnaire (and examination) from the household rosters completed at mixed-ethnicity households?

4. Section 2.5: The bulleted list of the “information domains” covered by the survey includes topics that were part of the core survey, as well as topics covered by modules in the 1, 2, 3, and 4th wave of the survey. Is it possible to create two separate lists – one including the contents of the core survey, which is administered continuously, and the other including topics from the various modules, which change from year to year? I think readers will be interested to know which domains are intended to be captured year after year, in addition to the domains that have been added as modules over the last few survey cycles. In addition, are there any “hot topics” which are planned for modules in future cycles? How are the decisions related to the content of the modules made?

5. Section 3.2: The reported response rate (79%) is outstanding. Is this actually a measure of the participation rate? It would help if the authors could include a definition of response rate in the manuscript itself, since there is an array of alternate definitions.

6. Section 3.2: The authors report that 90% of respondents have consented to linkage of their survey responses to existing administrative databases. This is also an outstanding accomplishment, especially given the increased interest in “integrated surveillance” methods. The survey has been in the field for more than two years – have survey responses already been successfully integrated with existing administrative databases, or will this be undertaken at a later time? I think readers will be very interested to learn more about the mechanics of this linkage process, as well as a summary of administrative challenges encountered and suggested strategies for overcoming these challenges.

- Discretionary Revisions

1. Section 1.2, The Canadian Community Health Survey, 5th paragraph: The authors state that RDD was “initially used but abandoned”. Did the survey team replace RDD with an alternate approach for identifying survey participants for that sampling frame?

2. Section 3.3, 2nd paragraph: This paragraph, which includes a brief qualitative summary of self-reported risk factors, history of medical diagnoses, and health care utilization is interesting – but seems out of place in the section on “Design Effects”. Could the authors reconsider the placement of this paragraph and/or
add some additional text to clarify the inclusion of this information in the “Design Effects” section?

3. Readers may be curious to know about the financial, human, and technical resources which are required to undertake such an effort. Would the authors be willing to provide some of this information in the manuscript?

- Minor Issues (not for publication)

1. It would be great if this manuscript could be reviewed by a survey statistician/methodologist. I don’t feel that I have the technical expertise to evaluate the sampling methods and design effect calculations.

Level of interest: An article of importance in its field

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