Reviewer's report

Title: The requirement for prior consent to participate on survey response rates: a population-based survey in Grampian

Version: 2 Date: 21 August 2003

Reviewer: Elaine McColl

Reviewer's report:

General

This is an extremely interesting and timely paper, of great relevance to those utilising questionnaire surveys in epidemiological and health services research in the United Kingdom. The study is well designed and clearly reported. I recommend only one compulsory major revision. This is essentially a point of clarification rather than a major flaw which might lead to rejection of the paper.

Discretionary Revisions (which the author can choose to ignore)

1. Since non-response bias is a major theme in the survey methods literature, the last sentence of the `Conclusion¿ section of the abstract would be better phrased as `It may also exacerbate non-response bias with respect to demographic variables.¿

2. In the Background section of the paper, clarify whether the term `survey¿ is being used to describe all modes of data collection in which structured questionnaires are employed (including interviewer-administered surveys) or whether the focus is solely on self-completion questionnaires (e.g. postal and e-mail).

3. Many survey researchers reserve the word `survey¿ to describe sample surveys (i.e. those of a sub-sample of the population) and apply the term `census¿ to surveys of the entire population. On page 4, the authors talk about surveys of the entire population without making this distinction in terminology.

4. It is undoubtedly true that the edited electoral roll (ER) produces a bias in the demographic profile with respect to the full register. However, it has long been acknowledged that the full ER was also a biased sampling frame with respect to the adult population, those ineligible to vote (such as the homeless and foreign nationals) and those choosing not to register have always been excluded. It would be useful to acknowledging this, and also to state what further biases are known to have been introduced in the edited, public access version of the ER.

5. For the benefits of non-UK readers, it would be usefully to give brief details on what the updating and synchronisation processes of the CHI involve (presumably removing deceased patients, updating addresses as the details are notified by patients to their GP).

6. What was the rationale for the choice of time intervals (10, 3 and 7 weeks) used in calculating response rates? Does `7 weeks¿ refer to the time since initial mailing of the questionnaire, or since mailing of the reminder?

7. What reference groups were used in the calculation of odds ratios in the analysis of non-response bias. These details can be discerned from Figures 2 and 4, but a brief description in the text would be helpful.
8. In describing the population sample, a tabular presentation of % male and female, % in each 10 year age group, mean and s.d. of age, and % in each deprivation category would be a useful complement to Figure 1.

9. Rather than using `Characteristics of Responders and Non-Responders¿ as section headings (pages 7 & 8), I recommend `Non-response bias¿.

10. In their discussion of how the reminders did appear to increase overall response rate, the authors might cite Edwards and co-workers review (their current reference 15) which showed that reminders are one of the most powerful influences on response rates to postal questionnaires.

11. The fact that the response rate of 80% (with respect to those who were actually sent a questionnaire) achieved in this survey is similar to those achieved in similar surveys using the CHI but in which the questionnaire was sent directly is very interesting in the light of the findings of Edwards and colleagues, and McColl and colleagues (McColl E, Jacoby A, Thomas L et al. (2001). Design and use of questionnaires: a review of best practice applicable to surveys of health service staff and patients. Health Technology Assessment, 5(31):i-256). Both of these reviews showed that pre-notification of a forthcoming questionnaire led to improved response rates. In particular, McColl and colleagues discuss the theory of `foot in door¿ methods (requesting compliance with a small request / task such as completion of a consent form) and the evidence for the effectiveness of such methods. The authors of this paper might usefully refer to this literature. Their experience (the fact that response rates in the current survey were not notably higher than in past surveys involving no prior contact with the individuals sampled from the CHI) is contrary to what has been theorised and demonstrated with respect to pre-notification.

12. In their excellent discussion of possible reasons for a low response rate at the consent stage, the authors of this paper refer to the fact that those contacted may have been reluctant to commit to completing an `as-yet-unseen¿ questionnaire (perhaps anticipating that it would be more burdensome than was actually the case, or than they would have judged had they seen the questionnaire). They could usefully refer to the findings of Cartwright and Windsor (Cartwright A and Windsor J (1989). Some further experiments with factors that might affect the response to postal questionnaires. Survey Methods Bulletin, 25:11-15). These researchers showed that lower response rates were obtained when a question asking whether respondents would be willing to participate in future research was included in a questionnaire.

Minor Compulsory Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. To reflect preferred terminology in the survey methods literature, substitute `respondents¿ and `non-respondents¿ for `responders¿ and `non-responders¿ throughout.

2. In the `Background¿ section of the Abstract, it would be better to state the impetus for this study (i.e. the new legislation requiring a two-stage approach to the identification and recruitment of survey participants) and the purpose of the work (i.e. to examine the implications for response rates, non-response bias and speed of response).

3. In the `Results¿ section of the Abstract, clarify what is meant by `overall response rate¿ (i.e. number of respondents divided by total number originally approached to participate).

4. Clarify that the Community Health Index is only available in Scotland, and that such a centralised sampling frame is (unfortunately) not available for the rest of the United Kingdom.

5. In the paragraph immediately before `The Study Context¿, state explicitly that non-response bias
was examined in this study.

6. Provide some further brief details of the initial contact, in particular, from whom was the letter sent, to whom were the consent forms to be returned, was a pre-paid reply envelope provided?

7. Similarly, provide some further brief details of the dispatch and return processes for the questionnaire, in particular, how long was the questionnaire (number of items, number of pages for paper version), from whom was the questionnaire and covering letter sent, to whom was the completed questionnaire to be returned, was a pre-paid reply envelope provided, when was the reminder sent, did the reminder include a duplicate questionnaire?

8. How were deprivation scores computed (presumably from post codes)? Which deprivation scoring system (Townsend, Jarman, Carstairs, other) was used?

9. An explicit comparison (with graphical presentation as for Figures 2 and 4) of all non-respondents (i.e. those who did not give consent + those who initially gave consent but subsequently did not return a questionnaire) and questionnaire respondents should be included.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The description of how the database of 10,000 patients was set up implies that the researchers (none of whom appear to have been the Director of Public Health) had access to patient-identifiable information before the patients concerned had given consent. Is this true? If so, were not the confidentiality protocols described in the Background section violated?

Advice on publication: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: A paper whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Declaration of competing interests: None