When questionnaire response rates do matter: a survey of general practitioners and their views of NHS changes

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SUMMARY
This paper investigates whether general practitioners (GPs) who do not participate in questionnaire surveys (non-responders) hold different views on participation in primary care reorganisation than their more compliant colleagues. A survey of 72 GPs' involvement in a pilot primary care prescribing group elicited an initial response of 74%. Non-responders were then approached personally and persuaded to complete the questionnaire. Comparison of the responders and the non-responders showed that the latter did differ significantly from the responders in many of their views. This difference needs to be considered whenever the results of surveys are used to guide policy-making in the more corporate model of primary care that is now emerging.

Keywords: questionnaires; primary care; general practitioners' participation.

Introduction
Texts on survey methods have usually advised that response rates of 60% and over are necessary to ensure that the replies of those responding will give an accurate picture of the population from which they are drawn.1,2 This recommendation assumes that non-responders are unlikely to have markedly different views to those who choose to respond; otherwise any results could be biased accordingly. However, non-response rates may become a problem when the subject of the survey is an aspect of 'participation'. The very fact that some of a sample choose not to participate in a study might suggest that they would also have different views on participation in general.

There is a growing literature that examines some of the determinants of non-response from general practitioners (GPs)3,4 and its effect on survey results.5,6 However, given the importance of participation in new forms of primary care organisation, non-response bias could become a particular problem whenever GP views on group commitment are elicited. The opportunity to assess the possible extent of non-response bias in such situations occurred during an evaluation of a prescribing pilot that, after the usual questionnaire and reminder, relied on more individualised follow-up to obtain a final response rate of 100%.

Method
A survey was carried out of all 72 GPs participating in a new primary care prescribing group (PCPG) based in south London. The survey was concerned with views of the PCPG. A reminder was sent after two weeks to those GPs not responding to the first questionnaire. Non-responders were then telephoned and encouraged to complete the questionnaire and the few who did not respond to any of these approaches received a personal visit (from MA). The GP's response group was recorded and some background demographic and practice information on the GPs was obtained from the local health authority. Questionnaires were coded and entered onto computer for analysis using SPSS for Windows.

Results
All 72 GPs responded to the questionnaire. Those GPs receiving a phone call prompt or a personal visit expressed no reservations about completing the questionnaire; they reported that it was only pressure of time that had prevented an earlier return.

Fifty-three GPs replied after the customary prompts (35 after the first mailing and a further 18 after the second). Five GPs responded after the telephone reminder and 14 after a personal visit. The former group constitute the usual responder group in any survey and will be described here as 'prompt responders' (74% of total) and the latter group as 'reluctant responders' (26% of total).

Table 1 shows the different characteristics of prompt and reluctant responders. Prompt responders were significantly more likely to be younger (Mann–Whitney = 285; P<0.05), have more partners (Mann–Whitney = 284; P<0.01), and have a lower average list size per GP (Mann–Whitney = 214; P<0.01) than the reluctant responders. They were also more likely to hold the MRCGP qualification (χ² = 10.4; P<0.01) and to be in a training practice (χ² = 10.6; P<0.001). Reluctant responders had a significantly worse score on the health authority's Prescribing Quality Index (Mann–Whitney = 149; P<0.001).

Prompt responders perceived that their prescribing was lower than their colleagues (Mann–Whitney = 283; P<0.01) and were less persuaded that information on the relative costs of drugs would influence their prescribing (Mann–Whitney = 344; P<0.05). Prompt responders reported more commitment to the aims of the pilot (Mann–Whitney = 306; P<0.05) and were happier to allow other GPs to see their own prescribing (Mann–Whitney = 283; P<0.01). They were also more likely to feel that pressure to change prescribing should be targeted at all GPs and not only those whose prescribing seemed to be a problem (χ² = 5.2; P<0.05).

Discussion
The study has attempted to compare responders to a questionnaire with those who, in other circumstances, would have been non-responders. Inevitably the process of converting the latter into responders meant that the techniques of data collection for this group had to be supplemented with further prompts. It is possible that this process — a phone call or a visit — might have affected how the questionnaire was answered but there was no evidence of significant bias: all of the reluctant responders mentioned time pressures as being responsible for their initial failure.
to complete the questionnaire, which is in accord with the find-
ings of Kaner and her colleagues. 7

Overall, prompt responders were more likely to be younger, in
multi-partner training practices, with more manageable list sizes,
and they tend to hold the MRCGP qualification. At the very least
they might have more time to answer questionnaires. However,
they also reported themselves more committed to the goals of
this collaborative initiative, which would involve revealing their
personal prescribing data to other GPs in the locality, as well as
being more optimistic of its chances of success. This commit-
ment may have been facilitated by the belief that they were
already cost-effective prescribers who were perhaps less likely to
need to change. Even so, they showed a collective ethos in not
wishing to see GPs divided by deliberate targeting of ‘problem
prescribers’. It may be this sense of purpose and involvement
that also engendered a response to the questionnaire.

In the new corporate forms of primary care organisation (such
as primary care groups) there are likely to be many times when
views of GP members are elicited by questionnaire. As ever,
there will be those who respond and those who do not. This

study suggests that the latter group are more ‘conservative’ than
their keener colleagues and also likely to be less sympathetic to
the intended collegiate nature of recent primary care initiatives.
In short, conclusions derived from the views of responders may
be biased in favour of the collaborative group. It will therefore be
important to consider this possibility if GPs from this less vocal
constituency are not to be inadvertently excluded from the new
forms of primary care organisation.

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Acknowledgement
This work was part funded through the STaRNet Research Network by the
NHS R&D Directorate, South Thames, of which Mark Ashworth is one of
the lead general practitioners.

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