

Improving response rates among doctors: randomised trial

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Institutional review boards often require the consent of a patient's doctor before a patient can be included in research studies. The process of obtaining consent can be long and costly, and excluding patients when consent cannot be obtained could limit the generalisability of results. We examined strategies (over which investigators might have control) to increase the response rate of doctors asked to provide consent to contact their patients.

Subjects, methods, and results

We identified the doctors of patients with cancer who were being asked to participate in a population based case-control study. These doctors were randomly assigned to one of eight treatments within two groups (affiliation with teaching hospital or non-teaching hospital). The eight treatments were combinations of signatory of the request letter (MD *v* PhD), letterhead (university *v* cancer agency), and presence or absence of a handwritten note thanking the doctor for his or her help. Mailings to the doctors began in July 1995; this report includes requests posted up to September 1995 and responses received before 4 December 1995. Doctors who did not respond to the letter were contacted by telephone every two weeks. The response rate reported here is the percentage of positive and neutral responses obtained from the first requests to the doctors, an example of a neutral response being suggesting that another doctor might be the more appropriate person to give consent.

The table shows the results of logistic regression of negative response on letterhead, signatory, and note, after adjustment for the other terms, and the difference in response rates between treatments. The use of a can-

cer agency letterhead improved the response rate, significantly so among doctors affiliated with teaching hospitals (difference in response rate 9.9, $P=0.009$). Response rate in both groups was improved if the signatory had a PhD, significantly among doctors affiliated to non-teaching hospitals (7.5, $P=0.024$). Although including a note had a significant, positive effect on doctors affiliated with non-teaching hospitals (8.2, $P=0.013$), it had little or no effect on those affiliated with teaching hospitals. When the two groups were combined, response rates were significantly higher with the cancer agency letterhead (6.2, $P=0.013$) and PhD signatory (5.6, $P=0.022$) and non-significantly higher with the note (4.2, $P=0.089$).

Comment

These results show a higher response rate when a covering letter has a cancer agency rather than a university letterhead, when the letter is signed by a person with a PhD rather than an MD, and when the letter includes a handwritten note thanking the doctor for help.

Research has shown that doctors are more likely to respond to a personalised approach and that this effect is strongest among specialists.^{1 2} Although we found an overall positive effect with the addition of a handwritten note, unlike in previous reports this effect was limited to doctors in non-teaching hospitals. Our proxy measure for specialty—teaching hospital affiliation—may not be equivalent to specialisation as such; it may measure workload or urgency.

The low response rates in our study were somewhat surprising, given previous anecdotal evidence of high response to requests (up to 90%) for doctor's consent. Moreover, the differences in response rates among treatment groups (which ranged from 76% to 88%) might have a serious impact on the validity of epidemiological research. Doctors who do not reply to consent letters or who do not give permission for patients to participate are not simply protecting patients whom they judge incapable of participating in research—they are responding differentially to the qualifications and institutional affiliations of investigators asking for their cooperation, and they are therefore affecting the representativeness of cases included in a study.

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Conflict of interest: None.

1 Maheux B, Legault C, Lambert J. Increasing response rates in physicians' mail surveys: an experimental study. *Am J Public Health* 1989;79:638-9.

2 Toffler W, Sinclair A. Mail surveys of physicians [letter]. *Am J Public Health* 1989;79:1434.

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Response rate of doctors asked for permission to enrol patients in cancer study

Factor	No of negative responses*	No of doctors approached†	Response rate (%)	Difference	P value‡
Affiliation with non-teaching hospital					
Letterhead:					
University	63	284	78		
Cancer agency	51	275	82	3.7	0.255
Signatory:					
MD	68	282	76		
PhD	46	277	83	7.5	0.024
Note:					
No	70	287	76		
Yes	44	272	84	8.2	0.013
Affiliation with teaching hospital					
Letterhead:					
University	41	187	78		
Cancer agency	23	191	88	9.9	0.009
Signatory:					
MD	34	185	82		
PhD	30	193	85	2.9	0.410
Note:					
No	30	188	84		
Yes	34	190	82	-1.9	0.630

*Refusals and non-responses.

†First approach only.

‡Likelihood ratio statistic for addition of factor to logistic regression model containing the two other factors.