

Effect of a financial incentive on responses by Australian general practitioners to a postal survey: a randomised controlled trial

Alison C Zucca^{1,2} , Mariko Carey^{1,2}, Rob W Sanson-Fisher AO^{1,2}, Joel Rhee^{3,4}, Balakrishnan (Kichu) R Nair AM^{1,2} , Christopher Oldmeadow², Tiffany-Jane Evans² , Simon Chiu²

General practitioners view health and medical research positively, but their participation in postal surveys is typically low.¹ Poor response rates reduce the sample size and consequently the generalisability of survey results.

As the impact of financial incentives in isolation on survey response rate and speed has not been investigated in Australia

in randomised controlled trials,² we examined the effect of a modest financial incentive on participation by GPs in a cross-sectional postal survey in a single-blinded randomised controlled trial during 28 March – 25 September 2019. The trial was nested within a cross-sectional study that explored the views of GPs regarding health assessments for older people (a 15-minute mailed pen-and-paper survey).³ The study was approved by the

Demographic characteristics of the 185 general practitioners who completed the survey

Characteristic	Intervention		Control	
	Completed survey	Did not complete survey*	Completed survey	Did not complete survey*
General practitioners	103	381	82	398
Sex				
Men	52 (50%)	205 (54%)	45 (55%)	224 (56%)
Women	51 (50%)	176 (46%)	37 (45%)	174 (44%)
Practice location				
Metropolitan	77 (75%)	292 (77%)	58 (71%)	299 (75%)
Regional/remote	26 (25%)	89 (23%)	24 (29%)	99 (25%)
Age group (years)				
35 or younger	9 (9%)	—	6 (7%)	—
36–45	11 (11%)	—	16 (20%)	—
46–55	29 (29%)	—	20 (25%)	—
56–65	29 (29%)	—	27 (33%)	—
66 or older	21 (21%)	—	11 (13%)	—
Missing data	4	—	2	—
Years in general practice				
5 or fewer	12 (12%)	—	7 (9%)	—
6–10	6 (6%)	—	12 (15%)	—
11–20	26 (26%)	—	16 (20%)	—
More than 20	56 (56%)	—	46 (56%)	—
Missing data	3	—	1	—
General practitioner fellowships [†]	100	—	81	—
RACGP	69 (70%)	—	65 (80%)	—
ACRRM	7 (7%)	—	8 (10%)	—
Neither	26 (26%)	—	12 (15%)	—
Missing data	3	—	3	—

ACRRM = Australian College of Rural and Remote Medicine; RACGP = Royal Australian College of General Practitioners. * Does not include randomised participants later excluded because valid practice address was not available (Supporting Information, figure). The only demographic data available for non-respondents were sex and practice location. † Multiple fellowships possible. ♦

University of Newcastle Human Research Ethics Committee (H-2018-0474).

A random selection of 1000 GPs included in the Australasian Medical Publishing Company (AMPCo) database and currently practising in Australia (541 men, 54%) were invited by mail to participate in the survey, and concomitantly randomised to the control or intervention trial groups. In a personalised cover letter and information sheet, intervention group GPs were promised \$20 gift vouchers (vendor unspecified) if they returned completed surveys; the offer was repeated in two subsequent reminder letters (at three and six weeks) if required. Control group GPs received identical survey-related mail, except that the gift voucher was not mentioned. GPs were not informed about the incentive trial until a thank-you letter was posted at the conclusion of the survey; all participating GPs then received \$20 gift vouchers. The primary outcome was survey response rate; the secondary outcome (a *post hoc* exploratory analysis) was the response speed of survey responders (from despatch of initial mail from the researchers' office to arrival of the completed survey) (further details on selection and analysis: [Supporting Information](#)).

Overall, 103 intervention group GPs (21%; 95% confidence interval [CI], 18–25%) and 82 control group GPs (17%; 95% CI, 14–21%) returned completed surveys (absolute difference, +4.1 percentage points (95% CI, –0.8% to +9.2 percentage points) (Box). Intervention group GPs were more likely than control group GPs to return surveys, but the difference was not statistically significant (odds ratio, 1.31; 95% CI, 0.95–1.81). The median response speed was 36 (interquartile range [IQR], 19–61) days for the intervention group, 42 (IQR, 19–61) days for the control group ($P = 0.39$).

Mailed survey response rates and speed were not increased by offering \$20 vouchers to GPs. Some overseas studies have found that even modest incentives were associated with higher response rates

for GPs.⁴ Although we incorporated many study design elements reported to maximise physician response rates,⁵ the overall rate (19%) remained low. The AMPCo database provides access to a population-based national sample, but databases of this type cannot support peer endorsement strategies. Further, our sample size may have been too small to detect between-group differences.

The problem of low and falling professional participation in research⁶ may reflect changing attitudes to research and time pressure for GPs. We need to improve participation rates, but larger incentives would be expensive, might be seen as coercive, and could undermine research feasibility. The effect of non-monetary incentives should be explored, such as the award of continuing professional development points for participating in research.

Trial registration: Open Science Framework, doi: [10.17605/OSF.IO/VZMWJ](https://doi.org/10.17605/OSF.IO/VZMWJ); 30 September 2021 (retrospective).

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Supporting Information

Additional Supporting Information is included with the online version of this article.