SWAT 35: Personalised text message versus standard text message prompts for increasing response to postal questionnaires

Objective of this SWAT
To evaluate the effectiveness of a personalised text message versus a standard text message for promoting response to postal follow-up questionnaires.

Study area: Retention, Follow-up
Sample type: Participants, Patients
Estimated funding level needed: Low

Background
There is a need to develop and rigorously evaluate strategies for improving the return of postal questionnaires, by embedding them in actual clinical trials [1, 2]. Text messaging is a simple, cost effective form of communication, which can be easily customised to the individual. They have been shown to be effective in a number of areas, including improving trial recruitment [3], return of postal questionnaires in trials [4], and increasing payment of delinquent fines [5]. This SWAT will embed text messaging trials clinical trials using the methodology of embedding trials developed and published by the MRC START (Systematic Techniques for Assisting Recruitment to Trials) initiative [6].

Interventions and comparators
Intervention 1: Participants will receive a personalised text message (which includes their name) at the same time as they are expected to receive their postal follow-up questionnaire. Message will read: “XXXX Trial: [Mr Smith] you should have received a questionnaire in the post by now. Your answers are important; so please help by returning it as soon as you can. Thanks”.
Intervention 2: Participants will receive a standard text message at the same time as they are expected to receive their postal follow-up questionnaire. Message will read: “XXXX Trial: You should have received a questionnaire in the post by now. Your answers are important; so please help by returning it as soon as you can. Thanks”.

Index Type: Method of Follow-up

Method for allocating to intervention or comparator
Randomisation

Outcome measures
Primary: Questionnaire response rate (defined as the proportion of questionnaires returned by participants).
Secondary: 1) Time to response (defined as the number of days between the questionnaire being mailed out to participants and the questionnaire recorded as being returned to the trial team).
2) Effectiveness of the text message intervention across different trial contexts.

Analysis plans
An intention-to-treat analysis will use two-sided significance tests at the 5% significance level. Baseline data will be summarised by group allocation. Response rates between groups will use chi-square tests. Odds ratios and 95% confidence intervals will be calculated. Time to response per group will be plotted using Kaplan-Meier survival curves with the log rank (Mantel-Cox) test used to assess whether there are significant differences between groups. Data will be presented as proportions and percentages (response rate) or as the median, standard error and interquartile range (25th-75th percentiles) (time to response). We will use Cox regression to adjust for age, gender, and host trial treatment allocation.
A meta-analytic framework will explore variability across host trials. Proportions of participants responding in each trial will be entered into a meta-analysis, and the heterogeneity of the intervention effect across trials will be assessed using the I2 statistic. If significant heterogeneity is demonstrated, differences between trials that might explain that variation will be explored. The power of any such analyses may be limited if there are small number of trials, but, if so, this issue will be explored qualitatively using data collected on the trial, the patient population, and the trial context.

Possible problems in implementing this SWAT

1) Recruiting host trials and delivering the intervention in keeping with their timelines.
2) Additional strategies to improve questionnaire response may be introduced if there are poor response rates, which might diminish the effect of the text message intervention.

References

1. Bower P, Brueton V, Gamble C, et al. Interventions to improve recruitment and retention in clinical trials: a survey and workshop to assess current practice and future priorities. Trials 2014; 15(1): 399.
2. Adamson J, Hewitt CE, Torgerson DJ. Producing better evidence on how to improve randomised controlled trials. BMJ 2015; 351: h4923.
3. Free C, Hoile E, Robertson S, Knight R. Three controlled trials of interventions to increase recruitment to a randomized controlled trial of mobile phone based smoking cessation support. Clinical Trials 2010; 7(3): 265-73.
4. Clark L, Ronaldson S, Dyson L, et al. Electronic prompts significantly increase response rates to postal questionnaires: a randomized trial within a randomized trial and meta-analysis. Journal of Clinical Epidemiology 2015; 68(12): 1446-50.
5. Haynes LC, Green DP, Gallagher R, et al. Collection of delinquent fines: An adaptive randomized trial to assess the effectiveness of alternative text messages. Journal of Policy Analysis and Management 2013; 32(4): 718-30.
6. Rick J, Graffy J, Knapp P, et al. Systematic techniques for assisting recruitment to trials (START): study protocol for embedded, randomized controlled trials. Trials 2014; 15(1): 407.

Publications or presentations of this SWAT design

Examples of the implementation of this SWAT

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Revisions made by:
Date of revisions: