SWAT 216: Motivation-targeted compared to standard text message interventions for data collection and adherence.

Objective of this SWAT
Primary Objective
To evaluate whether reminders that target stated motivations for trial participation affect response rates and time to trial task completion compared with standard reminders.

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

Background
There are multiple uses for digital notifications and reminders to trial participants, including to facilitate recruitment and consent, to promote intervention adherence, to encourage completion of trial activities, and to provide patient reported outcome data. Achieving a high response rate to these tasks can be challenging, particularly when multiple responses are required at different time points.

Reminders are effective in a various non-trial settings including patient appointment attendance (1), medication adherence (2), vaccination completion (3) and smoking cessation (4). However, their use in trial settings has mostly focused on the return of postal questionnaires and evaluations have yielded conflicting results (5). As data collection methods shift from postal questionnaires to online surveys where a questionnaire is delivered to participants via a hyperlink, there is a need for evidence about the optimal way to create and deliver notifications and reminders for participants to complete online surveys and other online tasks.

Every component of a reminder (e.g., content, frequency, interactivity) can be tailored to increase engagement and could potentially be evaluated using SWAT methodology. For example, it has been suggested that behaviour change theory may help optimise content of reminders (6, 7). We designed an optimised reminder intervention, targeting participants' expressed motivations for trial participation, and integrated feedback from patient representatives.

This SWAT will run in the MEL-SELF randomised trial of patient-led surveillance compared to clinician-led surveillance in people treated for early-stage melanoma (stage 0/I/II) (ACTRN12621000176864) (8). The host trial will assess whether patient-led surveillance (comprising: smartphone supported skin self-examination, teledermatology, fast-tracked unscheduled clinic visits in addition to routinely scheduled clinic visits) compared to clinician-led surveillance (usual care using treating doctor’s usual processes for fast-tracked unscheduled and for routinely scheduled clinic visits) increases the proportion of participants who are diagnosed with a subsequent new primary or recurrent melanoma at a fast-tracked unscheduled clinic visit.

We will evaluate the effects of an optimised text message intervention targeting participants’ stated motivations for participation (SWAT 190) (9) compared with a standard text message intervention for prompting a response from trial participants for data collection (completing an online health resource diary) and intervention adherence (submitting digital images of skin lesions for teledermatologist review).

Interventions and comparators
Intervention 1: Standard Intervention:
Health resource diary:
“Please click the link to complete the MEL-SELF resource use diary.”
Image submission:

“It’s time to perform a skin self-examination. Remember to take photos of Spot 1 (target lesion) identified by your dermatologist and up to 8 other lesions.”
Intervention 2: Optimised Intervention:
Health resource diary:

“Please click the link to complete the MEL-SELF resource use diary. Your responses will help highlight costs for people with melanoma and improve future healthcare services.”
Image submission:
“It’s time to perform a skin self-examination. This is your opportunity to have any moles or spots you are worried about checked by a specialist dermatologist before your scheduled visit. Remember to take photos of Spot 1 (target lesion) identified by your dermatologist and up to 8 other lesions.”

Index Type: Method of Follow-up

Method for allocating to intervention or comparator
Randomisation

Outcome measures
Primary:
• Health resource diary response rate, defined as the proportion of the monthly resource use diaries that are completed by participants within 2 weeks of the due date (the end of the time window for completion of this trial task which is done every month after randomisation).
•Image submission response rate, defined as the proportion of image submissions completed by participants within 6 weeks of due date.
Secondary:
• Time to collection of outcome data (days from scheduled date) for the health resource diary
• Time to collection of outcome data (days from scheduled date) for image submissions.
• Number of reminders sent to participants before a diary response was received.
• Number of reminders sent to participants before an image submission was received.

Analysis plans
The between-groups difference in time taken to collection of outcome data will be analysed using Kaplan-Meier curves. Descriptive statistics (mean and median time to collection) will be computed. Descriptive statistics (counts and percentages) will be used to report diary completion and image submission. We will report the absolute difference in proportions and estimate the 95% confidence intervals. We will explore further analysis using models that account for repeated outcome measurement.

Possible problems in implementing this SWAT
Additional staff time for administrative tasks.

References
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Publications or presentations of this SWAT design

Examples of the implementation of this SWAT

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