

MOBILE PHONE USE AND HEALTH: INNOVATION IN RECRUITMENT TO THE UK COSMOS COHORT STUDY

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Background: UK COSMOS is a new cohort, contributing to the international COSMOS study on mobile phone use and health. A 2009 UK pre-test study which used paper and online questionnaires, showed that paper-based recruitment procedures were too costly for large-scale recruitment. Ethical approval was granted to conduct the whole recruitment procedure online – consent, participant registration and questionnaire. To our knowledge this is the first UK health study to collect consent online.

Methods: The main recruitment campaign launched in April 2010, with postal invitations to almost 2.4 million UK mobile users via their network operator. Respondents logged into a secure website to consent and register, before completing the baseline questionnaire on mobile usage, lifestyle and health. Participants could log in/out to complete the questionnaire in their own time. We used e-mail and SMS to remind participants to complete the questionnaire if they did not do so in one session.

Results: To date, 67,988 people have joined the cohort (pre-test = 246, main launch = 67,742). The overall recruitment rate across both phases was 2.83%. 99.6% of the cohort completed the recruitment process online. The cohort comprises 46% males, 54% females, with median age of 48. Age distribution is similar by sex. Distribution of mobile call usage is similar by sex (by design the cohort was stratified by mobile phone usage), but varies by age. Preliminary analysis of e-mail/SMS reminders suggests SMS may be more effective than e-mail in promoting questionnaire completion.

Conclusions: We have demonstrated use of online e-consent and data collection in epidemiological research. Future large-scale epidemiological studies may benefit from the cost-savings and streamlining inherent in this approach. During 2011, we will continue our innovative use of new technologies by piloting recruitment via SMS invitation (ethical approval already obtained) to boost the cohort size and potentially improve response rates.