reached areas not targeted for media coverage, the pilot campaign ran after Christmas when fluctuations in screening activity are considerable and age-extension was underway in some areas.

**Conclusion** At the end of January 2012, the Government launched a 9-week national bowel cancer awareness campaign. Providers have been urged to plan for a 50% increase in GP referrals during the campaign and for a sustained increase in colonoscopy demand over the next 5 years. This analysis of local screening activity during the pilot campaign, however, suggests that the direct effect of the national NAEDI campaign on bowel cancer screening hub activity is likely to be modest.

Competing interests None declared.

# PWE-093 THE NHS BOWEL CANCER SCREENING PROGRAMME, SOUTHERN HUB—SCREENING ACTIVITY AND OUTCOMES

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**Introduction** As part of the NHS Bowel Cancer Screening Programme (BCSP) in England, every man and woman registered with a GP, living in England and aged 60–74 years, is invited to take part in screening every 2 years. The BCSP Southern Hub, hosted by the Royal Surrey County Hospital and one of five Hubs in England, serves a total population of about 14.4 million people and manages the screening activity in the south of England (excluding London). The Southern Hub handles nearly one million gFOB test kits every year. Here we provide a high-level overview of screening activity and outcomes for the Southern Hub since the Programme's launch in 2006.

**Methods** Screening invitees are sent a guaiac-based faecal occult blood (gFOB) test kit and asked to provide a faecal sample. Test kits are returned to the Hub for analysis. Participants with a positive ("abnormal") test are referred to a Specialist Screening Practitioner (SSP) for further assessment and investigation (usually colonoscopy) at one of 17 Screening Centres. All screening activity, including invitation uptake, gFOB test results, SSP referrals and colonoscopy outcomes are stored on a dedicated database—the Bowel Cancer Screening System (BCSS). The BCSS provides a rich source of data for observational analysis.

**Results** The uptake of screening invitations (the proportion of invitees that was adequately screened) is approximately 56% overall. Uptake is generally higher for women (61% vs 55%), although improves with age in men. The proportion of positive test kits ("positivity") is higher for men (2.6%) than for women (1.6%) at all ages. The number of colonoscopies performed at the Screening Centres has increased over time. About 40% of the screened population that tests positive and undergoes colonoscopy has significant neoplasia (cancer, high- or intermediate-risk adenomas). The prevalence of significant neoplasia is greater in men and increases with age. The proportion of significant neoplasia detected in screening episode 2 is lower than in episode 1, reflecting successful detection of lesions in the first episode.

**Conclusion** The BCSS data are encouraging and indicate that the BCSP in England is likely to achieve its goal of reducing mortality from bowel cancer.

Competing interests None declared.

## PWE-094 UNDERSTANDING NON-PARTICIPATION IN BOWEL CANCER SCREENING: A QUALITATIVE STUDY

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**Introduction** Uptake of the national bowel cancer screening programme (BCSP), at 52%, needs to be improved or at least maintained if the screening programme is to achieve projected reductions in mortality and morbidity. Understanding the origins of non-participation is therefore important. This study used qualitative methods to explore the beliefs and experiences of individuals who had not responded either to their screening invitation or reminder.

**Methods** In-depth qualitative interviews with volunteers were used to enable maximum opportunity for exploration and inductive hypothesis generation. Non-participation was defined as having refused all of the invitations and reminders for FOB test screening received from the North East Hub of the BCSP at the time of contact. Interviewees were purposefully sampled to allow for diversity in terms of gender, geographical location and socioeconomic status. Data collection and analysis were carried out using strategies consistent with the principles of grounded theory with an emphasis on the constant comparison method. Data collection and analysis took place concurrently and continued until saturation (27 interviews).

**Results** The interviews provided an in-depth understanding of a range of reasons and circumstances surrounding non-participation, including contextual and environmental influences as well as factors specific to the screening test. The nature of the data also allowed an appreciation of the potential for changes in beliefs, awareness and intention over time. Most of the interviewees had positive attitudes towards the BCSP, even those who did not feel screening was appropriate for them or who did not wish to take part. Many had intended to take part or intended to take part in the future. The main emergent categories included: practicalities of screening, value of screening, knowledge and awareness, risk perceptions, intention, embarrassment, good "citizenship", guilt, control, and the influence of others.

**Conclusion** A range of different approaches may be required to improve uptake, depending on the experiences, circumstances, beliefs and existing levels of intention of non-participants. Many of the interviewees in this study reported an intention to take part in future screening rounds. This group might be responsive to repeat invitations, reminders, and aids to making the test practical. Individuals who are opposed to screening (or BCS in particular) may have been less willing to be interviewed. Research is needed to ascertain whether different groups of non-responders require different approaches to intervention.

Competing interests None declared.

#### PWE-095 ROLE OF RESTRICTED FLUID THERAPY IN PATIENTS UNDERGOING LAPAROSCOPIC AND OPEN COLORECTAL SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS OF PUBLISHED RANDOMISED CONTROLLED TRIALS

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**Introduction** Sub-optimal fluid therapy during peri-operative time period may influence the postoperative mortality and morbidity. The aim of this article is to systematically review the randomised trials analysing the restricted fluid therapy (RFT) and non-restricted