PWE-018 EVALUATION OF THE BOWEL SCREENING WALES NETWORK MULTIDISCIPLINARY TEAM AND NATIONAL REFERRAL CENTRE PILOT

doi:10.1136/gutjnl-2013-304907.307

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Introduction The Bowel Screening Wales (BSW) Network Multi Disciplinary Team (NMDT) and National Referral Centre (NRC) pilot was established in October 2011 to offer the opportunity for expert opinion and discussion of therapeutic options for participants with complex benign polyps detected on the Welsh bowel screening programme. Formal evaluation of the pilot was undertaken to inform future service development and focused on establishing the views of participants.

Methods All screening participants with complex benign polyps referred to the NMDT between the 1st of January and the 17th of April 2012 were included in the evaluation.

Telephone interviews were conducted by members of BSW staff without direct involvement in their care using a structured questionnaire. Questions were of two different formats: some required responders to choose from a selection of structured options; whilst others required free-flowing text responses. Both qualitative and quantitative analysis methods were used.

Results A total of 41 screening participants were referred to the NMDT during this time frame. Twenty four participants agreed to take part in the evaluation (59%). Participants who responded were geographically dispersed and had a variety of management outcomes following index screening colonoscopy.

The importance participants placed on being involved in decision making about their care was emphasised by nineteen (79%) responders who considered it essential or important that a decision by the local team to refer their case to the NMDT was discussed with them prior to referral.

Most responders (92%) reported that following index colonoscopy, management options were discussed with them. Twenty one responders (87%) reported that they had received sufficient information for them to be able to make an informed choice about the best clinical option for them.

Although overall awareness of the NMDT and NRC pilot among screening participants was low (only 5 responders- 21% were aware), nine participants (38%) reported they were aware that their local team could seek advice about their clinical management from a group of experts outside of the immediate local team.

Participants' opinion about the overall service they received from the NRC was favourable, with 6 (86%) individuals describing the service as excellent and one individual describing the service as good.

Conclusion The BSW NMDT and NRC pilot was established to facilitate informed choice and to develop an equitable service for participants of the bowel screening programme in Wales. Evaluation of the initial pilot stage confirmed that participants felt involved in decision making about their treatment options and that the service was received positively. Initial evaluation would suggest that the pilot met the aim of developing an equitable participant focused service.

Disclosure of Interest None Declared.

PWE-019 PATIENT EXPERIENCES OF A POLYP CANCER IN THE BOWEL CANCER SCREENING PROGRAMME

doi:10.1136/gutjnl-2013-304907.308

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Introduction This study explores the experiences of patients in relation to their treatment modality to examine if there are any

differences between patients who had endoscopic treatment vs. surgical treatment of a polyp carcinoma.

Methods 49 patients diagnosed with a polyp cancer through the NHS Bowel Cancer Screening Programme (NHSBCSP). 24 patients (endoscopic management) and 25 patients (surgical management). A mixed-method, two-phase explanatory sequential design was employed. Phase One used mailed, EQ5D5L quality of life questionnaires to identify any general quality of life issues between surgical and endoscopic groups. Phase Two comprised of face-to-face, in-depth interviews to explore the patient experience in more detail.

Results A difference in QoL issues surrounding self-care was identified during phase 1 ($p < 0.016$). Phase 2 highlighted that patients had little or no awareness of the NHSBCSP prior to participation. Most patients were provided with treatment options and felt involved in the decision-making process. Those managed surgically ($n = 3$) had regular contact and support from surgical and colorectal nursing teams whilst endoscopic patients ($n = 2$) only had a single point of contact. All patients ($n = 5$) experienced feelings of shock, disbelief and fear following diagnosis with particular focus upon fear of a colostomy (surgical patients $n = 3$) and fear of cancer recurrence ($n = 5$).

Conclusion Patients diagnosed with a polyp carcinoma experience the same fears and anxieties despite treatment modality however, follow-up care and support differs significantly for the two groups with surgically managed patients being provided with more professional, clinical support than their endoscopically managed counterparts.

Disclosure of Interest None Declared.

PWE-020 DO SEASONAL TRENDS IN POSITIVITY EXIST WITH THE GUAIAIC-BASED FAECAL OCCULT BLOOD TEST?

doi:10.1136/gutjnl-2013-304907.309

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Introduction Several bowel cancer screening programmes, including the NHS Bowel Cancer Screening Programme (BCSP) in England, use a guaiac-based faecal occult blood test (gFOBt). Seasonal variations in gFOBt positivity have been reported, with lower positivity in the warmer spring and summer months compared with autumn and winter. As more population-based bowel cancer screening programmes are being planned and implemented worldwide, it is important to highlight the factors that could affect the performance of faecal occult blood tests.

Methods Men and women aged 60–69 years are eligible for biennial routine bowel cancer screening by the BCSP. The gFOBt card comprises six windows (or 'spots') onto which the screening participant is asked to apply two samples from three separate stools. Test cards are returned to one of five BCSP Hubs where each spot is tested to determine 'spot positivity'. The number of positive spots determines test positivity: 5–6 positive spots = positive test and immediate referral for colonoscopy; 1–4 positive spots = weak positive and re-test. Ultimately, a definitive test result is achieved for each screening episode, according to a well-defined test/re-test algorithm. Data from the Bowel Cancer Screening System (BCSS) for the BCSP Southern Hub for April 2008 to March 2012 were analysed and gFOBt spot positivity patterns assessed by month, stratified by age and sex. Analysis was limited to the first (prevalent) screening episode for all individuals.

Results In total, 7,765,282 spots were analysed (nearly 1.3 million kits). As expected, throughout the study period, gFOBt spot positivity for men (2.6%) was consistently higher than for women (1.7%) and increased with age. Any variations in seasonal positivity were similar for men and women and all ages. The pattern of spot positivity by month was not consistent year on year and there was

no clear evidence that spot positivity was different in the spring/summer months compared with autumn/winter.

Conclusion Seasonal variation did not appear to account for the fluctuations in spot positivity observed. We conducted a sub-group analysis restricted to 60 year-olds to explore the possibility that changes in the demographics of participants over time might affect the positivity patterns, but the data yielded similar inconsistencies. It is unlikely that operational factors account for the fluctuations as the BCSP ensures rigorous monitoring of test kit batches and quality control in the laboratories. More work is required to explore these data further in search of an explanation.

Disclosure of Interest None Declared.

PWE-021 AN INVESTIGATION INTO HIGH GFOBT POSITIVITY DURING THE FIRST FIVE DAYS FOLLOWING SAMPLE COLLECTION

doi:10.1136/gutjnl-2013-304907.310

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Introduction The NHS Bowel Cancer Screening Programme (BCSP) in England has used the guaiac-based faecal occult blood test (gFOBT) since 2006. Test positivity is higher during the first 5 days after sample collection.

Methods The gFOBT kits used by the BCSP have six windows (three pairs) lined with guaiac-impregnated philtre paper. The screening participant is asked to apply two faecal samples from three separate stools. The samples usually arrive dry at the laboratory, which is likely to reduce the degree of haemoglobin (Hb) degradation and provide the best opportunity to detect bleeding. BCSP policy is that every kit is logged on the day of receipt and read as soon as possible thereafter. BCSP Southern Hub data from the Bowel Cancer Screening System (BCSS) for 01/2008–07/2012 were analysed for subjects aged 60–69 years completing the first prevalent round of screening. The interval between each sample date and the date the sample was analysed (elapsed time) was calculated. Spot positivity was assessed by elapsed time, stratified by sex. Clinical outcomes were extracted from BCSS for subjects who had a positive gFOBT result. The relationship between positivity, elapsed time and clinical outcomes was examined.

Results During the period of observation, nearly 1.2 million kits were returned to the Hub and 92% were read within five days of the last sample collection. For samples analysed one day after the last sample collection, spot positivity was 2.7% for women and 3.8% for men. Positivity declined thereafter until it reached a steady level at day 5 (women 1.3%; men 2.0%). Positivity for the most recently collected sample (usually spots 5 and 6) was slightly higher than for the spots collected earlier. There were 20,408 subjects (8,343 women; 12,065 men) who accepted further investigation. The outcome of those investigations was not associated with elapsed time between faecal sampling and test kit reading; the proportion of cancers, high-, intermediate- and low-risk adenomas was fairly constant as elapsed time increased.

Conclusion The higher positivity associated with a shorter elapsed time did not appear to be associated with more false-positive tests. A number of factors may contribute to the pattern of positivity observed: (a) vegetable peroxidases present in the diet cause short term increases in gFOBT positivity; (b) faecal Hb denatures gradually before analysis, and (c) screening invitees worried about their health may return test kits more rapidly than others and a proportion of those individuals will be found to have colorectal cancer and related disease. None of those factors alone can account for the marked elevation in the 'early positivity rate' and further studies are required to elucidate the reasons for this effect.

Disclosure of Interest None Declared.

PWE-022 CHANGING LIFESTYLE TO REDUCE COLORECTAL CANCER IN A HIGH RISK POPULATION

doi:10.1136/gutjnl-2013-304907.311

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Introduction Both genes and environment are important contributors to colorectal cancer (CRC) risk. Modifying lifestyle has been shown to reduce CRC even in patients with higher genetic risk. Patient anxiety, risk perception and knowledge may affect healthy behaviour change. We examined these and their relation to self-reported lifestyle changes.

Methods 250 patients who had undergone surveillance colonoscopy for a family history of CRC were randomly selected. A telephone interview was conducted. Demographics, family history, risk factor knowledge, perceptions of lifetime CRC risk, worry due to family history, and self-reported behavioural change due to thoughts about CRC were obtained. General anxiety was assessed using the GAD-7 scale. Ordinal logistics regression was performed to determine significance. Ethics approval was obtained.

Results 148 participants responded (69%). Average age was 55.3 years, 96% were NZ European and over 80% had a lifetime risk of CRC of at least 18% (NZ Guidelines groups 2 & 3). Change in at least one lifestyle measure due to concerns about CRC was reported by 88.5%. Dietary variables and physical activity were more likely to be changed (increased fibre, 63%; increased fruit and vegetables, 54%; reduced red meat, 47%; more physical activity, 45%), with consumption of tobacco, alcohol, and body weight less likely to be altered (25%, 26% and 31% respectively).

Adjusted odds ratios for the association of knowledge, anxiety and worry with adoption of healthy behaviours

Abstract PWE-022 Table 1

	Adjusted Odds Ratio*	95% Confidence Interval	P value
Perceived knowledge of CRC risk factors	–	–	–
None	3.76	0.76 to 18.7	0.11
A little	5.39	1.18 to 24.56	0.03
Somewhat	9.49	2.08 to 43.32	0.004
Very much so			
Are genes the main cause of CRC?	–	–	–
Not at all	1.79	0.36 to 9.02	0.48
A little	1.83	0.39 to 8.61	0.45
Somewhat	2.34	0.49 to 11.25	0.29
Very much so			
Perceived risk of CRC, per SD increase.	1.21	0.90 to 1.61	0.20
Global GAD-7 score, per SD increase.	1.51	1.12 to 2.03	0.006
Worry about CRC due to family history	–	–	–
Never	2.93	1.05 to 8.13	0.038
A little	2.94	1.15 to 7.51	0.024
Sometimes	5.25	1.88 to 14.70	0.002
Often/Always			

* Adjusted for age, gender, and NZ Deprivation score.

Conclusion Most patients adopted at least one lifestyle change to reduce their risk. Those with higher anxiety levels, specific worry due to family history, and those who believed they knew more about CRC risk factors were more likely to report healthy lifestyle changes. Overall perceived risk of developing CRC and actual risk due to family history were not associated with behaviour change.

Disclosure of Interest None Declared.