Conclusions The programme has delivered competency-based training in clinical research and generated excellent feedback and evidence of increased research engagement in the first cohort. Although the programme to date has focused on hepatology doctors, the skills taught are generic and it is our hope that it is adapted for all specialties and healthcare professions, to help build the next generation of research-ready NHS staff.

Posters

Endoscopy

P1 **E**

EARLY EVALUATION OF A COMPUTER ASSISTED POLYP DETECTION SYSTEM IN BOWEL CANCER SCREENING

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Introduction Polyp detection during colonoscopy is critical for reduction of colorectal cancer associated morbidity and mortality. Computer-aided detection (CAD) systems are now available but have had limited evaluation in clinical practice. Our aim is to evaluate the effectiveness of, and clinician acceptability of, a polyp detection system in the bowel cancer screening programme (BCSP).

Methods We evaluated polyp detection rate (PDR) and adenoma detection rate (ADR) over a 2 month period on bowel cancer screening lists. In the first month, there was no change in usual practice. In the second month, all colonoscopies were performed with the addition of GI Genius (Medtronic Ltd), a computer aided polyp detection system.

Analysis of all CAD-assisted polyp detections (for greater than 1 second) was assessed alongside the endoscopist interpretation of the area of mucosa highlighted by the CAD.

Endoscopist's completed an evaluation form after the procedure.

Results The PDR and ADR for standard versus CAD-assisted colonoscopies are shown in table 1.

A sub-group analysis of 6 cases showed 149 episodes of CAD-assisted 'polyp detections' of which 36 were considered true polyps (24.3%) by the endoscopist. The 112 false positive detections (75.8%) consisted of folds (46), normal mucosa (35), stool (17), bubbles (5), ileocaecal valve (4), suction polyps (4), and Endocuff arms (2).

The endoscopist evaluation of 11 clinicians revealed that 45% found the system was helpful in identifying polyps and

Abstract P1 Table 1 The effect of a polyp detection system on PDR and ADR in BCSP Colonoscopy and Bowel Scope lists

BCSP Colonoscopy		BCSP Bowel Scope			
Standard	CAD	P value	Standard	CAD	P value
86	82		565	408	
208	202		251	150	
58.1	62.2	0.59	26.9	24.3	0.35
46.5	48.8	0.77	12.6	9.8	0.18
	Standard 86 208 58.1	Standard CAD 86 82 208 202 58.1 62.2	Standard CAD P value 86 82 208 202 58.1 62.2 0.59	Standard CAD P value Standard 86 82 565 208 202 251 58.1 62.2 0.59 26.9	Standard CAD P value Standard CAD 86 82 565 408 208 202 251 150 58.1 62.2 0.59 26.9 24.3

90% of clinicians felt that it did not adversely affect the procedure. 70% were unsure if the CAD system should be used in clinical practice.

Conclusions This early evaluation found no significant difference in polyp and adenoma detection rate when using a polyp detection system in the BCSP with high performing operators. The false positive rate is a significant issue. However, endoscopists did not feel the CAD adversely affected the procedure and further studies are required to evaluate the impact of CAD in clinical practice.

P2

RECTAL GASTRIC HETEROTOPIA ASSOCIATED WITH HELICOBACTER PYLORI; A CASE REPORT

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Introduction Lower GI tract gastric heterotopic mucosa (GHT) is rare and the aetiology remains unclear. GHT is a condition in which the gastric mucosa is discovered elsewhere. GHT in lower GI tract is uncommon and literature review shows that predominant locations include oesophagus, and duodenum; it can rarely present like a Meckel's diverticulum.

Rectal GHT is rare and literature search has shown around 50 case reports. Only a few have shown colonisation of Helicobacter pylori, which can be associated with the usual associations of Helicobacter pylori such as inflammatory change, ulceration and potential neoplasia, such as MALT lymphoma and colorectal cancer; the latter can sometimes lead to intermittent rectal bleeding.

Case Presentation We present a case of 56 year old lady who attended for a flexible-sigmoidoscopy as part of the Bowel Scope programme. Her sigmoidoscopy, revealed a 10 mm raised area in the rectum, near the anal verge, with an unusual pit pattern appearance.

She was subsequently referred for a completion colonoscopy and potential EMR polypectomy; the Bowel Cancer Screening colonoscopist took biopsies from the lower rectal polyp as he felt that this was not an adenomatous polyp; the histopathological analysis showed a mixture of normal large bowel mucosa and gastric phenotype contiguous with each other; there was mild patchy chronic inflammation with no evidence of dysplasia or malignancy; there were a small number of curvilinear rod shaped organisms seen trapped in the surface suggestive of Helicobacter pylori. These findings were confirmed with the aid of immunohistochemistry.

Discussion Helicobacter pylori can pass from the stomach to colonise other areas such as gallbladder, ears, nose, skin and areas as far as intestinal tract and to the rectum. Helicobacter pylori is associated with adenocarcinoma. There are studies showing increased risk of both colon polyps and colon cancer in *H. pylori*-infected patients. We present the first case of GHT, in the literature, within the national Bowel Scope programme.

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