referred patients underwent Oesophagogastroduodenoscopy (OGD), 13.04% (6/46) had non-erosive gastritis and 8.69% had peptic ulcer. Others had angiodysplasia, gastric erosions, gastric polyps and hiatus hernia in 4.3% each. OGD was normal in the rest; none had cancer or active bleeding. Colonoscopy was performed in 54.09% (33/61) patients and CT colonogram in 5%. Colorectal cancer was found 8.33% (3/36) patients, benign polyps in 5.55% and diverticulosis in 22%.

Conclusion A large number (73%; 169/230) of the anaemic patients with IHD were not referred to rule out gastrointestinal cause of anaemia. Coeliac serology is poorly checked by the Cardiologists. The prevalence of colorectal cancer was high that is, 8.33% in the small proportion of those referred. We suggest appropriate screening and thorough evaluation of anaemia in cardiology setting. This can be done by following British Society of Gastroenterology guidelines for investigation of iron deficiency anaemia. Education of colleagues would be of paramount importance in optimising appropriate referral practice.

Competing interests None declared.

Inflammatory bowel disease III

PWE-224 CHALLENGES IN RECRUITING TO CLINICAL TRIALS IN THE UK: THE TOPPIC EXPERIENCE

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Introduction The Trial of Prevention of Post-operative Crohn's disease (TOPPIC) is a multi-centre, randomised, Medical Research Council (MRC) funded, controlled trial of mercaptopurine (MP) vs placebo in preventing post-operative recurrence. It is the largest and only double-blinded trial conducted to date assessing thiopurine treatment in this setting. To complete the study in five centres we assumed that 60% of eligible patients would be enrolled into the study. Our experience of the challenges to recruitment has relevance to all other clinical trials in the area.

Methods Patients undergoing intestinal resection for Crohn's disease (CD) were prospectively recruited and randomised (1:1) within 3 months of surgery to either placebo or 1–1.5 mg/kg/day MP. 234 patients are sought to detect a 20% difference with 80% power between the two groups. The primary outcome means to assess the ability of MP to delay or prevent post-operative recurrence. This is assessed clinically at 12 study visits over 36 months and endoscopically at 12 and 36 months. Recruitment is due to finish in 2012.

Results The initial enrolment of patients was disappointing with only 60 patients recruited at 22 months (predicted 180 patients). Within the study centres anti-TNF use increased over the same period fivefold (p). The study was therefore extended for a further 18 months from 5 Scottish centres, to involve 25 new sites across England and Wales. As of February 2012 223 patients have been randomised representing 20.5% of the 1085 patients undergoing resection at participating centres. Of those not randomised, 530 (49%) were ineligible and 243 (22%) declined pre-screening, 71 (6%) were ineligible/declined during screening. Of the 530 patients ineligible pre-screening 158 (30%) had a stoma, 110 (21%) were not included for reasons not specified, 55 (10%) had a condition the clinician felt placed them at unacceptable risk, 53 (10%) had MP hypersensitivity, 32 (6%) had no known diagnosis of CD, 28 (5%) failed to have ileocolonic resection within 3 months, 19 (4%) had active or untreated malignancy. The remainder 14% consisted of multiple other factors; including previous pancreatitis, and length

small bowel resected. Of the 44 randomised patients whom have since dropped out since randomisation; 23 withdrew early from the trial, 13 were lost to follow-up, six other reasons not specified and one mortality from coronary heart disease.

Conclusion Our experience illustrates a number of challenges in investigator lead studies in IBD. Although we had accurately predicted the number of resections our initial projections had dramatically underestimated the proportion of patients willing or eligible to participate in a placebo controlled study. This study has however, highlighted the merits of multi-centre collaboration, not least due to the acceptance onto the NIHR portfolio.

Competing interests None declared.

PWE-225 EFFICACY OF FAECAL LACTOFERRIN IN IBS AND IBD: A COMPARATIVE STUDY

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Introduction Faecal lactoferrin (FL) has been proposed as a non-invasive diagnostic tool in IBD.¹ This is the first study conducted in a UK outpatient setting comparing simple colitis index (SCI) for ulcerative colitis (UC) and Harvey Bradshaw index (HBI) for Crohn's disease (CD) against FL concentration in IBD and IBS patients.

Methods From an IBD outpatient clinic, stool samples were collected and concurrent disease activity recorded for UC, CD, IBS patients along with samples from healthy volunteers. Using IBD-Scan®, a quantitative ELISA, FL concentration was measured. Each participant's recorded clinical index at time of collection was compared against calculated FL concentration to assess clinical efficacy of FL in determining disease status in IBD and in differentiating IBD from IBS.

Results Spearman's correlation for correlation between LF and clinical score indices: 0.027 (p<0.05).

Conclusion FL is useful in staging of IBD and in differentiating IBD from IBS.

Abstract PWE-225 Figure 1 Lactoferrin plotted on a log scale for UC, CD, IBS and control groups respectively.

Abstract PWE-225 Table 1

	UC			CD			IBS	Healthy
	≤2	3–4	≥5	≤3	4–5	≥6		
Mean and SD (μg/ml)	13±22.1	59.5±44.8	24.5±31.1	9±12.7	11±8.9	117±266	1.4±1.8	0.8±1.2
Median (μg/ml)	4.1	78.2	9.3	7.8	8.6	12.4	0.5	0.44

Competing interests None declared.

REFERENCE

1. Baveye S, Ellass E, Mazurier J, et al. Lactoferrin: a multifunctional glycoprotein involved in the modulation of the inflammatory process. *Clin Chem Lab Med* 1999;**37**:281–6.

PWE-226 ARE IBD SERVICES UP TO STANDARD?—RESULTS FROM 1ST ROUND OF THE UK INFLAMMATORY BOWEL DISEASE QUALITY IMPROVEMENT PROJECT (IBD QIP)

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Introduction IBD is a common cause of gastrointestinal morbidity with an estimated 240 000 people affected in the UK. Successive rounds of the UK IBD Audit have shown variation in care and there is a recognised need to implement the National Standards for IBD Care that were published in 2009. The IBD QIP was established as a pilot project to explore the potential of a web based self assessment tool to assist services benchmark themselves against the standards and develop action plans to improve.

Methods The IBD QIP assessment tool was developed through a series of meetings consisting of representatives of key stakeholder groups, including patients. Statements relating to aspects of IBD care were identified from analysis of the Standards and UK audit results. These were then included in a web based tool, similar to the “GRS” used in UK endoscopy. All IBD services in the UK were invited to volunteer for the pilot and after a series of regional meetings, participating sites were provided with access to the tool and asked to complete their assessment and provide feedback on the process. Results were collated centrally and fed back to sites locally. The QIP web site, also included tools for formulating an action plan and a “Shared Document Store” for sites to submit examples of good practice that could be shared with others. Re-assessment is planned for March 2012.

Results 73 sites enrolled for the pilot (64 adult & 9 paediatric services), 62 (85%) of whom submitted data. 52/62 (90%) of sites met to complete the assessment as a multidisciplinary group with at least 2 disciplines represented. 93% of sites took <4 h to complete

the rating process. Overall results for all domains showed similar scores for adult and paediatric sites with 18, 17, 23 and 43% of adult and 14, 12, 26 and 48% of paediatric sites scoring A, B, C and D respectively. Representative scores for selected items from adult sites are shown in the following Abstract PWE-226 table 1 (n=56).

Conclusion We have demonstrated that it is feasible for services to use a web based self assessment tool to benchmark themselves against nationally agreed standards for IBD care. First round results show that the majority of services are currently failing to meet the UK IBD Standards, with two thirds of sites scoring at level C or D. Feedback from the pilot round is currently being used to refine the tool and re-assessment in March 2012 will give sites an indication of their progress.

Competing interests None declared.

PWE-227 OUTCOME OF CYTOMEGALOVIRUS COLITIS IN PATIENTS WITH IBD—EXPERIENCE FROM ROYAL UNITED HOSPITAL BATH

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Introduction CMV infection has been described in patients with inflammatory bowel disease (IBD). It is considered to be responsible for relapse, increased severity and poor outcome if left untreated. Ganciclovir is the mainstay of treatment but data regarding its use, mode of administration and duration of treatment is poorly described. Studies have demonstrated favourable outcome with the use of antiviral treatment.

Methods We studied the medical records of patients with IBD and concurrent diagnosis of CMV since 2005. Record of investigations was obtained from hospital electronic resources. The parameters studied were duration and mode of treatment with Ganciclovir, clinical scoring using Harvey Bradshaw Index (HBI), CRP pre-treatment and on day 3, 7 and 14th of treatment, CMV PCR pre and post-treatment, detection of *Clostridium difficile* toxins (CDT) and outcome in term of colectomy or clinical improvement.

Results 13 patients with pre-existing diagnosis of IBD (UC=8, CD=3, non-specific colitis=2) were identified with a confirmed diagnosis of CMV on colonic biopsies between 2005 and 2011. The age range was 33–91 yrs (mean=68, F=6). 11/13 patients were admitted to hospital with flare of IBD and were steroid refractory. One was admitted with severe diarrhoea without IBD and the other had colectomy for severe UC and was found with CMV in the colectomy specimen. Out of 13, 11 patients were treated with Ganciclovir: six with 2 weeks of intravenous Ganciclovir 5 mg/kg, 3 with 1 week of intravenous and 2 with 1 week of intravenous followed by 2 weeks of oral Valganciclovir. Out of those treated, eight patients improved and were discharged, and three required colectomy. All six patients who received 2 weeks of intravenous treatment improved and were discharged. All three who required colectomy had 1 week of intravenous treatment and one had additional oral Vanganciclovir. CRP response was found to be non-predictive but improvement in HBI on day 3 of treatment was found to be associated with better outcome. None of the patients were positive for CDT.

Conclusion CMV colitis is associated with poor outcome in patient with IBD if left untreated. Data regarding mode and duration of treatment remain poorly defined; in our experience 2 weeks of intravenous Ganciclovir was associated with a better outcome. Little or no improvement in the clinical condition on day 3 of treatment was associated with colectomy. Further data are required to evaluate the treatment guidance of this condition.

Abstract PWE-226 Table 1

Patient experience	A	B	C	D
Rapid access	30	8	3	15
Education of patients	24	18	4	10
Clinical quality				
Access to nutritional care	6	7	8	35
Arrangements for use of immuno-suppressants	5	1	22	28
Surgery for IBD	15	12	10	19
Research, education and audit				
Participation in research	46	13	13	29
Training and education of IBD staff	4	18	64	14