MDT referral (asterisk). The case with incomplete excision of HGD was offered classical surgery. Histopathological examination of margins was not possible in 22 cases due to piecemeal excision. All patients entered an endoscopic surveillance programme.

Conclusion The majority of the referrals to the SERC MDT are for benign lesions and we would recommend all suspicious lesions are referred in the first instance. Rates of complete excision of benign lesions can be improved. TEMS has a significantly higher complete excision rate compared to EMR. Long-term follow-up of patients with incomplete excision will be of interest.

Abstract PWE-070 Table 1 Outcomes following LE for adenomas

	N (%)	Excision complete (%)	Excision incomplete (%)	Unable to assess (%)
LGD	29 (58)	10 (34)	4* (14)	14 (48)
HGD	21 (42)	12 (57)	1 (5)	8 (38)
TEMS	19	14 (74)	1 (5)	4 (21)
EMR	16	2 (13)	0 (0)	14 (87)
TART	10	7 (70)	2 (20)	1 (10)

HGD, High grade dysplasia; LGD, Low grade dysplasia.

Competing interests None declared.

PWE-071 THE MANAGEMENT OF SMALL EARLY RECTAL CANCERS—NETWORK MDT RESULTS

doi:10.1136/gutjnl-2012-302514d.71

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Introduction A regional Small and Early Rectal Cancer (SERC) MDT was established in 2008 with input from Gastroenterology, TEMS service, pathologists, oncologists, cancer specialist nurses and surgeons. All patients with stage 1 rectal cancer are referred, ensuring cases suitable for local excision (LE) are managed by teams with appropriate expertise in line with NICE guidance and peer review measures for colorectal cancer.^{1 2} We aimed to review the outcome of patients managed by the MDT focusing on adequacy of treatment according to histology, follow-up and classical surgery.

Methods Observational study of the SERC MDT database.

Results The SERC MDT processed 137 referrals (62 f: 75 m. Median age 77 (range 36–90)). There were 48 malignant cases. Of 74 local excision (LE) procedures, 24 were performed for malignancy (see Abstract PWE-071 table 1 below for outcomes). Classical surgery was advised for nine patients. The stoma averse or surgically high-risk patients were offered direct radiotherapy (n=16). There were 14 attempted LE's prior to MDT referral. All were malignant and only

Abstract PWE-071 Table 1 Outcomes following local excision for malignancies

LE for malignancy	T1	T2
24	21	3
Kikuchi grading	SM1	7
	SM2	7
	SM3	7
Resection margins	R0	11
	R1	9
	R0	0
	R1	3

three were completely excised. Incompletely excised lesions were referred for classical surgery or radiotherapy.

Conclusion This regional SERC MDT has demonstrated the successful implementation and functioning of the early rectal cancer MDT model. All small rectal lesions should be referred to MDT prior to attempt at LE, thus allowing for accurate staging and appropriate pre-operative planning. R0 resection rates need improvement.

Competing interests None declared.

REFERENCES

1. *Guidance on Cancer Services—Improving Outcomes in Colorectal Cancer: Manual Update.* NICE, 2001.
2. *Case Study: Implementing Early Rectal Cancer MDTs in Secondary Care.* November 2011.

PWE-072 CURRENT ROLE OF RADIOLOGY AS THE FIRST INVESTIGATION IN THE ENGLISH BOWEL CANCER SCREENING PROGRAMME (BCSP)

doi:10.1136/gutjnl-2012-302514d.72

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Introduction The current BCSP pathway recommends radiological examination of the colon for people with a positive faecal occult blood test who are unable to undergo colonoscopy. The proportion of people undergoing radiological examination and polyp/cancer yield is unknown.

Methods All patients undergoing lower gastrointestinal investigation following a positive faecal occult blood test within the English national Bowel Cancer Screening Programme (BCSP) in the first 4 years of the programme (August 2006–July 2010) were identified. The number, percentage, demographics and co-morbidity (as defined by ASA grade) of people having CT colonography, barium enema, and plain abdominal CT as the first investigation were recorded and variability between centres was assessed. Use of radiology and yield of cancer and high risk polyps were also recorded, and compared to colonoscopy. Outliers were determined using Tukey limit methods.

Results Use of radiological tests as a first line investigation increased steadily with age from 0.99% in those aged <60 years to 6.04% in those aged >74 years. Radiological tests were used in more women than men (2.65% vs 2.35%, p<0.01). Radiological investigation increased with co-morbidity from 1.94% in people graded ASA 1 to 38.36% in ASA 4 (p<0.001). Cancer and high risk polyp detection rates for all first-line investigations are shown below. Detection rates for radiological tests were lower in this older, co-morbid sub-population than found for colonoscopy. There was considerable variation in the use of radiology between centres (0.3% to 9.1%), not related to age or co-morbidity. Two centres had a very low percentage of people having radiology tests and three very high.

Conclusion The number of people having radiology tests as an alternative to colonoscopy in the BCSP is highly variable across England but is associated with increasing age and co-morbidity. Cancer and high risk polyp detection rates appear lower in this sub-population compared to colonoscopy yield. Accuracy of radiology

Abstract PWE-072 Table 1

	Colonoscopy	Barium enema	CT colonography	Abdominal CT
Number	94 135	253	1770	358
Cancer (%)	9.26	3.56	5.03	4.19
High risk polyps (%)	9.57	2.77	4.75	1.12

data input and examination of the factors contributing to these data requires further investigation and analysis.

Competing interests None declared.

PWE-073 COLONOSCOPY FOR A FAMILY HISTORY OF COLORECTAL CANCER: ARE WE SCREENING "THE WORRIED WELL"?

doi:10.1136/gutjnl-2012-302514d.73

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Introduction The British Society of Gastroenterology (BSG) updated guidelines for colonoscopic screening of people with family history (FH) of colorectal cancer (CRC) in 2010. In the UK, most patients anxious about their FH of CRC are referred by primary care doctors to non-specialist hospitals. Previous studies indicate guideline adherence is poor with significant clinical, medico-legal, and resource implications.

Methods Our study analysed adherence to the 2010 BSG guidelines in a district general hospital (catchment population of 300 000). Observational data were collected from all colonoscopies in which FH was the primary indication over a 16-month period from guideline publication up to April 2011 at our centre.

Results Of the 91 cases found (mean age 49.1 years, range 24.7–73.2), there were 11 high, 24 high moderate and 20 low moderate risk cases identified. 36 were low risk and did not fulfil criteria for initial colonoscopic screening. The 55 within guideline were screened on average 4.0 years early ($p < 0.0002$; paired T test; 0–24.2 years early), with 18 cases screened early. 17 of the 91 cases were offered unnecessary follow-up colonoscopies. Yield for polyps and CRC was significantly lower in screened individuals (16/91 (18%)) compared to patients offered colonoscopies for other indications during the same period (246/838 (25%); $p = 0.018$; χ^2 test). Referrers recorded "reassurance" in 29 cases as a factor for screening.

Conclusion The BSG guidelines are based on robust evidence. Despite this, many patients (40%) undergoing screening in our centre do not meet guideline criteria. Some (33%) were screened too early, and others (19%) had unnecessary follow-up. Therefore, some patients are exposed to the risk of colonoscopy decades younger than recommended without justifiable benefits. This is reflected in similar data from other centres. Non-adherence to guideline occurs at multiple levels from referral and beyond. Clinicians often feel compelled to offer screening against guidelines for the reassurance of anxious patients. Our study identifies multiple opportunities where intervention could result in better adherence to guidelines; interventions such as the development of family cancer clinics outside clinical genetics centres to improve management of these patients.

Abstract PWE-073 Table 1

Risk	Life time risk of CRC death	n (%)	Cases screened early	Inappropriate follow-up	Polyp/ CRC cases found
Appropriate for screening					
High (ie, known familial syndrome)	1 in 2–5	11 (12%)	0	0	2
High moderate	~1 in 6–10	24 (26%)	6	8	5
Low moderate	~1 in 12	20 (22%)	12	3	3
Inappropriate for screening					
Low	>1:12	36 (40%)	NA	6	6
Total		91	18/55 (33%)	17/91 (19%)	16/91 (18%)

Competing interests None declared.

PWE-074 FACTORS THAT PREDICT SEVERE CLOSTRIDIUM DIFFICILE INFECTION (CDI)

doi:10.1136/gutjnl-2012-302514d.74

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Introduction *Clostridium difficile* is a well-recognised infective cause for increased morbidity and mortality especially in hospitalised patients.¹ "Severe" CDI as defined by Health Protection Agency (HPA) is infection with stool positive for toxin, with white cell count $>15 \times 10^9/l$, or an acute rising serum creatinine (ie, $>50\%$ increase above baseline), or a temperature of $>38.5^\circ\text{C}$, or evidence of severe colitis (abdominal or radiological signs). Increasing age, female sex, prolonged hospital stay, patient movement between wards, previous CDI, usage of proton pump inhibitors (PPI), histamine blockers (H2B) and antibiotics were reported to be associated with CD infection and colonisation,^{2,3} but our aim was to check if the above factors predicted the severity of the infection.

Methods Data were collected from 392 patients who were diagnosed with CDI between January 2010 and December 2011. The CDI team (one Consultant, two nurse practitioners, one pharmacist) normally review patients twice weekly in our district general hospital. Details on the above risk factors were noted to study the correlation with severity of infection. Results were analysed with Pearson correlation test.

Results At the time of diagnosis, out of 392 patients, 206 were classified as "mild," 76 "moderate," 91 "severe" and 3 "life-threatening" infection (severity not documented in 16). Age distribution varied between 22 and 100 years, with 153 male and 239 female patients. 316 patients were on at least one antibiotic when they developed CDI, chest infection being the commonest indication (36.8%). Amoxicillin was the most used antibiotic and the range of days on antibiotic varied between 1 day and long term usage (>3 years). 46% of patients were taking PPI while only 7.8% were on H2Bs. There were up to maximum four ward transfers and average of 17.62 inpatient days before CDI. Pearson correlation test showed there is no significant association between severity and any of the identified risk factors, closest being previous CD infection ($p = 0.058$).

Conclusion Though there are definite risk factors associated with development of CDI, our study confirms that none correlate with the severity. More research is needed to clarify factors that will help identify hospitalised patients at risk of developing severe CDI.

Competing interests None declared.

REFERENCES

1. Leffler DA, Lamont JT. Editorial: not so nosocomial anymore: the growing threat of community-acquired *Clostridium difficile*. *Am J Gastroenterol* 2012;**107**:96–8.
2. Johnson S. Recurrent *Clostridium difficile* infection: a review of risk factors, treatments and outcomes. *J Infect* 2009;**58**:403–10.
3. Loo VG, Bourgault A, Poirier L, et al. Host and Pathogen factors for CD infection and colonization. *N Engl J Med* 2011;**365**:1693–703.

PWE-075 LACK OF ASSOCIATION BETWEEN THE PSCA RS2294008 POLYMORPHISM, OR PSCA EXPRESSION, AND COLORECTAL NEOPLASIA

doi:10.1136/gutjnl-2012-302514d.75

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Introduction Prostate stem cell antigen (PSCA) has been implicated in the pathogenesis of several solid tumours, either due to changes in