

including length of stay, treatment, mortality, and relapses were analysed and compared to standard hospital episode statistics (HES).

**Results** The annualised hospital incidence of CDAD was 70/20 000 admissions, age range 2–100 yrs (mean 75.5, M: F). 76.8% patients were older than 70 yrs. 43% had received antibiotics prior to admission and 35 (62%) patients were commenced on antibiotics in hospital. The top 5 were Amoxicillin, Co-amoxiclav, Flucloxacillin, Cephalexin and Trimethoprim. 62% of these had received one course of antibiotic, and 30% two or more courses. 39% patients had a previous admission to hospital in the preceding 12 weeks, 46.4% were taking a PPI and 35.7% a laxative. *C difficile* was confirmed by both toxin and GDH positivity in 80.4%, and by toxin positivity only in 19.6%. Total length of stay ranged from 51 days (16%). A positive diagnosis was made in 80% patients, but severity was not always recorded. Stool charts were completed in 70%, serum lactate checked in 10% and abdominal x-ray done in 30%. Only 25% patients were seen by an MDT member. 78.5% pts were treated, 30/44 (68%) with Metronidazole and 11/44 (25%) with Vancomycin as first line drugs. 3/44 patients received both drugs initially. 30.4% pts received  $\leq 7$  days, 50% upto 14 days and 19.6%  $\geq 14$  days treatment. All cause mortality was 25%, almost entirely in the elderly. 7% had a recurrence, all treated by Vancomycin and pulsed/tapered regimes and probiotics were used infrequently.

**Conclusion** CDAD continues to be an important hospital acquired infection with a significant increase in hospital length of stay and high mortality rates, especially in the elderly. This study indicates that a significant proportion of CDAD may be acquired in the community. Adherence to national recommendations for management and involvement of the MDT needs to be encouraged to improve outcomes.

**Competing interests** None declared.

#### PWE-099 CONTRIBUTION OF SURGERY AND DISEASE SUBTYPE TO HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH LOCALLY ADVANCED AND RECURRENT COLORECTAL CANCER

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**Introduction** Management of patients with locally advanced (LA) and locally recurrent (LR) colorectal cancer is challenging, with patients frequently requiring complex multimodality interventions. Despite increasing emphasis on evaluation of health related quality of life (HRQoL) in patients having complex interventions, HRQoL information on patients with LA and LR colorectal cancer is sparse. The aim of this study was to prospectively assess outcome measures and HRQoL in a cohort of patients with LA and LR colorectal cancer at our institution.

**Methods** LA disease was defined as tumour requiring extended multi-visceral resection in the abdomen or pelvis to achieve an R0 resection. 45 consecutive patients were prospectively assessed over a 2-year period. Demographic, treatment, and cancer-related outcomes were recorded on all patients. Pelvic disease was staged using Leeds and Royal Marsden Hospital classification systems. HRQoL was prospectively evaluated using the EORTC generic and disease specific instruments QLQ-CR30 and QLQ-CR29.

**Results** Median age was 69 (range 46–89) and 60% were male (27/45). There were 25 cases of LA disease and 20 LR cases. 35 patients underwent surgery while 10 patients had non-surgical palliation. R0 resection rate was 94%. HRQoL data were available on 41 patients. Median global health status was 65 (95% CI 55.5 to 74.1), physical functioning 77 (95% CI 69.9 to 84.5), and social functioning 72 (95% CI 60.3 to 83.8), which compared favourably with published EORTC reference values. Global health status and pain were significantly better in patients having surgery compared to non-surgical palliation ( $p<0.0001$  and  $p<0.0004$ ). Assessment of individual function and symptom scales revealed no significant difference in HRQoL between LA and LR except for greater buttock pain in patients with LR disease.

**Conclusion** In carefully selected patients, HRQoL after radical multimodality treatment for LA and LR colorectal cancer is acceptable, and gives better results than palliation.

**Competing interests** None declared.

#### PWE-100 REPEAT TWO WEEK WAIT REFERRALS FOR SUSPECTED COLORECTAL CANCER

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**Introduction** The two week-wait pathway for suspected colorectal cancer (CRC2ww) ensures prompt review and investigation of patients with symptoms concerning for malignancy. Previous investigation of such patients does not preclude future repeat referral yet may not represent efficient use of limited clinic time or diagnostic services. This study aims to evaluate the incidence and outcome of repeat CRC2ww referrals.

**Methods** A retrospective review of all CRC2ww referrals to our unit over a 4-year period was conducted. Patients with previous CRC2ww referrals were identified from a hospital database. Referral indication and outcome for all referrals was collected.

**Results** 2731 CRC2ww referrals were made between July 2007 and July 2011, median age 72 (19–102), 1179 (43%) male. 273 cancers were identified including 212 colorectal cancers. 121 referrals were repeat referrals, with 77 made prior to July 2007, and a median 1087.5 (35–2709) days between initial and repeat referrals. Referral indication was the same in 55 (47%) cases. When compared to unique referrals, repeat referral were associated with increased age (79 years vs 71 years,  $p<0.0001$ ) and increased proportion of females (69% vs 56%,  $p=0.0048$ ). Six cancers, including two CRC, were identified following repeat referral with a median 1511.5 (477–1988) days between initial and repeat referrals. There was no statistical difference in cancer detection between unique or repeat referrals (5.2% vs 10.4%,  $p=0.07$ ).

**Conclusion** Repeat referrals comprise a small proportion of all CRC2ww referrals. Such patients are older and more commonly female. However, cancer detection is not significantly lower in this cohort when compared to those not previously referred. Historical referral or investigation should not preclude future CRC2ww referrals and such patients should be investigated to the same extent as unique referrals.

**Competing interests** None declared.

#### PWE-101 HIGH DEFINITION ENDOSCOPY INCREASES THE NUMBER OF ADENOMAS DETECTED IN THE UK BOWEL CANCER SCREENING POPULATION

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**Introduction** Adenoma detection and removal is one of the main goals of colonoscopy. Improved adenoma detection has been shown

to reduce future risk of colorectal cancer. High definition colonoscopy allows better visualisation of the colonic mucosa and may improve detection of polyps. Previous studies have shown variable results when comparing polyp and adenoma detection between standard definition (SD) and high definition (HD) colonoscopy. The UK bowel cancer screening programme offers colonoscopy to all citizens aged 60–75 years who test positive for faecal occult blood (FOB). We aimed to compare polyp and adenoma detection rates between those patients undergoing SD Colonoscopy and HD colonoscopy in the screening population.

**Methods** Endoscopy, histopathology and screening database reports were analysed for all BCSP in our institution for the period September 2009 to October 2011. 1020 colonoscopies were performed of which 68 were excluded from further analysis (Incomplete procedure/polypoid syndrome/colitis/unknown definition of endoscope/previous colonic resection). Procedures were divided according to the definition of endoscope used: SD (500 000 pixels) n=421, HD (>500 000 pixels) n=531. Reports were analysed for demographic data, bowel preparation, withdrawal time, and the number, size, morphology, site and histology of all lesions removed.

**Results** There were no significant differences between the SD and HD groups respectively in percentage male subjects (57% vs 60.0%,  $p=0.229$ ), mean age (66.47 vs 66.54,  $p=0.24$ ), percentage with good or adequate bowel preparation (96.1% vs 96.2%,  $p>0.5$ ), mean withdrawal time (10.9 min vs 10.6 min,  $p=0.06$ ). In total 1553 lesions were detected: 49 cancers, 1149 adenomas and 335 non-neoplastic polyps. There was no significant difference between the SD and HD in overall polyp detection rate (SD 0.63 vs HD 0.65,  $p=0.401$ ) and adenoma detection rate (SD 0.59 vs HD 0.59,  $p=0.516$ ). However a significantly greater number of adenomas per patient (APP) were detected in the HD group (SD 1.20 vs HD 1.34,  $p=0.016$ ). HD endoscopy detected significantly more diminutive adenomas (1–5 mm) than SD endoscopy (0.87 per pt vs 0.72 per pt,  $p=0.02$ ), but there was no difference in the rate of detection adenomas >5 mm. More adenomas were detected in the proximal colon in the HD group (0.59 vs 0.44,  $p=0.03$ ) but there was no significant difference in the distal colon (HD 0.79 vs SD 0.77).

**Conclusion** Overall adenoma detection rate in this study population was excellent with 59% of patients having one or more adenomas detected. HD endoscopy appears to improve the total number of adenomas detected in the screening population. The main gain of HD endoscopy is in detection of diminutive polyps in the proximal colon.

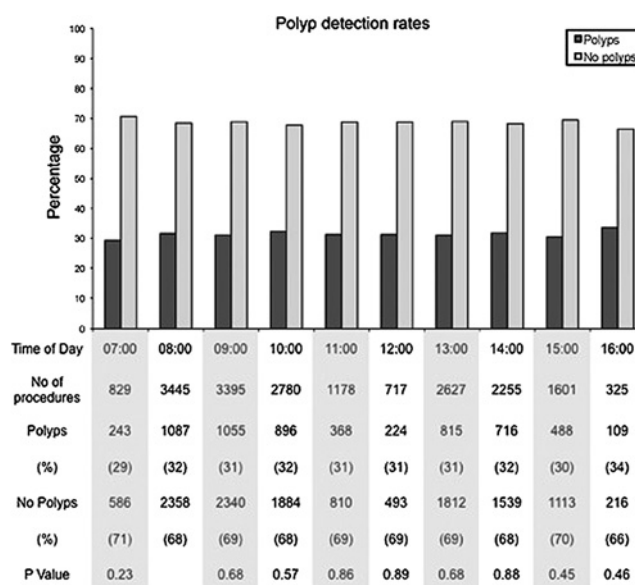
**Competing interests** None declared.

## PWE-102 IS THERE A DIFFERENCE IN POLYP DETECTION RATES BY TIME OF DAY?

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**Introduction** The endoscopy literature<sup>1 2</sup> has raised concerns regarding variations in polyp detection rates during the day. One mechanism for this is thought to be operator fatigue which increases as the day progresses. However, published data so far has been conflicting.<sup>3 4</sup> This is worrying as one purpose of colonoscopy is to detect and remove polyps in order to prevent cancer via the adenoma-carcinoma sequence. Therefore polyp detection rates in the East Anglian Bowel Cancer Screening Programme (BCSP) between 2006 and 2011 were reviewed and analysed. Bowel cancer screening colonoscopies in England are conducted for individuals between the ages of 60 and 74 with a positive faecal occult blood test. The procedures are performed by accredited bowel cancer screening colonoscopists under gold standard conditions.



Abstract PWE-102 Figure 1

**Methods** The National Health Service BCSP database was retrospectively interrogated and polyp detection rates were calculated.

**Results** In total 19 152 bowel cancer screen procedures were performed between the hours of 07:00 and 17:00. Although there is a variation in the number of procedures performed per hour 325–3445 (see Abstract PWE-102 figure 1), less at the beginning and end of a list, there is no significant difference in the polyp detection rate. Differences in polyp detection rates were calculated from the data for 08:00 (the baseline).

**Conclusion** No significant difference in polyp detection rates by time of day was detected in patients undergoing colonoscopy through a national bowel cancer screening programme. This should reassure endoscopists and patients alike.

**Competing interests** None declared.

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## PWE-103 A RISK STRATIFICATION SCORE FOR PREDICTING 30-DAY MORTALITY IN CLOSTRIDIUM DIFFICILE ASSOCIATED DIARRHOEA

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**Introduction** *Clostridium difficile* associated diarrhoea (CDAD) causes significant morbidity and mortality in susceptible patients. There are no validated risk stratification scores to identify those patients at the greatest risk of death.

**Methods** Data were collected on 125 sequential patients diagnosed with CDAD in our institution between August 2008 and October 2010. Data on age, co-morbidities, number of antibiotics prescribed and course length as well as other relevant medications such as proton pump inhibitor (PPI) were recorded. The length of and timing of any admissions in the preceding 13-month and