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/polyposis 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 nonneoplastic 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.

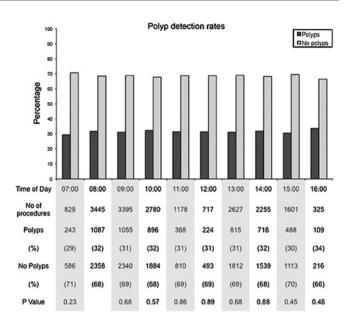
#### PWE-102

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

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T Maheswaran, R Warburton,\* R Tighe. Department of Gastroenterology, Norfolk and Norwich NHS Trust, Norwich, UK

**Introduction** The endoscopy literature<sup>1</sup> <sup>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</sup> <sup>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 19152 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.

### **REFERENCES**

- Lee A, Iskander JM, Gupta N, et al. Am J Gastroenterol 2011;106:1475—65.
- 2. Long MD, Martin C, Sandler RS, et al. J Clin Gastroenterol 2011;45:253—8.
- Munson GW, Harewood GC, Francis DL. Gastrointestinal Endoscopy 2011:73:467-75.
- 4. **Gurudu SR,** Ratuapli SK, Leighton JA, et al. Am J Gastroenterol 2011;106:1466—71.

## PWE-103

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

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<sup>1</sup>R Sood,\* <sup>1</sup>L L Wong, <sup>2</sup>R Swallow, <sup>1</sup>S J Smale. <sup>1</sup>Department of Gastroenterology, York Teaching Hospital, York, UK; <sup>2</sup>Pharmacy Department, York Teaching Hospital, York, UK

**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

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