

condition. The instant generated clinic letters have been a particular success with both patients and GPs.

**Results** The dashboard facility gives an instant overview of our local IBD cohort, revealing 2571 (as of Jan 2014), 1280 with UC, 934 with Crohn's, 77 with IBD unclassified and 59 with microscopic colitis. It takes 4–5 min to upload the basic details in clinic, although complex histories take longer. There were 1072 telephone and virtual clinic contacts recorded between Jan–Nov 2013. The time spent on the IBD phone line was 943 min, with a further 940 min spent dealing with these issues. This work saved 149 clinic visits. Data reports sent to our CCG provided evidence of this service and enabled an income generation not previously claimed for. The IBD-R/PMS identified 913 clinic visits and 173 inpatient reviews. Experience using the worklist functions now allow us to better monitor colonoscopy surveillance, schedule MDT patients and regulate azathioprine reviews.

**Conclusion** The IBD-R/PMS has been a huge success, with relatively little effort on our behalf. It would be difficult now to go back to paper based reporting. There are still benefits yet to be fully appreciated. The service reports have been easy to generate and strongly assisted in our bid to fund 2 additional IBD nurses. Further integration is expected to reduce duplication with our own IBD-SSHAMP project, IBD-GRS and the Biologics Audit.

**Disclosure of Interest.** None Declared.

#### PTH-053 OPEN ACCESS TO COLONOSCOPY: ONE YEAR OF EXPERIENCE IN A DISTRICT GENERAL HOSPITAL

<sup>1</sup>MF Hale\*, <sup>2</sup>V Sathyanarayana, <sup>2</sup>K Kapil, <sup>2</sup>AS Soliman, <sup>2</sup>SH Riyaz, <sup>3</sup>P Hurlstone, <sup>2</sup>E Said. <sup>1</sup>Gastroenterology, Royal Hallamshire Hospital, Sheffield, UK; <sup>2</sup>Gastroenterology, Barnsley District General Hospital, Barnsley, UK; <sup>3</sup>Gastroenterology, Doncaster Royal Infirmary, Doncaster, UK

10.1136/gutjnl-2014-307263.499

**Introduction** Open access endoscopy allows non-gastroenterologists to schedule elective endoscopies without prior consultation with a specialist and is widely used for upper gastrointestinal endoscopy. Our hospital has provided an open access service for colonoscopy (OAC) since May 2011. We analyse our initial data to determine the appropriateness of referral and proportion of clinically significant diagnoses found.

**Methods** We retrospectively reviewed endoscopy reports from all open access colonoscopies between 01/05/2011 and 30/04/2012 performed in a local district general hospital. Patient demographic data was collected alongside indication for examination, completion rates and final diagnosis. Further information from all colonoscopies performed during this period was retrieved from our endoscopy database system for comparison. Appropriateness of

Abstract PTH-053 Table 1

EPAGE referral status	Appropriate/Uncertain	Inappropriate
Diagnosis		
Diverticular Disease	77	1
Polyp (s)	53	-
Haemorrhoids	19	2
Inflammatory Bowel Disease	13	1
Anal fissure	2	-
Colorectal cancer	2	-
Angiodysplasia	1	-

open access colonoscopy was graded using the European Panel on the Appropriateness of Gastrointestinal Endoscopy criteria (EPAGE II). Primary endpoint: appropriateness of colonoscopy. Secondary endpoint: clinically significant diagnosis.

**Results** 2895 colonoscopies were performed in total during the study period of which OAC accounted for 14% (407). 57% (231) patients were female, age range 24–89 years (median 56 years). Caecal intubation was achieved in 96% (389 patients). OAC had the lowest diagnostic yield for all outpatient referrals to colonoscopy compared to bowel cancer screening (86%), medical outpatients (61%) and surgical outpatients (57%). The indication was designated appropriate in 69% (279 patients), inappropriate in 6% (25 patients) and uncertain in 25% (103 patients) based on the EPAGE II criteria. Patients with appropriate or uncertain indications had more relevant endoscopic findings than those with inappropriate indications (45.8 vs 19.0%  $p = 0.005$ ). Sensitivity and negative predictive value of the EPAGE II criteria for detecting clinically significant pathology were 97.7 and 83.3% respectively. The most common diagnosis was diverticular disease, followed by polyps and haemorrhoids (Table 1). Colorectal cancer was found in 0.5% (2 patients), both in the appropriate/uncertain EPAGE group based on indication.

**Conclusion** Open access to colonoscopy is useful to avoid delay in investigation of symptomatic patients but is associated with a low proportion of clinically significant findings compared to standard referral routes. Inclusion of the EPAGE II criteria in the referral form may help to avoid unnecessary examinations.

**Disclosure of Interest** None Declared.

#### PTH-054 IS TIME ALLOCATED FOR COLONOSCOPIC ENDOSCOPIC MUCOSAL RESECTION ENOUGH?

H Kang, K Ofafor, MH Thoufeeq\*. Endoscopy/Gastroenterology, Peterborough and Stamford Hospitals NHS Foundation Trust, Peterborough, UK

10.1136/gutjnl-2014-307263.500

**Introduction** Colorectal cancer is the third commonest cancer in the United Kingdom with 35000 patients newly diagnosed per annum Evidence has shown that resection of adenomatous colonic polyps decreases the occurrence of malignancy by upto 90%. Endoscopic mucosal resection of polyps has been very effective in removing polyps.

**Methods** A retrospective case study of lower GI EMR procedures done by a single endoscopist (colonoscopy/ sigmoidoscopy) at a district general hospital from September 2012 and January 2013 was performed. The data was extracted from endbase reporting system.

Data collected included size, location and morphology of polyp. Procedural data collected included type of EMR and procedural time.

**Results** 95 EMRs were included in the study. 1 unit time point was assumed to be 15 min. Procedures were allocated between 2 and 4 units.

All the procedures were performed by a consultant gastroenterologist with experience in EMRS. The mean time for 95 procedures was 52 min, whilst the mean allocated time was 43 min. There was a significant correlation between the time taken to complete EMR polypectomy and age (mean age = 66.6 years,  $p = 0.02$  and polyp size (mean diameter = 25.3 mm)  $p < 0.0001$ .

Morphology of the polyps did not cause significant variation in time taken (sessile/flat-elevated Vs semi-pedunculated/pedunculated: mean duration = 51 mins vs. 54 mins mean time difference = 3 mins  $p = 0.28$ ).

Piecemeal-EMR (p-EMR) was longer than en-bloc EMR (mean duration = 63 vs 48 min, mean difference = 14 min,  $p < 0.0022$ ).

Sigmoidoscopy EMR ( $n = 52$ ) was not significantly longer than colonoscopy EMR ( $n = 43$ ) (mean times: 53 vs 50 min mean difference = 3 min  $p = 0.28$ ).

Removal of  $>1$  polyps ( $n = 74$ ) was not significantly longer than that for 1 polyp ( $n = 21$ ) (Mean time: 53 vs 46 min, mean difference = 7 min  $p = 0.1115$ ).

**Conclusion** The time taken for endoscopic mucosal resection of colonic polyps did not exceed the allocated significantly. The factors that affected the duration significantly were age of the patient and size of the polyp. Piecemeal EMR was also associated with longer duration than en-bloc-EMR.

These factors should be taken into consideration when booking patients for planned endoscopic resection of colonic polyps.

**Disclosure of Interest** None Declared.

#### PTH-055 USS SMALL BOWEL FOR CROHN'S DISEASE – SINGLE CENTRE EXPERIENCE IN MEDIUM SIZED DGH

M Usman-Saeed\*, T Skouras, T Patani, J Whalley, S Khalid. *Warrington and Halton Hospital, Warrington, UK*

10.1136/gutjnl-2014-307263.501

**Introduction** USS (Ultra sound scan) in experienced hands is good radiological modality in diagnosing, confirming or ruling out Crohn's disease. USS is easy, cost effective and without risk of radiation as compared to CT (Computerised tomography) or MRI (Magnetic resonance imaging) scans. USS can be particularly useful in younger population with Crohn's who may require repeated imaging.

We were interested to look at outcomes of USS of small bowel performed by dedicated GI (gastrointestinal) radiologist in our hospital.

**Methods** We audited efficacy of USS in patients with known, suspected or to exclude Crohn's disease. A retrospective review of patient records using specialised electronic Medicorr and PACS databases was performed. Demographic information, diagnosis, procedural details and subsequent result of USS was entered into a Microsoft Access database and analysed using Microsoft Excel.

**Results** A total of 145 patients underwent USS of small bowel in 18 months. The average age was 40. There were 97 females and 48 males. USS was performed in fifty seven patients with known, twenty four suspected and in 64 patients to exclude Crohn's disease. In known disease group thirty four (60%) had normal USS (these patients were in remission), and twenty three (40%) had USS findings consistent with active, small or large bowel disease, strictures, fistulating disease and abscesses.

For suspected group, 17 patients (70%) had normal and seven (30%) had features consistent with Crohn's. Five of these positive scan patients had MRI scans. 2 MRI scans confirmed USS findings, 3 were normal and required endoscopic confirmation.

In exclusion group 64 had USS with 61 (95%) normal and 3 (4%) abnormal. Findings of 3 abnormal scan showed gallbladder polyp, caecal thickening (colonoscopy confirmed caecal tumour) and non-specific ileitis with negative colonoscopy and histology. **Conclusion** Our results show that USS is reliable and as good as other imaging if done by experienced radiologist with special interest in GI radiology. USS is cost effective, readily available and free of radiation. It is cheap, portable, flexible and user- and patient-friendly. It can save cost and time required for CT and MRI scan especially in district general hospital.

We recommend utilising USS small bowel to assess disease activity in known cases and also to confirm or exclude the disease provided experienced GI radiologist is available.

#### REFERENCES

- 1 Nylund K, Ødegaard S *et al.* Sonography of the small intestine. *World J Gastroenterol* 2009;15(11):1319–1330
- 2 Parente F, Greco S *et al.* Modern Imaging of crohn's disease using bowel ultrasound. *Inflamm Bowel Dis* 2004; 10(4):452–461

**Disclosure of Interest** None Declared.

#### PTH-056 PRODUCTIVE ENDOSCOPY PROJECT

<sup>1</sup>N Taggart\*, <sup>2</sup>J Lucking, <sup>1</sup>C Eccles, <sup>1</sup>C Cooper, <sup>1</sup>K Kennedy, <sup>1</sup>D Daw, <sup>1</sup>L Williams, <sup>1</sup>W Hymer, <sup>1</sup>D McGuinness, <sup>1</sup>L Flavell, <sup>1</sup>J Dahill, <sup>1</sup>S Sarkar. *Endoscopy, Royal Liverpool Hospital, Liverpool, UK; <sup>2</sup>NHS IQ, NHS UK, London, UK*

10.1136/gutjnl-2014-307263.502

**Introduction** In June 2012 the Royal Liverpool endoscopy department was chosen by NHS Improving Quality to be a pilot site for the development and implementation of a productive endoscopy toolkit. The outcome was improved efficiency, safety, patient experience and team-working.

**Methods** The aim was to apply processes and cultures of lean thinking to endoscopy and complete a series of modules that increase safety, reliability of care, improve team performance and improve efficiency.

A six month “diagnostic phase” involved collecting data on all aspects of the service to identify areas for improvement. A number of modules were completed that tackled the inefficiencies identified and involved the engagement of all staff groups.

**Results** Stock: The “well organised unit” module identified £7,500 of redundant stock. Clearing the extra space meant equipment could be re-allocated, releasing two bed spaces in recovery.

Enemas: 44% of patients were not compliant with their enemas. Of the 56% who were complaint 14% was ineffective. This impacted on the daily running of the department due to un-prepped patients. This has led to a different type of enema now being used along with the development of more detailed patient information.

Department efficiency: Start/ Stop audit identified that 15% of the time, rooms were not utilised and 85% of time the list started late, due to staff or the room not being ready for the start of the morning session. Sharing this information with the teams led to more motivation and demonstrable leadership by senior Clinicians and Nursing staff to improve workforce compliance. 50% of lists finished late, 43% was due to complex procedures over-running this has led to stricter vetting and more points allocated for these procedures. Further data analysis has shown that Thursday and Friday run late 65% of the time due to endoscopists arriving late for the start of the afternoon session because of over-run clinics. This has led to a review of the scheduling template.

Patient experience: Long waits were problematic for patients particularly, time after admission, prior to procedure, patients waited 12 to 90 mins and time spent post procedure, waiting for discharge, up to 210 mins. Discharges were also slower in the afternoon than in the evening. Review of skill mix and assigning specific roles to discharge will help to expedite effective and timely discharge.

**Conclusion** Working through the innovative tools and processes of each module has allowed us to use an evidence based methodology for quality improvement. The use of advanced data