

procedure was 2.5 days (range 1–13). Procedures were done within 24 and 48 h after referral in 48% and 80% of the time, respectively, while 50% suspected UGI bleeds had an OGD within 24 h. OGD referrals were for assessment of suspected UGIB (72%), dysphagia (12%), varices screening (7%) and dyspepsia (6%). Endotherapy was performed in 23%. A probable cause for UGIB was found in 44%, blood in upper GI tract in 11% and haemostatic endotherapy was delivered in 22%. In those with dysphagia, oesophageal stricturing (3/5, 2 requiring dilatation), post-oesophagectomy (1/5) and oesophagitis (1/5) were seen.

**Conclusion** This list allows an average of 2 extra procedures to be performed daily, without interrupting elective work. Since over 10% of patients are sent back to wards we propose optimising use of list capacity. We report similar waiting times for suspected UGIB to other UK endoscopy units, although still not in line with NICE recommendations. Around 1 in 5 patients required endotherapy. We suggest that our current endoscopy referral triage to an early morning endoscopy list effectively manages AUGIB locally but could be optimised by improving time to endoscopy in suspected AUGIB and decreasing non utilisation rates.

**Disclosure of interest** None Declared.

#### REFERENCES

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#### PTU-298 SMALL BOWEL ENDOSCOPY: A 13-YEAR EXPERIENCE OF DEMAND AND OUTCOMES

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**Introduction** Historically the small bowel has been considered a black box, which is technically difficult to examine due to its length, tortuosity and location. Diagnosis and management of small bowel pathology has entered a new era with the advent of capsule endoscopy (CE) and enteroscopy. We have been providing a comprehensive small bowel endoscopy service and we present our experience from the last 13 years, evaluating demand, diagnostic yield and management.

**Method** A retrospective analysis was conducted on patients who underwent CE, push enteroscopy (PE), double balloon enteroscopy (DBE) and intraoperative enteroscopy (IOE) between January 2002 and October 2014. Data collected included demographics, indications, diagnosis, subsequent change in management and complications.

**Results** A total of 4288 CEs, 294 PEs, 399 DBEs and 19 IOEs were performed over 142 months. The most common indication across all 4 modalities was obscure gastrointestinal bleeding (OGB). The majority of patients (91%) had CE prior to DBE or PE, which helped direct the route and modality of enteroscopy. The diagnostic yield for CE, PE, DBE and IOE were 29%, 43%, 49% and 89% respectively ( $p < 0.0001$ ). Whilst the demand for CE has continued to rise over the years ( $p < 0.0001$ ), the diagnostic yield has fallen ( $p < 0.0001$ ). The diagnostic yield was

highest for the indication of OGB (36%) in CE compared to Crohn's disease (30%,  $p < 0.001$ ). Significant pathology was found outside the small bowel in 8% of patients (colon 36%, gastric 64%). With the advent of DBE, the demand for PE has fallen ( $p = 0.03$ ,  $r = -0.6$ ) and was mainly used for proximal lesions seen on CE. In contrast, the demand for DBE has risen gradually in tandem with the diagnostic yield ( $p < 0.0001$ ,  $r = 0.9$ ). Management was altered by CE in 25%, 43% for PE and 41% for DBE. The rate of therapeutics for PE and DBE were 21% and 24% respectively. In 2014, for every 13 CEs performed, one patient underwent DBE locally. Whilst there were no complications for PE, the complication rate for DBE was 1.25% and 10.5% for IOE. Capsule retention data was collected for patients undergoing CE from 2010. Of the 2882 procedures done in this period, CE retention  $>2$  weeks occurred in 6 patients (0.2%), of which 5 were due to a stricture (Crohn's  $n = 4$ , non-steroidal  $n = 1$ ) and 1 was due to delayed gastric emptying. Three patients required further intervention for capsule removal (endoscopic  $n = 2$ , surgery  $n = 1$ ).

**Conclusion** This is the largest series to date comparing the clinical utility of all four small bowel endoscopic modalities. Enteroscopy has an important role in altering management post CE in patients with small bowel pathology as reflected by the rising demand and yield. Future tariffs for the modalities particularly CE are likely to influence this demand.

**Disclosure of interest** None Declared.

#### PTU-299 DELIVERING COST EFFECTIVE MANAGEMENT FOR IRRITABLE BOWEL SYNDROME (IBS) ACROSS SOMERSET

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**Introduction** Despite 2008 NICE guidance on managing IBS in primary care, referrals to gastroenterology persist with baseline audit finding 14% of new outpatient slots in two DGHs were used by patients aged 16–45 years with no red flag symptoms where the GP felt diagnosis at referral was IBS. Given evidence for lifestyle and diet modification, we set out to help GPs avoid referral as outpatient review and investigation cost over £160,000 annually for these patients. Using potential savings, we funded direct GP access to faecal calprotectin (FC) testing and specialist IBS dietetic-led clinics in four centres across Somerset.

**Method** We designed new care pathways for 16–45 year olds with no red flag symptoms with county-wide GP education using Rome III criteria to make a positive diagnosis of IBS and avoid missing red flags. Instead of referring to secondary care, GPs were asked to check FC, with Coeliac screen, FBC, CRP and TFT. If FC  $<50$  mg/g with normal blood tests, GPs and community-based dietitians were encouraged to manage symptoms using first-line diet and lifestyle advice, referring to the specialist IBS dietetic clinic if needed. If FC  $>50$   $\mu$ g/g, secondary care referral was appropriate to consider investigation, especially if FC  $>150$   $\mu$ g/g. A management algorithm provided symptom-based drug therapies. To aid implementation, the Somerset Pathway Navigator provided a single gateway to GP referrals.

**Results** Outpatient data: Repeating our initial audit at 1 year showed referrals to secondary care for management and investigation fall from 14% to 9% of new appointments.

Faecal calprotectin: 94 patients met this protocol; 64 patients had FC <50 µg/g, 19 had FC 51–150 µg/g and 11 had FC >150 µg/g.

Even when FC <50 µg/g, 13 patients were still referred for secondary care review and investigation with no GI pathology found. Only 1/12 patients referred with FC 51–150 mg/g had Crohn's; others had normal endoscopy/radiology. This contrasts with FC >150 mg/g with 10 referred and 5 having Crohn's or Ulcerative colitis.

Specialist Dietetic outcomes: Over 12 months, 83 patients completed 8-week treatment courses including low FODMAP advice with statistically significant reductions in severity scores of all symptoms. After treatment, 65% reported satisfactory relief of IBS and 74% reported improved quality of life.

**Conclusion** Providing GP education, developing new diagnosis and management pathways, introducing FC testing for GPs and effective dietetic treatments have encouraged self-management, provided cost-effective symptom resolution and reduced unnecessary secondary care referrals for likely IBS.

**Disclosure of interest** None Declared.

#### REFERENCE

1 Irritable bowel syndrome in adults (2008) CG61 NICE

#### PTU-300 ENHANCING PATIENT CARE BY TOTAL INTEGRATION OF MULTIDISCIPLINARY SKILLS

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**Introduction** A multidisciplinary team (MDT) is essential to ensure high quality and compassionate care for patients with longterm diseases. We established a holistic care model using a MDT approach to provide support through easily accessible services and permeable pathways.

In addition to the medical/nursing staff a post for a pharmacist was incorporated into the team; this complemented and highlighted total integration of roles.

Multidisciplinary services are widely reported but having nursing/pharmacy staff sharing responsibility for patients care is innovative and new ways of working were explored in the redesigning of our IBD service.

#### Method

- Clear pathways were developed to ensure patients attended appropriate clinics and enabled reviews with the correct team member.
- Therapeutic drug monitoring (TDM) was newly introduced to optimise medical treatment.
- At the MDM pathways were developed to initiate and review immunomodulators and were facilitated by the nurse/pharmacist.

**Results** Established patients were seen for follow ups mainly by the nurse specialist. One pharmacist clinic was established weekly. Referrals to the pharmacist clinic consisted of patients needing to initiate and optimisation of immunomodulating therapies, adverse drug reactions (ADRs) or with perceived concordance issues. The nurse/pharmacist clinics are well used with 10 patients per clinic supporting the effectiveness of the new developed pathways.

Interdisciplinary support was provided to enable the nurse/pharmacy team to deputise for each other when answering the patient helpline/email queries and undertaking the TDM for

patients on immunosuppressants. The helpline had an average of 11 calls per day. In the 4 months analysed 1032 calls were managed of which the pharmacist answered 142 queries whilst deputising.

Due to the involvement of the pharmacist early adoption of innovative TDM was established. 47 patients had their immunosuppressant therapy changed or stopped, resulting in a minimum of £50,000 savings in the initial 4 months.

The infusion clinic was expanded to include cross speciality patients on immunosuppressants, nutritional supplements and iron due to the involvement of the pharmacist guaranteeing effective support for non speciality patients.

The MDM reviewed 42 patients according to the developed pathways. 10 patients considered eligible for biologics/7 patients needed their therapy altered.

**Conclusion** Interprofessional relationships profit greatly when working closely and deputising for each other. Providing support for each other when taking over responsibility for non traditional roles proved to be an effective way of enhancing patient safety. Permeable pathways and standardisation of treatments including consistent monitoring provided sound governance for individualised medical care.

**Disclosure of interest** None Declared.

#### PTU-301 SUSPECTED UPPER GI CANCER REFERRALS IN SECONDARY CARE CENTRE: ARE THEY ALWAYS APPROPRIATE?

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**Introduction** According to NICE guidelines all patients with suspected cancer should be seen within 2 weeks of referral. Our Gastroenterology Department is experiencing an increasing workload burden due to a high number of suspected upper GI cancer referrals. We therefore decide to perform an audit to evaluate the nature, appropriateness and diagnostic findings of these referrals.

**Method** We reviewed 90 consecutive referrals from 26<sup>th</sup> September 2013 to 4<sup>th</sup> November 2013. We focused our attention on duration of symptoms, type of symptoms and diagnosis.

**Results** 36 patients were male (40%) and 54 patients were female (60%) with a mean age of 64 years (range 32–89). The most common reason for the referral was weight loss, present in 42 patients (47%), followed by dysphagia, in 34 patients (38%) and iron deficiency anaemia (21 patients-23%). Other symptoms that prompted the referral were abdominal pain in 20 patients (22%), dyspepsia in 19 (21%), altered bowel habits in 12 (13%) nausea and vomiting in 11 (12%) and abnormal imaging in 7 (8%). The majority of patients presented with a duration of symptoms of <6 months (65 patients-72%) and 43 (47%) had a symptom duration of <2 months. Twenty-one patients (23%) had symptoms for >6 months and 7 had symptoms of >2 years duration (7%). Looking at appropriateness of referrals we took into account the duration of symptoms and evidence of recent investigations which had already excluded a malignant cause, and considered 17 (19%) of target referrals not appropriate.

Investigations didn't reveal any pathology in 19% of the cases (17 patients). The most common finding was hiatus hernia, seen in 21 patients (23%), followed by gastritis, seen in 17 patients (19%). The cancer detection rate in our series was 10% (9 patients), 2 of the cancers were not gastrointestinal (1 renal,

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