#### PTH-166 PATIENT PREFERENCE FOR THE MANAGEMENT OF **CHRONIC GASTROINTESTINAL DISORDERS**

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Introduction Gastroenterology has a large and expanding outpatient workload, much of which deals with chronic relapsing disorders. In our Scottish Teaching Hospital it is the second busiest speciality by referral rate leading to intense pressure on resources such as clinic. Traditionally many patients with chronic disease had regular clinic regular follow-up which may not always be clinically required. The objective of this study was to establish whether there were alternative review methods to traditional clinic appointments that could be employed to reduce pressure on overstretched clinics. Methods A questionnaire was devised and given to patients in various gastroenterology outpatient clinics who fulfilled the inclusion criteria. Clinics included the IBD, liver and general GI clinics. The questionnaire asked patients to rank their preferred method of follow-up. Options included: Pre-scheduled Doctors Appointment, Open Doctors Appointment, Teleconsultation, Email Consultation, Letter Consultation, Specialist Nurse Appointment, Self Management Plan and No follow Up. Data was analysed for preference trends among different epidemiological groups including age, sex, disease type and postcode deprivation.

Results Questionnaires were completed by 106 patients (62 females: 43 males). The age of patients ranged between 18 and 86, with average age of 46.6 and median age of 50. Analysis was carried out looking for trends of preference among different groups (18–39, 40-64, 65-90). No deprivation bias was identified in this study. There were no significant patterns of preference observed between sexes or disease type. In all age groups the top three choices were a regular clinic appointment with a doctor, an open appointment or a teleconsultation.

# Abstract PTH-166 Table 1

	Age 18–39	Age 40–64	Age 65–90
Pre-scheduled Dr's Appointment	39.4%	37.5%	34.6%
Open Drs Appointment	21.1%	18.7%	38.5%
Teleconsultation	12.1%	20.8%	19.2%

**Conclusion** Gastroenterology outpatient clinics are in grave need of a system to reduce workload. Chronic, relapsing conditions could be subject to other methods of follow-up given their nature. Whilst new follow-up methods could be the solution current patient preference is for traditional doctor led clinic appointments. Any change from this will require patient education and support. Surprisingly modern methods such as virtual clinics by email were not popular and had no significant preference with the younger age groups. From this data we plan to explore telephone consultations as a means to reduce pressure on out patient clinics.

Disclosure of Interest None Declared.



### PTH-167 THE INVESTIGATION OF DYSPEPSIA IN PRIMARY CARE-THE BURNING TRUTH

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**Introduction** Dyspepsia is a common symptom, thought to affect up to 46% of the population<sup>1</sup>. In order to streamline investigation and management in primary care, guidelines have been formulated

by both the BSG and NICE. These advocate that prior to endoscopy patients are reviewed with respect to precipitating medications, helicobacter pylori (HP) status and are trialled on a proton pump inhibitor (PPI) 1, 2.

Methods Using our computer based endoscopy database we retrospectively reviewed the direct access GP referrals for the endoscopic investigation of dyspepsia and reflux. We examined 260 cases referred to the North and East Hertfordshire NHS trust between January and December 2012 looking for adherence to guidelines.

Results In our cohort 56% were female, with the average age of patients being 55.8 years old. 10% were considered to be urgent referrals, whilst 16.5% were referred via the two week wait. Only 30% patients were tested for HP status prior to investigation, with 10 patients having had serology and 80 tested using stool antigen testing. Just 15 patients (6%) in the cohort tested positive for HP by either serology, stool antigen, CLO or gastric biopsy. A greater proportion received a trial of a PPI, 53.8% receiving a full course, whilst 36.5% had used a PPI inconsistently and 9.6% had never tried a PPI. Only 45 patients (17%) had both HP testing and a trial of a PPI. An alternate cause of pathology was considered in 12 patients with investigation with an abdominal ultrasound, in 3 cases this was as a consequence of the endoscopist's suggestion. The most common findings on endoscopy were oesophagitis, gastritis and duodenitis, 21% of examinations were entirely normal. Four cancers were identified within the 46 two week wait referrals.

**Conclusion** Our data has confirmed that the patients in this cohort received inadequate work up in primary care, leading to unnecessary endoscopic investigation. The average age of the patients in this group indicates that many were at an age where pathology such as malignancy would be highly unlikely. Lack of adherence to guidelines is likely to be the reason for the low diagnostic yield of significant pathology, although our endoscopic findings are consistent with those of previous studies1. The low prevalence of helicobacter may represent a reduction in its prevalence, although it is difficult to know whether this is a consequence of inappropriate testing whilst on PPI therapy, the socioeconomics of our cohort or due to HP patient positive patients treated in primary care rather than referred for endoscopy. Improved use of guidelines and dialogue between primary and secondary care should improve patient selection for the endoscopic investigation of dyspepsia.

Disclosure of Interest None Declared.

# **REFERENCES**

- 1. Dyspepsia: management of dyspepsia in adults in primary care, 2004
- 2. BSG: Dyspepsia management guidelines, 2002

## PTH-168 ORGANISATION OF AN ACUTE UPPER GASTROINTESTINAL **BLEED SERVICE IN AN AVERAGE DISTRICT GENERAL** HOPSITAL

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Introduction Acute Upper Gastrointestinal Bleed (AUGIB) continues to carry appreciable morbidity and mortality. Organisation and deliverance of emergency care incorporating therapeutic endoscopy is pivotal in the management of AUGIB. Recent British Society of Gastroenterology and NICE guidelines have recommended the introduction of a dedicated AUGIB service in institutions managing patients presenting with AUGIB. Since 2011 we set up a dedicated AUBIG service delivered by a team of gastroenterologists, surgeons and endoscopy support staff. The service currently runs 24 hrs a day and seven days a week.

Methods Through clinical coding, endoscopy and theatre database we identified all cases of AUGIB for the first year of the service. Data was collected retrospectively from patient case notes, endoscopy reporting system and emergency theatre records.

Results 77 cases of AUGIB were identified with gender distribution of 56% males and 44% females. The median age of presentation was 67 years (range 20-93 years). Most cases of AUGIB (71%) were acute admissions with the rest occurring among in-patients.

A major improvement in the service is that all patients had at least one endoscopy during their presentation with most endoscopies (67%) performed within 24 hours or less and a further (26%) carried out 2-7 days. Endoscopies were performed by gastroenterologist (66%), surgeons (20%) and specialist registrar (14%). About a third (27%) had out of hours (OOH) emergency endoscopies and the remaining procedures were carried out in the dedicated inpatient lists. Majority (62%) of the OOH procedures were done at the weekends.

A notable shortcoming was poor risk assessment (18%) at presentation although retrospective risk scoring revealed a median Rockall Score of 3 (range 1–5). At presentation only 8% of patients were admitted to the dedicated gastroenterology ward before the first endoscopy while the majority (52%) were managed initially on the acute medical wards and discharged or subsequently admitted to the gastroenterology ward.

**Conclusion** The introduction of a dedicated service has improved the management of AUGIB in our hospital serving a population of 325,000 particularly during the OOH. The findings of this retrospective audit showed an AUGIB service collaborating medical gastroenterologists and surgeons is workable and sustainable in the setting of a district general hospital.

To further improve the service a dedicated AUGIB clerking proforma incorporating Rockall risk score assessment is being consid-

Disclosure of Interest None Declared.

# PTH-169 CLINICAL UTILITY OF A RAPID PCR ASSAY AND TRADITIONAL CCNA TO DETECT CLOSTRIDIUM DIFFICILE INFECTION (CDI) - COMPARISON TO CLINICAL DIAGNOSIS

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Introduction Clostridium difficile causes nosocomial antibiotic associated diarrhoea, with a range of mild to severe disease, pseudomembranous colitis, toxic megacolon and potentially fatal outcome. The diagnosis of this disease in clinical laboratories has traditionally been performed by cell culture cytotoxin neutralisation assay (CCNA) or by toxin A/B detection using EIA. The routine test in our laboratory is CCNA, which takes 24–48 (–72) hours; it is labour intensive, requires specialist facilities, expertise and is not done out of hours. There are other rapid tests now available including GDH as well as molecular (real-time PCR) assays.

**Methods** This study was designed to assess the clinical relevance of a fully automated, random access PCR assay, Xpert C. difficile, for rapid identification of C. difficile infection (CDI) in comparison to clinical diagnosis as the reference method. During March to September 2011, 1040 samples from inpatients in 2 hospitals, with suspected CDI, were prospectively tested by routine cell culture cytotoxin neutralisation assay (CCNA), PCR (GeneXpert, Cepheid), and a GDH/Toxin EIA (Premier, Launch Diagnostics). Cytotoxicity was assessed after 24 and 48 hours. All PCR positive patients (and controls) were reviewed by a multidisciplinary team (Gastroenterologist, Microbiologist, infection control nurse, requesting staff).

Results C. difficile detection rates were 10.8% (PCR), 6% (CCNA) and 13.8% (GDH). 974/1035 (94.1%) samples showed concordant

CCNA and PCR results, 89% (886/985) were concordant for CCNA, PCR and GDH and 94.4% (930/985) showed concordance between GDH and PCR. With clinical diagnosis as a reference, PCR was 99.1% sensitive, 98.9% specific, with PPV 91.9% and NPV 99.9%. Surprisingly, CCNA on a single sample was only 51% sensitive, 99.4% specific, PPV was 91.9%, NPV 94.3%. GDH sensitivity was 83.8%, specificity 94.5%, PPV 64.7% and NPV 97.9%. 59 more samples were positive by PCR than CCNA (62); 54/59 were clinically CDI.

**Conclusion** We found PCR to be a more sensitive method than CCNA and GDH (sensitivity 83.8%) for the detection of C.difficile infection (CDI). In contrast to using CCNA or an algorithm that includes GDH, the use of Xpert C.difficile PCR allows us to provide accurate and rapid (mostly same day) results to the clinicians.

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## PTH-170 FIVE YEAR FOLLOW UP OF PATIENTS WITH **ASYMPTOMATIC IRON DEFICIENCY ANAEMIA FOLLOWING** NORMAL INVESTIGATIONS IN A NURSE LED PROTOCOL **DRIVEN PATHWAY**

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Introduction Systematic investigation of patients with iron deficiency anaemia has been proven to yield a 12% diagnosis for colorectal cancer and 5% for coeliac disease<sup>1</sup>. Following publication of BSG guidelines, a nurse led protocol driven pathway was established at a district general hospital.

We report the 5-year outcome of 122 patients with normal investigations entered onto this pathway and assess its efficacy in identifying GI pathology. This is the largest study to date in this field, and no other nurse led 5 year follow up studies have been published.

Methods Between 2001 and 2004, 271 cases of asymptomatic iron deficiency anaemia were referred to the pathway and 212 met the inclusion criteria. From initial investigations, 43% were diagnosed with an underlying cause of anaemia and we have now followed up the remaining 122 patients for a minimum of 5 years.

Data collected at presentation included: haemoglobin, mean cell volume, ferritin, creatinine, iron-binding capacity, CRP, drug use (aspirin, clopidogrel, warfarin, NSAIDs), co-morbidities, smoking status, BMI, and the results of investigations carried out (gastroscopy, colonoscopy, barium enema). Iron supplementation was recorded and haemoglobin level at 3 months.

Patients were divided into 2 groups: those that died or developed malignancy and those that were well at 5 years. The data was analysed for significant differences between the 2 groups and to identify risk factors for poor prognosis.

Results Analysis of primary and secondary care records generated outcome data of 97% (118) patients. 69% were female and 31% were male, mean age of 69 years.