Abstracts

Line management (as per NICE guidance) and with faecal calprotectin (FC) level less than 150 ug/g directly to a dietitian-led clinic. The pathway and service aim to provide effective and expert management for this patient group, whilst reducing invasive investigation and referrals into secondary care gastroenterology clinics.

Methods GP requests for faecal calprotectin testing and subsequent referral to the RIBS service were audited over a 2 year period. Outcomes from intermediate FC results and referrals for lower GI endoscopy were audited annually for 6 month and 1 month periods retrospectively.

Results GP’s requests on average 31 FC tests/month in 2016, rising to 54/month in 2017. 76% of these returned a negative (<50 ug/g) or intermediate (50–150 ug/g) result, with 60% of these patients being referred to the RIBS service. Proportion of patients with an intermediate FC referred directly to the RIBS service were similar in both audit periods (2016: 29%, 2017: 29.5%). Seven patients with an intermediate FC result had a high result at re-test three months later. These cases were discussed within MDT and referred for lower GI endoscopy as appropriate. Colonoscopy audit over a 1 month period prior to service set-up (May 2015) showed 100 patients<45 years had lower GI endoscopy, 35% of these met ROME criteria for IBS. One year later, 106 patients<45 years underwent lower GI endoscopy over one month with only 18% meeting ROME criteria for IBS. This figure fell again to 10% in May 2017. In all cases where symptoms met ROME criteria for IBS, lower GI endoscopy showed no major pathology. Over 300 direct access referrals have been managed through this pathway to date with 70% patients reporting satisfactory relief of IBS symptoms following dietary manipulation. Patients who do not respond are discussed in a consultant-led MDT with advice, review or investigation arranged as appropriate.

Conclusions The integrated care pathway and direct access RIBS service has led to a reduction in patients with ROME criteria IBS referred to GI consultants and for costly invasive lower GI investigation. GPs adhere to the care pathway and request FC tests appropriately as demonstrated by the 76% return of negative or intermediate results. Our data supports the validation of a higher negative FC cut off of 150 ug/g; no cases of IBD have been missed in this patient cohort to date. We continue to recommend ongoing education and audit prospectively to ensure optimisation of the service.

Method In this ongoing pragmatic, parallel group, open label, randomised controlled trial, adult patients presenting to hospital with acute diarrhoea (<14 days) were recruited and randomised 1:1 to receive either POCT with the FilmArray GI panel or to routine clinical care. Results of POCT were communicated to clinical and infection control teams. The primary outcome measure was duration of time in a side room and secondary outcome measures included turnaround time, proportion of patients with a pathogen detected, and proportion of patients correctly de-isolated. Statistical analysis was done using GraphPad Prism Version 7.

Result We performed an interim analysis using data collected from the first 100 patients. The groups (n=50) were well matched in terms of baseline characteristics. 34% of patients had inflammatory bowel disease. The median [IQR] turnaround time for results was 1.7 [1.6–2.3] hours in the POCT group and 6.1 [4.9–8.4] hours in the control group, p<0.0001. Pathogens were detected in 4% of patients in the POCT group and 20% in the control group, p=0.0057. The median duration of side room isolation was 2.1 [1.0–4.3] days in the POCT group (for those testing positive) compared to 2.7 [1.8–5.0] days in the control group, p=0.037. For those testing negative for pathogens, this was 1.4 [0.6–3.8] days in the POCT group versus 2.7 [1.8–4.9] days in the control group, p=0.0066. 62% of pathogen-negative patients were correctly de-isolated in the POCT group versus 20% in the control group, p=0.0012.

Conclusion POCT using the FilmArray GI panel resulted in a rapid turnaround time for results and an increase in the proportion of patients with pathogens detected. POCT was associated with a reduction in the duration of side room use. If these benefits are maintained in the full study and supported by health economic analysis, molecular POCT for GI pathogens should become standard of care.

Impact of point-of-care testing for pathogens in patients with suspected gastroenteritis: A randomised controlled trial

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Introduction Patients presenting to hospital with diarrhoea are routinely isolated as an infection control measure whilst awaiting results of laboratory stool tests which typically take several days. Novel rapid molecular testing platforms, which test comprehensively for gastrointestinal (GI) pathogens, generate a result in 1 hour, making them potentially deployable as point-of-care tests (POCT). Their use may therefore rationalise the use of isolation facilities.

Methods In this ongoing pragmatic, parallel group, open label, randomised controlled trial, adult patients presenting to hospital with acute diarrhoea (<14 days) were recruited and randomised 1:1 to receive either POCT with the FilmArray GI panel or to routine clinical care. Results of POCT were communicated to clinical and infection control teams. The primary outcome measure was duration of time in a side room and secondary outcome measures included turnaround time, proportion of patients with a pathogen detected, and proportion of patients correctly de-isolated. Statistical analysis was done using GraphPad Prism Version 7.

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IBD psychological support pilot reduces IBD symptoms and improves psychological wellbeing

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Introduction Growing evidence suggests that psychological stress can increase activity of inflammatory bowel disease (IBD)1,2,3,4. However there is insufficient access to psychological support services for IBD patients in the UK5. Current evidence demonstrates that psychological therapies improve quality of life in the short term, and supports the efficacy of antidepressant medication6 in improving disease activity.

Methods Our digestive disease unit at a major teaching hospital secured funding to pilot a Psychological Support Service for Patients with Inflammatory Bowel Disease (PSSPIBD) to provide outpatient psychological support to patients with IBD.

Between October 2015 to March 2017, 85 patients were assessed and treated by PSSPIBD, staffed by a psychiatrist (0.1WTE) and clinical health psychologist (0.3WTE) with special interests in IBD. Referrals were made for patients experiencing psychological difficulties related to their IBD by gastroenterologists, IBD nurses, pharmacists and stoma nurses.
**Results** The most common reason for referral into the service was support adjusting to IBD and its symptoms (e.g. pain, fatigue, incontinence, tolerating uncertainty) (55%), followed by anxiety (30%) and depression (10%). 75% of patients seen were female. We demonstrated improvements across a balanced scorecard of four dimensions: clinical effectiveness, service utilisation, patient satisfaction and referrer satisfaction.

Clinical effectiveness was measured through the use of validated questionnaires.

Short IBD Questionnaire (SIBD) scores pre- and post- psychological therapy showed significant reductions in symptoms across all domains (p=0.003) with notable improvement in systemic symptoms (fatigue and energy levels) and emotional and social functioning. Statistically significant improvements (p=0.003) were seen in Patient Health Questionnaire (PHQ-9) depression score, and there was a strong trend of improvements in anxiety scores, using Generalised Anxiety Disorder Assessment (GAD-7) and quality of life (p=0.061 using EuroQol). Patient and referrer satisfaction with the PSSPIBD was very high: 90% of patients and all referrers completing the feedback rated the service as excellent. Initial data comparing service use in one year before and after engaging with PSSPIBD found a statistically significantly reduction in outpatient appointments by 62.5% (p=0.008) and in CT and MRI scans by 76.2% (p=0.05).

**Conclusions** The pilot PSSPIBD demonstrated significant improvements across all domains, notably symptomatology and service utilisation. There should be increased access to integrated psychological support services with further evidence gathered of success across all domains.

**OWE-033 INTEGRATING MAJOR HAEMORRHAGE POLICIES: ENDOSCOPY AND LABORATORY WORKING TOGETHER**

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**Introduction** Major haemorrhage is a common medical emergency in endoscopy rooms where on site critical care support is not always standard. Successful management includes resuscitation, appropriate and safe use of blood products alongside effective communication between clinical and laboratory teams.

NICE, the National Patient Safety Association and the Serious Hazards of Transfusion organisation all specifically refer to the need for major haemorrhage protocols.

NHS Tayside’s Blood Transfusion Service launched an updated major haemorrhage policy (MHP) in May 2017. We developed a protocol that combines practical clinical response within both the endoscopy room and the laboratory.

We wish to describe the development and implementation of this policy.

**Methods** A time and space study was completed looking at staff roles within the endoscopy room, typically endoscopist, nurse (RN) and Health Care Assistant (HCA); and the unit as a whole during major GI bleeds. Barriers to effective resuscitation, timely provision of blood products, communication with laboratories/other clinical teams were identified.

**Results** We identified variation in the following key areas:

1. Staff roles and numbers in room
2. Communication between nursing, medical and laboratory teams
3. Need for a team leader to free up the endoscopist

The following protocol was developed.

**Endoscopist** Declares major haemorrhage.

Assesses haemostasis/patients global status, requests additional clinical support (eg anaesthetics).

**Nursing** Room RN activates in-room buzzer triggering protocol.

Three additional RNs and 1 HCA supplement the original room team.

**Laboratory** ‘2222’ call triggers the laboratory and blood bank to prepare and dispatch: 4 units packed red cells, 4 units fresh frozen plasma and 1 pool of platelets directly to the endoscopy unit by a dedicated porter. The lab remains on standby as required.

The policy’s introduction was supplemented by training sessions including simulated scenarios to increase staff awareness, confidence and responsiveness to major haemorrhage.

**Conclusions** We believe this protocol is the first to give a practical description of a process dovetailing clinical and laboratory response to major haemorrhage. Having a clearly defined team leader and standardising individual staff roles allows streamlined communication with other clinical groups in a non critical care environment.

**ADTU-09 RECRUITMENT AND RETENTION OF BLOOD DONORS AMONG PATIENTS WITH HAEMOCHROMATOSIS: 5 YEARS OF EXPERIENCE**

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**Introduction** In patients with haemochromatosis, the current standard treatment is by removal of iron by regular venesection. EASL guidelines recommend that, in uncomplicated haemochromatosis patients, blood from therapeutic venesection should be made available to national blood transfusion services. A scheme to facilitate blood donation in these patients was trialled, and here we describe 5 years’ experience of this pilot.

**Methods** A specialist haemochromatosis clinic was developed. In this clinic, an information leaflet and self-referral application to the blood services were provided to those patients interested in becoming blood donors. These applications were countersigned by the responsible physician and upon receipt of the form, the local blood service team contacted patients to determine their eligibility. Data on new referrals and resultant donations from the clinic were collected.

**Results** Following implementation of this Haemochromatosis Pathway, 169 patients have been seen in the dedicated clinic (109 male; median age 56). The majority (156) had uncomplicated haemochromatosis. From these, 66 were potentially...
eligible for blood donation; 58 were ineligible due to age or co-morbidity and 32 were in the induction phase and therefore not eligible.

Prior to the introduction of this service there were 9 regular blood donors amongst this eligible cohort.

56 (85%) of the potentially eligible patients expressed interest in blood donation and 54 (81%) applied. The blood service excluded 6 patients for medical reasons and 8 have not attended. This new pathway has therefore resulted in 31 new, and 40 in total, regular blood donors. This cohort has been responsible for the donation of 334 units of blood, 236 of these coming from new donors.

Conclusions 3 year follow-up of this blood donation facilitation service has confirmed that patients with haemochromatosis are willing to be involved in regular blood donation. The number of units donated from these patients has significantly contributed to the regions supply of red cells and could help alleviate ongoing national shortages. The current pathway in Newcastle is now recognised as the "gold standard" in blood donations amongst patients with haemochromatosis. National rollout of this pathway may have significant impact on the availability of this highly valuable commodity.

**ADTU-10 THE SETTING UP AND RUNNING OF A GASTROENTEROLOGY VIRTUAL OUTPATIENT CLINIC FOR NEW REFERRALS**


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Introduction The outpatient services are under increasing pressure across the NHS. A novel approach to virtual outpatients was trialled in this study. The aim was to provide virtual triage and virtual co-ordination of investigations and care of gastroenterology GP referrals, avoiding a physical outpatient visit when deemed clinically safe and appropriate.

Methods All gastroenterology referral, excluding urgent or two-week wait referrals, from Barking, Redbridge and Havering CCG’s were included. To support local consultant capacity, we adopted a unique approach by recruiting NHS gastroenterology consultants from around the country to boost local capacity virtually. They were able to review gastroenterology referrals via the bespoke IT platform and work in their own time to meet the demand of the area.

All referrals were initially triaged by a gastroenterology consultant. The consultant could triage the patient to: GP advice only (discharge), outpatient clinic if patients were deemed too complex, and Virtual Hospital pathway. The Virtual Hospital pathway involved a combination of investigations or telephone consultations by junior doctors. All the results were reviewed by the consultant. The outcomes included discharge to GP, further investigations, or outpatient clinic review, for example, for chronic disease management.

Results A total of 1189 of patients were referred to the service from March 2017-January 2018. Of these, 21.1% were discharged to GP with simple advice, 14.97% were deemed too complex and reviewed in outpatient clinics, and 63.84% entered the virtual hospital pathway. The average time taken for the initial consultant triage was 5 hours and 2 min compared to several weeks for an initial outpatient appointment. 99% of referrals were triaged within 48 hours. 2.5% of routine referrals were upgraded to urgent and 1% were upgraded to cancer pathway. Of the 189 patients discharged from the Virtual Hospital, the average time for patients to complete the pathway was 10.11 weeks. No clinically adverse incidents have been reported. The service has been well received by patients, and ~1% of patients requested an outpatient visit.

Conclusions The virtual hospital has created a safe and efficient healthcare pathway, utilising technology that significantly reduces hospital footfall, reducing patient waiting times and delivers system-based cost savings. We have identified a sustainable solution to improve and meet increasing demand despite limited capacity within the NHS. The Virtual Hospital demonstrates that majority of patients under virtual specialist care can be managed within the community setting or virtually. Early triage also helps reduce clinical risk for patients who would have otherwise waited several weeks for a clinic appointment.

**PTU-073 A THOUSAND CAPSULES: SIX YEARS’ EXPERIENCE FROM A DISTRICT GENERAL HOSPITAL IN ENGLAND**

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Introduction The diagnostic role of capsule endoscopy CE has rapidly evolved over the past two decades and is currently regarded as one of the gold standard test to investigate the small bowel. Although most publications are from tertiary referral centres, there is a paucity of data on feasibility and clinical utility of CE in a district General hospital (DGH) setting in the United Kingdom (UK). We aimed to evaluate the capsule endoscopy service in our Hospital since it has been established in 2011.

Methods We retrospectively reviewed and analysed the CE reports of all patients who had the test between April 2011 and April 2017. Exclusion criteria: Retained capsule, difficulty to swallow capsule and inadequate views due to poor bowel prep. We assessed demographics, indications, outcome, complications and completion of the test among the whole cohort. We also looked at the diagnostic yield (DY).

Results In the aforementioned period, Small bowel CE was performed on 1029 patients. 71 (6.9%) patients were excluded as per exclusion criteria. 958 (528F/430M; Mean age 59 years, Range: 17–92) patients’ reports were reviewed and analysed. OGIB was recorded as the main indication 81.4% (iron deficiency anaemia, IDA: 74.9% (n=718), overt bleeding 6.5% (n=62)). Other indications included investigation of small bowel Crohn’s disease (CD) 10.3% (n=99), weight loss: 1.7% (n=16), angiodysplasia: 1.3% (n=12), abdominal pain: 2% (n=19) and others: 7.2% (n=69). Complete small bowel examination was achieved in 902 patients (94.2%). 56 patients (5.8%) had sub optimal views due to rapid transit time. The test was normal in 61% (n=581). Small bowel angioectasia was detected in 13.8% (n=132). Other findings included aphthoid ulcers: 11.8% (n=113), inflammation and oedema suggestive of Crohn’s disease in 8% (n=76), polypoidal lesion 1.5% (n=17), colonic pathologies 1.5% (n=14) and others 5.8% (n=56). Patients with suspected small bowel Crohn’s disease had initial patency capsule to prevent lodgement. Retention was recorded in 3% of patients (n=3) due to strictures. One patient’s stricture improved with