both the patient and will reduce costs to the trusts from unnecessary laboratory tests. In addition, by following the algorithm below, for patients with a qHBsAg <1000, this will lead to a further saving of £100/patient over a 6 year period, equivalent to £31 100 for our cohort.

Abstract PTU-136 Table 2 Projected cost savings for 10 patients over 6 year period following introduction of qHBsAg

qHBsAg > 1000		
Test	Frequency of tests over 6 years per patient	Costs (£)
Fibroscan	3	1320
HBV DNA	3	1950
ALT	12	120
COST		3390
qHBsAg < 1000		
Fibroscan	2	880
HBV DNA	2	1300
ALT	6	60
qHBsAg		140
COST		2380

Conclusions Implementation of the EASL guidelines would reduce the frequency of blood tests needed as well as the frequency of clinic follow ups. This is therefore much more beneficial to the patient. In addition, this would produce a cost saving to the trust estimated to be £100 per patient over a 6 year period for this cohort of patients

PTU-137 THE NEED FOR ANAESTHESIA SUPPORTED ERCP IN A DISTRICT GENERAL HOSPITAL

Alexander Smith*, Juliette Loehry, David Sheppard. *Salisbury District Hospital, Salisbury, UK*

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Introduction Updated guidance on the management of common bile duct stones (CBDS) published by the BSG at the start of 2017 highlighted the need for ready and prompt access to anaesthesia supported ERCP. Furthermore, it is commented that likelihood of therapeutic success is higher with anaesthetic support. Our unit has no formal provision for anaesthesia supported ERCP and as such this is currently performed on an ad hoc basis. Through analysis of our ERCP database since 2014 we demonstrate the benefits of anaesthesia supported ERCP and the need for a dedicated service.

Methods We performed a retrospective analysis of all patients who underwent ERCP in our unit from January 2014 to December 2017. The data was obtained from an excel database employed in our unit specifically for ERCP. We identified all procedures done under GA and recorded the indication for GA. We also identified procedures performed under conscious sedation where there was intention to repeat under GA. For all procedures in the study period we recorded whether the procedure was successful by intention. This permitted comparison of procedure success between conscious sedation and GA support. We were then able to further analyse the conscious sedation cases brought back for a repeat procedure under GA. **Results** Over the study period 776 ERCPs were performed. 115 of these were done under GA (15%). The overall success by intention for all ERCPs was 80.5%. For those done under

conscious sedation this was 79.6% whereas for those done under GA the overall success by intention was 83.5%. The indications for GA were: Intolerance of sedation (46%), complex procedure (17%), acutely unwell (11%), not documented (12%), patient decision (8%), other (6%).

In our sub analysis there were 77 cases (10% of total) that required at least one further procedure under GA having had the initial procedure under conscious sedation. 33 of these had failed by intention under conscious sedation. Under GA 73% of these cases were then successful.

Conclusions The analysis of our unit's database is consistent with BSG guidance in that we demonstrated higher success rates with ERCPs done under GA. This effect is particularly highlighted in cases where ERCP failed under conscious sedation. We conclude that having ready access to anaesthetic support would undoubtedly reduce the need for repeat procedures. In addition we believe that provision of this service would generate significant financial savings to our trust in terms of day case tariffs as well as staff and equipment costs. Going forward, we are confident that this data will form the basis of a successful business case for anaesthesia supported ERCP in our hospital.

PTU-138 IMPACT OF NEW PRIMARY CARE FAECAL CALPROTECTIN (FCP) GUIDELINES ON SECONDARY CARE WORKLOAD AND FINANCE

Anet Soubieries*, Taylor-Jane Owen, Frances Boa, Andrew Poullis. *St Georges Hospital NHS Trust, London, UK*

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Introduction Faecal calprotectin (FCP) testing is a useful tool in the diagnostic work-up for differentiating Inflammatory Bowel Disease (IBD) from non-inflammatory bowel diseases. However, despite current support for its use, current guidelines lack clear instruction on cut off levels and diagnostic pathways. Most guidelines have a normal/abnormal cut off of 50micrograms/g. A potential new primary care guideline, proposed by the National Faecal Calprotectin Task and Finish Group, has been proposed but not yet implemented. In brief, the new algorithm states that if FCP is <100 micrograms/g, a diagnosis of IBD is unlikely; if the value is between 100–250micrograms/g, the test should be repeated; and if >250 micrograms/g a referral to gastroenterology is indicated. As well as helping to guide clinicians, it should also help to reduce the referral rates to secondary care for unnecessary invasive investigations, albeit with the introduction of repeat tests, potentially at the expense of increased laboratory workload. European studies have shown large financial benefit to FCP testing (Mindemark and Larsson). Locally 41% of referrals with an elevated FCP undergo colonoscopy.

Method All FCP tests requested from primary care that are served by a single pathology laboratory in South West London between 01/01/16 and 31/12/16 were collated. The data was then separated into categories according to both the cut-offs for existing guidelines and the potential new guidelines. Costs were calculated (£29 for a faecal calprotectin test and £680 for an adult colonoscopy(Mindemark and Larsson)) under both guidelines.

Results 6,962 FCP tests were requested, 1375 were excluded due to an insufficient sample. 5577 were included in the study. Under the current guidelines there were 936 referrals to secondary care, with 384 colonoscopies (£261 k). Under

the new proposals there would be 321 initial referrals, a 65.7% reduction. If all of these underwent colonoscopy calculated cost would be £218 k. 279 patients fell into the repeat testing category (costing £8 k). Introducing new guidelines would predict a saving of £43K on colonoscopy at a laboratory expense of £8 k.

Conclusions Implementation of the potential new primary care guidelines could result in markedly fewer referrals to secondary, with a small increase in laboratory workload, and could thus reduce the strain for secondary care services. In SW London this could save £35 k, and lead to a reduction in secondary care referrals but lead to an increase in primary care reviews.

PTU-139 THE NEED TO WORK 'SMART' ON ACUTE WARDS: COULD MOBILE PHONE APPLICATIONS BE THE ANSWER?

Haroon Khan*, Richard Warner, James Ritchie, Kush Sharma, Andrew Robinson, Marie McMahon, Dipesh H Vasant. *Salford Royal Foundation Trust, Salford, UK*

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Introduction Due to rising service pressures there is a need for innovation to optimise efficiency on acute medical and gastroenterology wards. Using smartphone applications to achieve this is an attractive proposition, but the utility of such technologies in clinical practice is unclear. Here, we report the experience of multidisciplinary staff after a pilot of a smartphone application at our hospital.

Methods Two acute medical wards (including a 24 bed gastroenterology ward), were selected for a two-week pilot trial of a smartphone application, Listrunner (Desma Health, Canada), during October 2017. Multidisciplinary team members including; doctors, pharmacists, and nurses, were given access to Listrunner via dedicated secure mobile devices. During daily consultant ward rounds and throughout the working day, all tasks were uploaded onto Listrunner. A Control Centre lead reviewed all uploaded tasks, identified non-medical tasks and either completed these or reassigned them to more appropriate team members. At the end of the pilot, staff provided feedback on their experience via a structured questionnaire.

Results During the pilot, whilst a total of 1080 tasks were uploaded onto Listrunner, 20% of these were non-medical tasks managed by the Control Centre. The most common tasks managed by Control Centre were chasing specialty reviews (42%) and chasing investigations (33%). At the end of the pilot, staff from both wards (n=19; Junior Doctors n=9, Nurses n=4, Consultants n=2, Pharmacists n=2 and Occupational Therapists n=2), completed questionnaires. Most doctors (73%) found Listrunner easy to use and 56% of juniors felt that it improved the relevance of their work by reassigning non-medical tasks. Overall, 42% rated Listrunner as 'useful', whereas 21% did not find it useful and 56% felt it improved communication between team members. When asked how Listrunner affected the conduct of ward work, the most popular responses selected were; 'it improved patient flow/discharges' (n=8), 'it speeded up allocation of tasks' (n=7) and 'it prolonged the ward round' (n=6). Whilst 12/19 (63%) felt it would be worth adopting Listrunner, 8/19 (42%) expressed some reservations about using smartphones in front of patients. The main barrier to adopting this technology more

widely (according to 58%) would be the staffing levels and related costs required to replicate the pilot experience.

Conclusions Our data suggest that a large number of tasks currently performed by doctors on acute wards are non-medical tasks. Smartphone technology appears to have potential to improve efficiency and streamline clinical activities, and our early experience may help inform future adoption and further development of this technology.

PTU-140 DOES A DEDICATED INFLAMMATORY BOWEL DISEASE (IBD) PHARMACIST CLINIC IMPROVE PATIENT SAFETY ?

¹Alan Steel*, ²Helen Morgan, ²Wei Tan, ²Vanessa Marvin, ²Mahmood Wahed. ¹The Royal Liverpool and Broadgreen University Hospitals NHS Trust, Liverpool, UK ²Chelsea and Westminster NHS Foundation Trust, London, UK

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Introduction Immunomodulator (IMM) drugs are widely used in the treatment of IBD. These drugs are very effective but also have well recognised, potentially serious, side effects including bone marrow suppression, liver toxicity and pancreatitis. There is a developing role in the UK for pharmacists utilising their specialist knowledge and skills in direct patient facing activities. We aimed to review the impact of the introduction of a specialist IBD pharmacist clinic in the management of IBD patients

Methods IBD patients seen by the IBD pharmacist were identified from our database. Clinical history, demographics, side effects, blood monitoring including TGN levels were recorded. The total number of actual and virtual clinic visits managed by the pharmacist was determined and the outcome of these visits was categorised.

The pharmacist responsibilities included initiation of IMM therapy for patients, medication counselling, prescribing, blood tests and follow up appointments allowing assessment of both clinical response and safety monitoring.

Results Between Nov 2015 and Feb 2017, 367 pharmacist out-patient appointments and 83 pharmacist virtual clinic reviews for 176 IBD patients (Crohn's disease 101, ulcerative colitis 69, IBDU 6) were undertaken. Of the 176 IBD patients, 164 (93%) were on thiopurines, 9 (5%) on methotrexate and 3 (2%) on ciclosporin.

Patients visits with the IBD pharmacist were for the following reasons: initiation of IMM treatment (including counselling, dose titration, 2 weekly blood monitoring for the first 2 months), 92 appointments (appts); post initiation, 95 appts; routine 3 monthly monitoring, 145 appts; intensive monitoring (e.g. dose escalation), 45 appts; and dose optimisation (combination therapy with allopurinol) 63 appts. 89% of clinic appts were managed independently by the pharmacist.

196 appointments resulted in 230 actions in patient management to be undertaken. These were: side effects assessed and pt reassured (37 actions); symptoms assessed and pt reassured (27); adherence support (15); dosing advice (8); dose increased (low thioguanine nucleotide (TGN)) (27), dose decreased (high TGN, abnormal blood tests) (32); allopurinol combination therapy (11); azathioprine switch to 6MP (5); other medication (12); physician review (15); other (34).

As a result of the IBD pharmacist in the clinic, a pharmacy helpline was developed with patients calling or emailing the pharmacist for advice in between clinic visits (122 calls/emails over 37 weeks).

Conclusion The IBD pharmacist has a key role in the management of IBD patients contributing not only to medication monitoring, prescribing, and safety but also allowing greater capacity in the physician's, often highly stretched IBD clinics.

PTU-141 A STUDY OF VARICEAL BLEEDING ACROSS CONTINENTS

¹Tom Walker*, ¹Stuart McIntosh, ^{1,2}Balasubramaniam Vijayan, ^{1,2}Andrew Fraser.
¹University of Aberdeen, Aberdeen, UK ²NHS Grampian, Aberdeen, UK

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Introduction The underlying aetiology and subsequent management of variceal haemorrhages is well documented in developed countries however, there is significantly less data from developing countries. The aim of this study was to compare the aetiology and management of patients presenting with variceal haemorrhage to Aberdeen Royal Infirmary (ARI) and its allied Felege Hiwot Referral Hospital (FHRH), Ethiopia.

Methods Two medical students spent their electives performing retrospective case note reviews of all patients presenting with variceal haemorrhage to FHRH between September 2013 and September 2015 and ARI in a similar time period between January 2013 and December 2015. Patients were identified from the Ward Register. Case notes were examined for patient demographics, symptoms, investigations, management and mortality data.

Results There were 66 patients presenting to FHRH and 129 patients presenting to ARI during the study period. Mean age at presentation was 37.7 (FHRH) and 57.4 (ARI). Aetiology of liver disease was significantly different between the 2 sites. At FHRH Schistosomiasis accounted for (33.3%), Hepatitis C (24.6%) and Hepatitis B (22.8%). At ARI, the most common aetiology was alcohol related liver disease (58.9%) followed by non-alcoholic fatty liver disease (14.7%).

Abstract PTU-141 Table 1 Number of patients in FHRH and ARI groups receiving stated treatments, rebleeding and mortality. (Percentage of total).

	FHRH	ARI	p
Antibiotic therapy	48 (72.7)	106 (82.1)	NS
Terlipressin	0 (0)	94 (79)	<0.00001
Blood Transfusion	55 (83.3)	49 (38)	<0.00001
Banding	21 (31.8)	91 (70.5)	<0.00001
Rebleeding within 2 years	8 (14)	40 (36.7)	<0.01
Mortality*	9 (13.6)	22 (17)	NS

*Figures for mortality for FHRH were hospital mortality whereas for ARI it is 6 week mortality.

Conclusions The underlying aetiology of liver disease resulting in portal hypertension and variceal haemorrhage is very different in the 2 hospitals studied. The management is also significantly different due in part to the resources available. Unfortunately admission haemodynamic data and Haemoglobin measurements were not reliably recorded for comparison. Clinical management of patients presenting with variceal haemorrhage at FHRH does not follow as stringent a protocol as

ARI which is likely to explain the higher rates of blood transfusions required in FHRH. Although these data suggests that fewer patients at FHRH represent with variceal bleeding over a 2 year period, many patients in the area cannot afford to attend hospital repeatedly resulting in under-reporting of cases. There is an ongoing knowledge exchange between University of Aberdeen and Bahir Dar University which will hopefully improve the access to appropriate educational and training resources to reduce the variability between the 2 centres

PTU-142 SCHEDULED DEEP SEDATION LIST IN ENDOSCOPY ARE MORE COST EFFECTIVE COMPARED TO TRADITIONAL EMERGENCY LIST

Chia Chuan Yau*, Rosanna Hiles, Sunil Sonwalkar. Department of Gastroenterology, Calderdale and Huddersfield NHS Trust, UK, Huddersfield, UK

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Introduction Sedation and analgesia are considered an essential component and are commonly used by endoscopists in endoscopic. The primary goal of a procedure involving sedation is to reduce a patient's anxiety and discomfort as well as improving their tolerability for the examination. Four stages of sedation have been classified ranging from minimal sedation (anxiolysis), moderate (conscious sedation), deep sedation to general anaesthesia. Deep sedation is defined as a stage where a patient can not be easily aroused but responds purposefully following repeated painful stimulus.² Traditionally patients who fail conventional sedation for endoscopy have heavier sedation in operating theatres, which requires occupying the emergency theatre and use of valuable theatre resources. With the dedicated deep sedation endoscopy services we are able to provide such a service as scheduled, which minimise the resource and reduce the cost.

Methods Huddersfield Royal Infirmary has been running a deep sedation endoscopy service on every alternate Tuesday since June 2014. The aim is to manage patients who tolerate endoscopic procedures poorly. From their database, 127 patients were included between August 2015 and August 2016. All patients were referred as either fast track, urgent or routine. Deep sedation endoscopy is conducted in the endoscopy department with anaesthetic set up and presence of endoscopist, endoscopy nurse, an operating department practitioner and anaesthetist. Induction agents include Propofol 1% and occasionally Alfentanil without intubation.

Results 127 patients were included from 140 procedures conducted. Each endoscopy conduct in the theatre day case cost £1280. Each endoscopy conduct in the endoscopy suite cost £817. The cost different per case cost £463. Average costs of saving for year 2015/2016 are £64 820.

Conclusions The introduction of a deep sedation session in the endoscopy department has effectively minimised the resources, improve the quality of endoscopy and proven to be cost effective. Guidelines for referring a patient for endoscopy under deep sedation should be anticipated to ensure resources are being used appropriately. Additional sessions are indicated to provide more services to reduce waiting times for patients who need the service.

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