Although Blatchford scores >2 were not a predictor of early outcome or the use of intervention, there is a correlation between Blatchford score and death over time. The Blatchford score is significantly greater in those with survival <4 weeks (14.6) compared with those ≤52 weeks (8.9, p<0.01). Likewise pre and post Rockall score is correlated with 52 week survival, (log rank test, p<0.01), but a poor indicator of the need to intervene at OGD, or death from GI causes. Indicating that both risk assessment scores are in fact surrogate markers of frailty rather than GI pathology.

All patients that died during admission had a CFS 7-9, and of the 15 (11%) patients that died <4 weeks 80% had CFS 7-9. Of the 23 patients who died <12 weeks 91% had a CFS of 7-9, Only 1/64 (1.5%) of patients with a CFS 1-3 survived <52 weeks.

Conclusion A Blatchford score ≤2 is strongly predictive of no AUGIB.

No scoring system predicts reliably whether intervention was required. A high percentage of those patients with poor outcomes during admission, and <12 weeks have a CFS of 7-9, in contrast to the excellent long term survival of those patients with a CFS 1-3.

The Rockwood CFS can help differentiate those patients who may have poor outcomes from undertaking emergency OGD, particularly in the short term, giving an opportunity to discuss and pursue a more conservative approach.

**Abstract PTH-42 Figure 1** Kaplan-Meier curves of survival, grouped according to the CFS

Improving Endoscopy Turnaround Time and List Efficiency through Implementation of a Multi-Faceted Improvement Plan

Christopher Mycko*, Rami Mohamed, Ahmed Hemy, Firas Elfourtia, John Keating, University Hospitals Morecambe Bay NHS Foundation Trust, UK

**Introduction** Maximising efficiency in endoscopy in the face of increasing service pressure, demand and complexity of endoscopy is imperative, particularly given the unparalleled impact of the COVID pandemic on service delivery and cancer pathways. Previous attempts to improve turnaround time through introduction of a turnaround nurse have been hindered by inadequate staffing. We aimed to improve list efficiency and improve turnaround time through the application of marginal gains theory and implementation of a multi-faceted improvement plan.

**Methods** Data was collected from electronic patient records and audit entries made by endoscopy staff. List ‘actual’ start and stop times were audited against ‘scheduled’ times. Turnaround time was assessed by a Quality Improvement (QI) Fellow, observing the endoscopy list and collecting information in real time. Results were discussed at a departmental meeting and a 4-stage improvement plan was devised and implemented. Re-audit data was collected to determine effect.

**Results** Preliminary audit data revealed 89% of list starts to be delayed. Lists ran beyond scheduled stop times in 73%. The improvement plan saw:

1) Review and re-organisation of the nursing rota.
2) Departmental commissioning of an external ‘change agent’ to conduct interviews with nursing and endoscopy managers and work with the QI fellow in designing a bespoke team-building day to address communication strategies and brainstorm perceived departmental issues hindering efficiency.
3) Introduction of an in-room debrief tool, to enhance situation awareness and teamwork.
4) Implementation of a multi-modal ‘Nurse-led consent’ training programme, combining didactic and in-situ scenario-based simulation training, measuring and recording competence using Directly-Observed-Procedural-Skills (DOPS) assessments.

Re-audit data revealed improved list finish-times (49% cf. 27%) although delays in start-times remained. Median turnaround time was 10 minutes, a major improvement from a turnaround time in 20.8 minutes in 2018.

**Conclusions** It is recognised that single improvement interventions are unlikely to result in significant, sustainable change. The aggregation of marginal gains theory dictates that small, marginal gains can add up to a remarkable improvement. Our 4-stage improvement plan saw the implementation of a revised nursing rota and a bespoke team-building day in tandem with the introduction of a ‘Nurse Consent’ training programme and a novel team debrief tool. In this way, we were able to implement change, whilst simultaneously assessing and addressing staff morale, engage key stakeholders and as a result significantly improve turnaround time. We plan to streamline admission and patient preparation processes to further address delayed start times in future cycles of the improvement project.

**References**

Methods

Quality improvement methodology adopted with the aim to apply the BSG AUGIB Care Bundle at University Hospitals of Morecambe Bay NHS Foundation Trust (UHMBT) to improve patient outcomes including rates of endoscopy within 24 hours, median length of stay and rates of mortality within 28 days of AUGIB.

Initially, pilot data collection was performed manually to understand baseline UHMBT care standards. 40 cases of AUGIB were randomly selected from January to December 2019 (pre-pandemic). Analysis included comparison between hospital sites and to national data in the National Confidential Enquiry into Patient Outcomes and Death 2015 report on gastrointestinal haemorrhage.2

Interventions were delivered from the start of April 2021. This included the development and integration of AUGIB Pathway (based on BSG AUGIB Care Bundle) into Lorenzo IT system in combination with the release of a new ‘Pan-Bay Consultant Bleeding Rota’. Awareness was raised with trust-wide comms including both email and IT system notification. In addition, presentations were delivered to both Emergency Medicine and Medicine Departments across both sites in April and May 2021.

An automated report has now been designed for prospective data collection via Qlik Sense software. The three main outcomes: rates of endoscopy within 24 hours, median length of stay and rates of mortality within 28 days of AUGIB; in combination with uptake of the AUGIB pathway are being recorded. The report has been extended to include AUGIB cases from 2018 until present to allow for a larger sample size (n = 404) and therefore a more accurate assessment of
the impact of the project. This has also allowed for assessment of the impact of the pandemic on our AUGIB service. PDSA cycles are in progress on a quarterly basis with the aim to complete 3 cycles by the end of 2021.

Results Pilot baseline data included a sample of 40 cases of AUGIB, which required urgent inpatient gastroscopy. 27 cases at Royal Lancaster Infirmary (RLI) and 13 cases at Furness General Hospital (FGH) were analysed. The sample consisted of 12 females and 28 males with a mean age of 67.2 years and age range 20 - 96 years. 30 cases were diagnosed in Emergency Department and 10 on Inpatient Wards. Mean time to gastroscopy was 43.9 hours; 37.4 hours at RLI and 57.38 hours at FGH. 65% of gastroscopies were performed within 24 hours; 78% at RLI and 38% at FGH. Median length of stay was 4 days; 3 days at RLI and 6 days at FGH. Mortality within 28 days of AUGIB was 10% (4 cases); 11.1% (3) at RLI and 7.7% (1) at FGH. Gastroscopy findings, rates of active bleeding, therapeutic interventions and haemostasis success were recorded for interest.

Data from the automated Qlik Sense report has so far included a sample of 404 AUGIB cases since Jan 2018 (cases during 2020, the height of the pandemic, were initially excluded from analysis). 242 cases at RLI and 146 cases at FGH. The sample consists of 164 females and 240 males. Mean time to gastroscopy were 83.5 hours at baseline and 85.1 hours so far post PDSA 1. Rates of endoscopy within 24 hours were 39.4% at baseline and 30.4% so far post PDSA 1. Median length of stay were 5 days at baseline and 4 days so far post PDSA 1. Mortality rate within 28 days of AUGIB were 5.6% at baseline and 4.1% so far post PDSA 1.

In terms of comparison between sites. RLI, the larger hospital within UHMBT, appears to be performing better than FGH in terms of rates of endoscopy within 24 hours and median length of stay.

Conclusions UHMBT data and national data were comparable, with ample room to improve the Morecambe Bay AUGIB service and therefore outcomes for our patients in line with BSG recommendations. It is too early following PDSA 1 interventions to draw any meaningful conclusions from the data. However, a positive result appears achievable with improvements ongoing via further quarterly PDSA cycles throughout the remainder of the year. The authors look forward to presenting these results with the wider BSG community towards the end of 2021. The impact of the Covid-19 Pandemic will also be included in the final data and presentation.

REFERENCES
