completed CDAT and Biagi questionnaires, with at least 4 duodenal biopsies taken from D2 in addition to at least one biopsy from the duodenal bulb. The presence (Marsh 3a or above) or absence (Marsh 0-II) of villous atrophy was used to determine the sensitivities of the tests.

Results 151 patients were recruited, 101 females (66.9%), median age 55.0 years, median duration of GFD of 72.0 months. Table 1 outlines the sensitivity and specificity of the CDAT questionnaire, Biagi questionnaire, IgA-TTG and IgA-EMA.

Conclusions The sensitivity of the CDAT questionnaire was not superior to IgA-TTG for predicting villous atrophy in patients with coeliac disease. However, the use of a combination of both Biagi and CDAT had a greater sensitivity than IgA-TTG and IgA-EMA ($p < 0.05$), but lower specificity ($p < 0.05$). Duodenal biopsy remains the gold standard, although these scores remain useful tools in the assessment of dietary adherence.

Abstract PTU-079 Table 1 | Comparison of tools used for adherence

	Sensitivity % (CI)	Specificity % (CI)	Positive predictive value% (CI)	Negative predictive value% (CI)
CDAT	52.0 (37.6–66.1)	69.8 (60.–7.5)	40.6 (28.8–53.6)	78.6 (69.6–85.5)
Biagi	22.4 (12.–7.0)	93.1 (85.6–97.0)	61.1 (36.1–81.7)	71.4 (62.8–78.8)
CDAT & Biagi	61.2 (46.–4.8)	69.3 (60.–7.2)	43.5 (35.–2.0)	82.2 (76.–7.0)
IgA-TTG	30.6 (18.7–45.6)	91.6 (83.6–96.0)	65.2 (42.8–82.8)	71.9 (62.8–79.5)
IgA-EMA	34.3 (26.7–42.7)	92.5 (84.8–96.7)	68.2 (45.1–85.2)	71.9 (62.9–79.5)

PTU-080 SHOULD WE ALL BE LOOKING FOR MARGINAL GAINS IN ENDOSCOPY EFFICIENCY?

¹Kathleen Bryce*, ¹Cheh Kuan Tai, ²Sam Murray, ¹Robert Fearn. ¹Homerton University Hospital NHS Foundation Trust, London, UK; ²North Bristol NHS Trust, Bristol, UK

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Introduction Demand for endoscopy in the UK has doubled in the last 5 years. In 2017, 64% of units failed to meet suspected cancer targets despite 66% of units having weekend lists and 27% outsourcing to external providers¹. UCL Cancer Collaborative (UCLCC) data showed demand can be met by improving efficiency. This is important in a resource-limited setting. Our Quality Improvement (QI) Project aimed to improve efficiency by improving turnaround time, non-attendance and on-the-day cancellations.

Methods The Endoscopy QI fellow, endoscopy unit manager and Gastroenterology service manager participated in the UCLCC Improvement Programme, and utilised QI methodology. We collected data from electronic patient records and scheduling system.

At baseline, we identified that underutilisation of lists was multifactorial. We introduced a turnaround nurse role to consent patients. Healthcare assistants (HCAs) and nurses were trained in cannulation. As poor bowel preparation contributed

to cancellations, we introduced telephone pre-assessment to educate patients. Finally, the administrative team sent text reminders before appointments.

Results At baseline, our unit performed an average of 7.9 points per list, out of a planned 10. On average, 28.5 patients per month had procedures cancelled on the day due to poor bowel prep or inadequate fasting. After the introduction of pre-assessment, it improved to 23.5 per month, saving 5 procedures which would have had to be rearranged. The average points performed improved to 9.3 points per list.

The average DNA rate has improved from 9% to 7% after the introduction of text reminders. After the introduction of the turnaround nurse and HCA cannulation, turnaround time reduced from an average of 18 to 9 minutes between procedures. This could save 90 minutes over a 12-point list.

Despite these improvements, only 41.6% of lists are booked for 1–2 points. Inadequate staffing numbers and late start times are contributing factors. A start time audit showed that only 5 out of 27 lists in a week started within 10 minutes of supposed start times, a target for further cycles of this QI project.

Conclusions Multiple small improvements in efficiency can achieve significant impact on productivity. Interventions focused on turnaround time can reduce underuse of list time. Patient-centred approaches to procedural preparation may reduce squandered appointments. Sustainability of these improvements is difficult to assess in the short term but will be promoted by the continuing QI fellow role and implementation of endoscopy QI champions from the administrative and nursing team.

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PTU-081 ENHANCING EFFICIENCY IN ENDOSCOPY UNIT USING THE 'TIME AND MOTION' MODEL

¹Shivkumar Budihal*, ¹Ms Isobel Esberger, ¹Ms Ann Fertilwell, ¹Mr Richard Canetti, ^{1,2}Adolfo Parra-Blanco, ^{1,2}Krish Ragunath. ¹Nottingham University Hospitals, Nottingham, UK; ²NIHR BRC at Nottingham University Hospitals and University of Nottingham, Nottingham, UK

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Introduction Endoscopy Units throughout the UK are facing unprecedented pressures due to increasing demand with limited capacity. Our aim was to explore strategies to improve our endoscopy unit's efficiency. In order to identify targets for improvement we sought to undertake a 'Time and Motion' study in the endoscopy unit. **Methods**

The study was conducted at Nottingham City Hospital Endoscopy centre between 13th January 2017 to 10th February 2017. Procedures included were gastroscopy, colonoscopy, sigmoidoscopy, bronchoscopy, therapeutic endoscopy and endoscopic ultrasound. From the time a patient reports to the reception to the time discharge was made the patients journey was mapped using the 'time and motion' principle. As part of this study, healthcare professionals and admission staff were asked to record the patient's journey through endoscopy unit accurately and complete templates which were kept with the patient's notes as they moved through the unit. Separate