Abstract PTU-31 Table 1

Colorectal polyps ≤ 10 mm (N= 370) 95% CI

Accuracy	91.8%	89.11% to 95.17%
Sensitivity	96.8%	93.94% to 98.64%
Specificity	75.8%	63.64% to 85.46%
NPV	86.2%	75.71% to 92.61%

Colorectal polyps ≤ 5 mm (N=280)

Accuracy	89.3%	85.68% to 92.29%
Sensitivity	94.2%	90.66% to 96.74%
Specificity	77.1%	67.93% to 84.77%
NPV	84.4%	76.57% to 89.92%

Recto-sigmoid polyps ≤ 5 mm (N=131)

Accuracy	89.5%	85.57% to 91.16%
Sensitivity	95.8%	92.47% to 97.98%
Specificity	78.2%	68.72% to 83.86%
NPV	90.9%	84.40% to 94.87%

Conclusion Real time optical diagnosis in trained endoscopists using WL and BLI along with BASIC meets PIVI criteria for diminutive rectosigmoid polyps.

PTU-32 NATURAL LANGUAGE PROCESSING DRIVEN COMPARISON OF SMALL BOWEL MRI AND CAPSULE ENDOSCOPY REPORTING FOR CROHN'S

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Introduction Small Bowel Capsule Endoscopy (SBCE) has an established role in the diagnosis/management of small bowel Crohn's disease (CD). Previous work has suggested its diagnostic yield is comparable to that of Small Bowel MRI (SBMR), but the narrative nature of reporting makes this challenging to evaluate formally.

Methods Anonymised data from the electronic health record were systematically extracted from patients undergoing SBCE at our hospital between Jan 2016- Jan 2020 and categorised according to indication. A subgroup with suspected or established Crohn's disease was identified, and corresponding SBMR and calprotectin results were obtained. Natural

Abstract PTU-32 Table 1

Small Bowel Test	'Crohn's' mentioned as the potential diagnosis	A positive finding of small bowel 'inflammation/ulceration' described	A positive finding of a 'stricture' described	Terms of uncertainty used in report conclusion	A positive finding of 'thickening' described
SBMR	3.75%(n=5)	6.02%(n=8)	3.01%(n=4)	11.28% (n=15)	6.77%(n=9)
SBCE	14.29% (n=19)	17.29%(n=23)	3.76%(n=5)	2.26%(n=3)	0.75%(n=1)
χ^2 & p	8.98 (p=0.003)	8.22(p=0.004)	0.12 (p=0.115)	8.58 (p=0.003)	6.65 (p=0.009)

language processing (NLP) techniques were used to compare the content and diagnostic accuracy of the reports.

Results Out of 1016 patients undergoing SBCE, 494 patients were suspected as having small bowel CD. Of this cohort, 133 underwent SBCE within 180 days of SBMR. 59 patients had corresponding faecal calprotectin (FC) measured (Mean: 318.12+/-138.39).

Tokenisation demonstrated that the style and content of the SBCE vs SBMR reports were very different in form and structure. The resultant 'word-bags' revealed that SBCE reports had significantly more 'diagnostic' weight, as described in Table 1:

Mean FC was significantly higher in patients with the term 'ulceration' reported on SBCE (703.5+/-353) compared to 'no ulceration' (265.2+/-148.38) ($p=0.044$) linking the word 'ulceration' with more severe disease descriptions.

Conclusions NLP is a powerful novel tool to compare narrative diagnostic accuracy between SBCE and SBMR not previously described. FC is positively correlated with small bowel 'ulceration' linking descriptive, diagnostic terms to biomarkers. According to our results, SBCE alone rather than SBMR is necessary to investigate small bowel Crohn's disease unless full-thickness stricturing is suspected from clinical symptoms.

PTU-33 DUODENAL INSPECTION DURING GASTROSCOPY; SHOULD THERE BE AN EXEMPTION IN THIS 'STANDARD' FOR BARRETT'S SURVEILLANCE?

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Introduction Current British Society of Gastroenterology (BSG) guidance recommends that Barrett's surveillance should adhere to a quadrantic 2 cm biopsy protocol, in addition to sampling any visible lesions (Seattle Biopsy Protocol – SBP)¹. This, together with photographic evidence of intubation of second part of duodenum (D2), are part of the BSG measurable standards for gastroscopy (OGD)².

In long Barrett's segments, OGD can be prolonged and uncomfortable for patients, especially as the majority are performed with anaesthetic throat spray and/or light sedation, which may affect endoscopist compliance with SBP.

We postulated that if endoscopists could be reassured that D2 intubation and examination did not alter management, then they would spend more time on careful oesophageal inspection and adherence to the SBP.

Therefore, we planned our audit to assess:

5. If adherence to SBP was affected by maximal length of Barrett's a) Occurrence of dysplasia and neoplasia b) If duodenal findings led to a change in management

Methods All patients undergoing Barrett's surveillance at Newcastle upon Tyne (an upper GI cancer referral centre) and South Tyneside Hospitals in North East UK between from 01/04/18 to 31/03/19 were identified. Their current and previous OGD reports were reviewed to determine demographics, Barrett's length, adherence to SBP, histology and duodenal findings.

Results A total of 1335 endoscopy reports were reviewed from 390 patients occurring between January 2008 and April 2020. 282 (72%) were males, with an average age of at

Abstract PTU-33 Table 1 shows degree of adherence to the SBP and the prevalence of dysplastic/malignant change

Length (cm)	N	Adherence to Seattle protocol (%)	Indefinite for dysplasia (%)	Low-grade dysplasia (%)	High-grade dysplasia (%)	Malignancy* (%)
<3	406	94.44	0.51	0.51	1.52	0
3 to 8	666	82.92	5.11	5.05	1.49	0.36
>8	182	76.57	4.80	2.28	4.35	4.59

*All malignancy were adenocarcinoma.

diagnosis of 61; 64 years old for females. Barrett's length was not recorded in 81 cases and excluded from the final analysis.

Duodenal inspection findings were: Normal - 96.2%; Duodenitis - 3.4%; Duodenal ulcer (clean base) - 0.4%

Conclusions Our audit demonstrates:

- As Barrett's length increases, the risk of high grade dysplasia and malignancy increases, but conversely, the degree of adherence to the SBP decreases.
- Duodenal inspection rarely identified significant pathology, and the management of the Barrett's oesophagus superseded the management any duodenal findings.

We conclude that in the absence of new symptoms suggesting duodenal pathology, Barrett's surveillance should be considered a distinct examination from a diagnostic OGD. The endoscopist should not need to inspect the duodenum, allowing more time to focus on careful oesophageal inspection and strict adherence to the SBP.

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PTU-34 SMALL BOWEL CAPSULE ENDOSCOPY: A COMPARISON AGAINST EUROPEAN SOCIETY OF GASTROINTESTINAL ENDOSCOPY PERFORMANCE MEASURES

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Introduction In 2019, the European Society of Gastrointestinal Endoscopy (ESGE) published its first performance measures⁺ for use by small bowel capsule endoscopy (SBCE) services. There is no published data on performance of UK SBCE services against these metrics. We aimed to evaluate the quality of the SBCE service at a district general hospital.

Method A standardised proforma was designed to capture the performance metrics listed by ESGE. Data was collected retrospectively from SBCEs performed between January 2019 and September 2020 at a single hospital site. Data was drawn from the SBCE procedure report, reported by a consultant gastroenterologist, using Miroview software, and from electronic medical records. Discrepancies were resolved by consensus by two reviewers.

Results 50 patients underwent SBCE in the study period; 1 was excluded from the study due to a referral error. We included 49 patients, of which 30 were male, with a median age of 62. Our SBCE service met 5/10 of the targets (Table 1). 'Lesion detection' was the performance metric met least

Abstract PTU-34 Table 1 SBCE service results against the ESGE quality metrics

Domain	Performance metric	Minimum (≥%)	Target (≥%)	Result % (n)
Pre-procedure	Indication for SBCE	95	95	100 (49)
	Adequate bowel preparation	95	95	86 (26)
	Patient selection	95	95	77 (7)
Procedure completion	Caecum/stoma visualised	80	95	84 (41)
Pathology identification	Lesion detection rate	50	50	39 (19)
	Timing of SBCE for overt bleeding	90	90	83 (10)
	Use of standard terminology	90	90	100 (49)
Pathology management	Reading speed of SBCE	90	95	0 (0)
	Appropriate referral for DAE	75	90	80 (4)
Complications	Capsule retention rate	<2	<2	0 (0)

often (39%), with 'use of standard terminology', 'indication for SBCE' and 'capsule retention rate' being the best met metrics (100%). Data on 'reading speed' was not collected.

Conclusion This analysis is the first to compare a UK SBCE service against newly-released ESGE quality improvement criteria, and the first to report patient-level data from any service.

We identified areas of good performance and targets for quality improvement. The Miroview application used by the service for recording reports encourages data capture for some of these quality metrics. Others, such as reading speed and adequacy of bowel preparation need to be more actively recorded when the procedure is reported. A proforma has been devised to assist high quality capsule reporting for the future.

The results from this single-centre study support the need for a larger, multi-centre UK study, assessing UK SBCE service quality on a national level.

⁺Spada C, McNamara Det al. Performance measures for small-bowel endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy*. 2019;**51**(06):574-598.

PTU-35 ENDOSCOPIC BIPOLAR RADIOFREQUENCY ABLATION FOR TREATING MALIGNANT BILIARY OBSTRUCTION: SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Early evidence suggests using radiofrequency ablation (RFA) as an adjunct to stenting may improve outcomes in patients with malignant biliary obstruction. RFA can be deployed either at the initial stent insertion or to clear tumour ingrowth in a previously placed stent.

Methods To assess the clinical and cost effectiveness and potential risks of RFA for malignant biliary obstruction.