Abstract PTU-18 Table 1 Endoscopy workforce by procedure

	Role	Endoscopists	Procedures	Median Endoscopist Annual Procedures (IQR)	Endoscopists performing fewer than recommended procedures annually*	Procedures by Endoscopists performing fewer than recommended annually (% total procedures)
OGD	Doctor	2937 (89.5%)	404529 (76.9%)	94 (23-218)	51.3%	
	NE	345 (10.5%)	121249 (23.1%)	243 (23-548)	36.2%	
	Total	3282	525778	101 (23-240)	49.7%	48566 (9.2%)
Colon	Doctor	2567 (89%)	357853 (83.8%)	110 (30-221.5)	47.1%	
	NE	317 (11%)	69327 (16.2%)	170 (16-343)	40.1%	
	Total	2884	427180	113.5 (28-232.25)	46.3%	42842 (10%)
FS	Doctor	2516 (87.3%)	141909 (55.2%)	37 (12-76)	na	
	NE	365 (12.7%)	115279 (44.8%)	173 (46-497)	na	
	Total	2881	257188	41 (13-90)	na	na
ERCP**	Total	316	20676	63.5 (13-104)	55.1%	4308 (20.8%)

* <100 for OGD/Colon, <75 for ERCP, nil minimum set for FS

**ERCP workforce comprised 313 doctors (99.1%) so no split by Doctor and NE performed

ERCPs, but these endoscopists perform only 9.8% of total procedures. Further analysis is required to compare KPIs for those not reaching and those exceeding the minimums. If other KPIs are low in the group not reaching the minimum additional intervention is required; conversely, if this is not the case, the appropriateness of the minimum standard should be reviewed.

PTU-19 THE ENDOSCOPY SAFETY ATTITUDES QUESTIONNAIRE (ENDO-SAQ): RESULTS OF A PILOT STUDY

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Introduction Across healthcare, evidence has demonstrated the influence of safety culture on patient outcomes. We developed a novel tool to measure endoscopy safety culture - the Endoscopy Safety Attitudes Questionnaire (Endo-SAQ). Our aims were to assess the safety attitudes of our workforce and tool validity in a pilot study.

Methods The previously validated SAQ was adapted by the core research team to reflect endoscopy-specific content. An expert group was convened to undertake a rating exercise to assess content validity. Endo-SAQ has 6 domains: teamworking, safety climate, job satisfaction, stress recognition, perceptions of management and working conditions.

The Endo-SAQ was administered to the staff at a tertiary UK endoscopy unit. Outcome measures were mean domain scores, percentage of positive responses per domain, content validity indices (item (I-CVI) and scale (S-CVI)) and internal consistency (Cronbach's alpha). Statistical analysis included descriptive statistics, paired samples *t* test, one-way ANOVA and Kruskal-Wallis tests.

Results 61 participants completed the survey (completion rate 88.4%). All domains scores were over 60%, indicating a positive overall response across domains. The percentage of positive responses per domain varied, with 'perceptions of management' and 'working conditions' both scoring < 40% (Table 1). This appears to be in line with the wider literature

Abstract PTU-19 Table 1 Mean scores (as%) and percentage of positive responses for each domain (SD = standard deviation)

Domain	Mean score (SD)	% positive responses
Teamworking	74.32 (20.75)	59.70
Safety climate	76.13 (16.16)	58.70
Job satisfaction	77.68 (19.07)	66.70
Stress recognition	73.51 (26.89)	66.70
Perceptions of management	64.35 (22.44)	33.90
Working conditions	66.78 (19.77)	38.70

in medicine and surgery. On subgroup analysis, nurses scored 'job satisfaction' ($p = 0.01$), 'perceptions of management' ($p = 0.002$) and 'working conditions' ($p = 0.004$) significantly lower than endoscopists.

Five independent expert raters scored the Endo-SAQ for clarity and relevance. Four items had an I-CVI < 0.78 resulting in question rewording. Overall, S-CVI was > 0.90 indicating good content validity. All Endo-SAQ domains scored 'acceptable' or above for internal consistency.

Conclusions Endo-SAQ can detect safety attitudes and differences between groups. A national study is due to be undertaken utilising Endo-SAQ in addressing modifiable factors to support the workforce better.

PTU-20 NO SURVEILLANCE INTERVAL CHANGE WITH OPTICAL DIAGNOSIS OF SMALL POLYPS DURING BOWEL CANCER SCREENING COLONOSCOPY

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Introduction High confidence optical diagnosis (OD) in combination with a 'resect and discard strategy' during screening colonoscopy has advantages over histology alone, provided accuracy is maintained regarding surveillance intervals. Low confidence diagnoses, and/or polyps >1cm still require histology to complete individual patient polyp datasets and inform

Abstract PTU-20 Table 1 Accuracy of OD surveillance intervals compared with histopathology-derived intervals

Group	Confidence in optical diagnosis of polyps <1cm	Cases	Accuracy of optical diagnosis BSG surveillance interval
A	High confidence only	47.4% (65/137)	100% (65/65)
B	Mixed (high/low) confidence	52.6% (72/137)	98.6% (71/72)

surveillance intervals. We analysed the effect of OD on the accuracy of surveillance interval in a bowel cancer screening setting.

Methods Eight screening colonoscopists used an OD approach for polyps <1cm in 250 patients between Feb-Nov 2020 in the early phase of a prospective feasibility study (DISCARD3). After OD (white light+NBI) all polyps were resected and retrieved for histopathology where possible. Cases with polyps ≥1cm were excluded.

Cases were divided into 2 groups:

3. Group A: all polyps <1cm and only high confidence OD

• Group B: all polyps <1cm and mixed (high/low) confidence OD

Each patient had an OD surveillance interval assigned and this was compared to histopathology alone.

Results Of 205 patients, 137 were included (68 excluded: 36 had no polyps, 13 had large colorectal cancers, 10 flexible sigmoidoscopies, 7 did not consent, 1 abandoned procedure, 1 missing data). See Table 1.

65/137 (47.4%) patients had polyps <1cm and only high confidence OD (Group A). In 65/65 (100%) cases the OD surveillance interval matched the histology surveillance interval.

72/137 (52.6%) patients had polyps <1cm and mixed (high/low) confidence OD (Group B). In 71/72 (98.6%) cases the OD surveillance interval matched the histology surveillance interval. The one case where surveillance interval changed was a serrated polyp which was found to have dysplasia on histology.

The overall accuracy of OD surveillance intervals compared with histology surveillance intervals was 99.3% (136/137). There were no unexpected polyp cancer cases.

Conclusions OD of polyps <1cm, with a resect and discard strategy, does not appear to adversely affect BSG surveillance intervals across different levels of OD confidence.

PTU-21 SINGLE OPERATOR CHOLANGIOSCOPY – DOES CONSCIOUS SEDATION HAVE A ROLE? A RETROSPECTIVE SINGLE CENTRE EXPERIENCE

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Introduction Single operator cholangioscopy (SOC) has an important role in the diagnosis and management of biliary strictures and complex biliary stones. The evidence base is evolving, but with small numbers in reported studies. The majority of published literature discusses SOC under general anaesthetic; typically propofol. We compared successful stone

clearance, stricture assessment and safety under conscious sedation and propofol.

Methods A single centre retrospective analysis was performed of consecutive SOC over 8 years at Bristol Royal Infirmary (tertiary referral centre for SW England and South Wales). Parameters included sedation/propofol usage, stone clearance, electrohydraulic lithotripsy (EHL), histology, final diagnosis and complications.

Results Between Jan 2013 – Nov 2020, 471 SOC were performed on 352 patients (175f, 177m); mean age 65.7years (17-92), referred from 18 centres. 15 SOC were performed in 2013 compared to 99 in 2019 before restrictions from the COVID19 pandemic.

228 therapeutic SOC + EHL were performed for stone clearance, 79.8% (n=182/228) under conscious sedation (median fentanyl dose 150mcg; midazolam 7mg; comfort score 2). Complete stone clearance rose from 79.7% in the conscious sedation group to 89.2% in with propofol sedation, although the difference was not significant (p=0.19).

243 diagnostic SOC were performed, 88.9% under conscious sedation. Similar to therapeutic SOC, median fentanyl dose 150mcg; midazolam 7mg; and comfort score 2. Overall macroscopic assessment of strictures correlating with malignancy had a sensitivity, specificity and diagnostic accuracy of 90.2% (95%CI 82.7-95.2), 92.6% (95%CI 86.3-96.5) and 91.5% (87.0-94.8%) respectively. Diagnostic accuracy with macroscopic assessment was comparable between patients receiving conscious sedation (91.4%; 95%CI 86.6-94.9) vs propofol sedation (92%; 95%CI 74.0-99.0). Diagnostic accuracy with histological assessment appeared greater in patients receiving propofol sedation (95%; 95%CI 75.1-99.9) compared to conscious sedation (84.7%; 95%CI 78.5-89.6).

28 adverse events were recorded (5.9%), with post ERCP cholangitis (2.3%) and pancreatitis (2.1%) the commonest causes. Complications were marginally higher in patients receiving propofol sedation (6.8%; n=5/73) vs those receiving conscious sedation (5.8%; n=23/398) but the difference was not significant (p=0.72).

Conclusions This is the largest single centre retrospective analysis of SOC. Successful stone clearance is similar to results found in literature from smaller studies. There was a trend to greater successful stone clearance with propofol. Conscious sedation has previously been described as a risk factor for inadequate visualisation, but we found very similar high levels of diagnostic accuracy in both groups. Both were generally well tolerated with low rates of adverse events.

PTU-22 IDENTIFYING AND IMPROVING RATES OF POST-COLONOSCOPY COLORECTAL CANCER (PCCRC)

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Introduction Bowel cancer is the fourth commonest cancer in the UK; accounting for over 40,000 new cancer diagnoses and 16,000 deaths per year.¹ PCCRC (post-colonoscopy colorectal cancer) rate – cancer found within 6 to 36 months after a negative colonoscopy² – is improving. However, there remains a large variation amongst providers, with rates from 3.6- 9.3%.³ Early detection leads to improved outcome and