We have audited the effects of these interventions individually and overall.

Methods We compared data from 2013 to 2011 to assess the impact of the intervention undertaken.

1. To assess the impact of the change in vetting guidelines, we measured the number of patients with ASA grade 3 or 4 who underwent colonoscopy.
2. To assess the impact of the change in patient information, we measured the number of sachets of Klean prep taken by patients and the assessment of the quality of bowel preparation.
3. To assess the impact of certain operators stopping performing colonoscopy, we measured the number of operators (excluding trainees) who performed >100 colonoscopies per annum and those with caecal intubation rate (CIR) >90%.
4. To measure the combined effect of the interventions, we looked at the combined CIR of all operators within the department.

Results

Abstract PTH-019 Table 1

Measure	2011	2013	P value
Number	1563	1338	
Patients ASA grade 3 or 4	47 (3.01%)	33 (2.47%)	
Good/excellent bowel prep	1206 (77.16%)	192 (12.28%)	
Poor bowel prep	1060 (79.22%)	147 (10.99%)	
Mean dose of Klean prep	3.55	3.71	**<0.0001**
Operators >100 per annum	6 of 11	5 of 6	
Operators CIR >90%	7 of 11	4 of 6	
Overall CIR	**90.21%**	**94.54%**	**<0.0001**

Conclusion All three interventions have caused improvements in measured outcomes. Fewer patients with significant co-morbidities are undergoing colonoscopy. The bowel preparation has improved and there is a statistically significant increase in the mean dose of Klean prep taken. The changes in the number of operators undertaking colonoscopy have allowed fewer operators to do more procedures. Intuitively, practice makes perfect and this along with the other interventions has significantly improved the combined CIR of all operators from 90.21 to 94.54% (p= <0.0001).

The implementation of interventions outlined has been rewarding and is an exemplar to other endoscopy units on how to improve key quality outcomes of their colonoscopy practice.

Disclosure of Interest None Declared.

PTH-020 RETROSPECTIVE COHORT STUDY TO DETERMINE THE OPTIMUM FREQUENCY OF SURVEILLANCE COLONOSCOPY FOR PATIENTS WITH INTERMEDIATE GRADE COLORECTAL ADENOMAS IN THE UK

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Introduction Colonoscopic surveillance for colorectal cancer (CRC) is widely practiced; however, there remains a lack of evidence to determine appropriate surveillance intervals for individuals at intermediate risk (IR) of CRC. Due to the considerable strain on endoscopic resources and serious cost implications, it is vital to optimise surveillance strategies to ensure colonoscopy is targeted at those who will benefit most. This study examines the frequency of surveillance in patients with intermediate grade (IG) adenomas, aiming to assess whether there is significant heterogeneity in the detection of advanced neoplasia within this group, according to baseline findings and surveillance interval length.

Methods A retrospective cohort design was used in a secondary care setting. 18 UK hospitals were selected based on the availability of electronic patient data suitable for automatic extraction. Endoscopy reports containing Systematised Nomenclature of Medicine codes or words relating to adenomas were identified and linked to corresponding pathology records. These were extracted from hospital databases before being pseudo-anonymised, formatted and uploaded onto an APEX database to be interpreted and coded. Patients were excluded from the analysis if they had no IG adenomas, no baseline colonoscopy, any missing exam dates or conditions affecting CRC risk. Baseline and follow-up visits, and polyp characteristics, were defined using a series of rules developed by the study team. Outcome measures used were advanced adenomas (AA) and CRC; information on these was obtained using follow-up data from external sources, in addition to the hospital data.

Analysis of risk of AA and CRC at each follow-up visit, according to baseline findings and interval length, will be performed through the use of descriptive statistics and logistic regression.

Approval was obtained from the National Research Ethics Service, Caldicott Guardians and the National Information Governance Board. As it was not feasible to seek patient consent, patient confidentiality was ensured through pseudo-anonymisation of data.

Results Endoscopy and pathology data from over 200,000 patients was collected and coded, and a large bespoke database was created to store this data. A total of 11,995 IR patients with a baseline colonoscopy were identified for analysis, 4,694 of whom have at least one follow-up visit.

Conclusion Analysis of the data is currently in progress. When completed, later this year, conclusions will be drawn on the optimal surveillance intervals for IR patients. The database will also act as a unique resource for further studies involving patients at both low and high risk, and for examining the association between serrated lesions and proximal CRC.

Disclosure of Interest None Declared.

PTH-021 NUTRITION ASSESSMENT IN THE ACUTE MEDICAL UNIT

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Introduction Malnutrition can increase hospital mortality rates, worsen clinical outcomes and increase the length of hospital stays. Those at particular risk include patients with cancer, gastrointestinal and neurological disease. We wanted to review whether patients admitted to the Acute Medical Unit were adequately assessed for malnutrition and whether identified patients had been referred to or received specialist nutritional assessment and support in a prompt manner.

Methods A prospective audit was performed on 77 acute medical admissions. Data was collected during the first 48 h of the patients' stay and was compared to the current recommendations highlighted in the NICE Clinical Guideline 32 – 'Nutrition

support in adults'. Patients' notes were then recalled following discharge to determine whether further nutritional interventions had taken place during their admission.

Results We found that only 36% of patients were screened appropriately for malnutrition and through our analysis, we identified that at admission 51% were either malnourished or at risk of malnutrition. Only one patient was referred to a dietician and started on nutritional support during the acute admission period.

Conclusion Nutrition assessment needs to be reinforced as a clinical priority and essential screening for patients admitted to hospital through the Acute Medical Unit. This should be jointly addressed by the medical and nursing teams and by ensuring early input from dieticians is available.

Disclosure of Interest None Declared.

PTH-022 SAFETY AND EFFICACY OF DAY CASE THERAPEUTIC PARACENTESIS FOR MALIGNANT ASCITES

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Introduction Ascites is a common consequence of cancer, occurring in 15–50% of patients, and causes symptoms such as abdominal discomfort, anorexia, nausea and a reduced quality of life. Therapeutic paracentesis is the most often utilised and the most effective treatment for malignant ascites. It can improve the patient's symptoms and quality of life, and has a low risk of complications. The aim of this study was to assess the safety and efficacy of day case paracentesis in the context of malignant ascites.

Methods We performed a retrospective analysis of patients with malignant ascites admitted as a day case to our Ambulatory Care Unit (ACU) for therapeutic paracentesis. Drains were placed without ultrasound guidance by doctors experienced in the procedure. Drains were left *in situ* for a maximum of 6 h. Albumin or fluids were not given. Data on blood pressure and heart rate before and after the procedure, the volume of fluid removed, duration of stay, any complications and any fluids given, were recorded. Data such as age, albumin levels, having chemotherapy at that time and if they are still alive were collected for all the patients.

Results A total of 20 ascitic drains, performed in 9 patients, were identified. Of these, 19 drains were performed successfully as day-case procedures at ambulatory care unit (ACU).

Mean age of patients was 75 years (range 45–85 years). All patients had cancer of gastrointestinal origin. Five patients were having chemotherapy at the time of the procedure. The average albumin was 31.3 g/L (range 23–41).

The mean volume of ascites drained was 8.3 L (range 4.0–14.8 L).

There were no significant changes in either mean arterial pressure or heart rate before and after paracentesis. Heart rate: before 82 ± 18 bpm, after 82 ± 13 bpm ($p = 0.95$). Mean arterial pressure: before 91 ± 10 mmHg and after 84 ± 11 mmHg ($P = 0.07$).

The maximum time of staying in ACU was 8.5 h (mean time <7 h). Six patients have since died from cancer related deaths.

There was one failed paracentesis; this patient subsequently underwent uncomplicated ultrasound guided placement. One drain was delayed by 48 h due to neutropenia. There were no serious complications and no patients required hospital admission. One minor complication was reported (skin haematoma) and one patient required intravenous fluids.

Conclusion Day case paracentesis is both safe and effective in the management of malignant ascites. It is not necessary to routinely replace fluid or albumin during the procedure. This approach can avoid unnecessary hospital admissions and provides rapid improvement in patient's symptoms and patient quality of life.

Disclosure of Interest None Declared.

PTH-023 PAEDIATRIC FAECAL VOC ANALYSIS: METHOD OPTIMISATION

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Introduction Faecal Volatile Organic Compounds (VOCs) analysis is an emerging diagnostic tool for gastrointestinal conditions because of its sampling ease and non-invasive characteristics. Solid phase micro-extraction (SPME) is often used with gas chromatography–mass spectrometry for the analysis of VOCs; however no procedure has been standardised for an application in faecal analysis with the potential for on–site utilisation. Several aspects of the sampling preparation applied to neonatal faecal samples were studied to improve the robustness of the analytical process for paediatric studies.

Methods Thirty-three faecal neonate samples of weight 50–700 mg were analysed. The results produced by SPME coatings CAR/PDMS and DVB/CAR/PDMS were compared (n = 5/variable), as were vial volumes of 2 and 10 ml (n = 4/variable; N=3) and the addition of 0.5 and 1 ml (n = 3/variable) of a saturated NaCl solution prior to GC-MS analysis. In addition, the influence of leaving the samples for 14 h at 1°C instead of -20°C was studied (n = 3/condition). Finally, the reproducibility of the method was tested by looking at the internal variation of 10 sets of triplicate; furthermore, 3 sets were reanalysed 4 times in order to characterise the repeatability across GC-MS runs. Independent samples t-test, one–way ANOVA and Tukey's HSD test were performed to test differences between data classes. Final p-values were adjusted by Bonferroni and p-values < 0.05 were considered significant.

Results Twenty (±2) VOCs were identified using samples of 100 mg, while 28 (±1) and 25 (±2) VOCs were identified in samples of 450 respectively 700 mg. There were no significant differences in VOCs intensities between samples of 450 and 700 mg as between 50 and 100 mg. However, all VOCs intensities were significantly higher in samples of 450 and 700 mg when compared to 100 mg. No differences were observed between the two SPME coatings, and the addition of salt did not improve results quantitatively or qualitatively. Keeping samples at 1°C instead of -20°C and/or varying the volume of the vial did not influence the results significantly. Finally, for 7 sets of triplicates out of 10, more than 90% of the ion intensities varied less than 30% but multiple runs of GC-MS resulted in significant changes in intensity of 40% or more of the VOCs identified.

Conclusion Several parameters were studied to optimise a method for paediatric faecal VOCs analysis and a robust method has now been developed and detailed. Samples of 50–100mg may be studied. This weight gives reproducible results, but samples should not be reanalysed as headspace VOCs are altered by the procedure. Other changes to sample processing had little impact on the results. A chilled auto sampling rack may be safely used.

Disclosure of Interest None Declared.