2010 and 10/12/2016. The records were then histology matched.

The data was then analysed using the Anaconda™ 3 distribution of *Python*, using *numpy*, *pandas*, *matplotlib* and *seaborn* to clean and prepare, plot and perform statistical analysis on the data.

Results 23 837 colonoscopies were performed on 18 489 individual adults during the study period.

544 procedures had to be excluded as they lacked an NHS number and couldn't be histology matched. 23 293 procedures remained.

50.4% of the procedures were performed on females. The median age was 64. Across all the procedures, 25.46% were reported as entirely normal by the endoscopist. 3.04% of procedures contained a histologically confirmed cancer.

Abstract PTH-058 Figure 1 Age vs% normal examinations

Age We found that the chances of obtaining a normal examination declined from $\sim 49\% \pm 5\%$ ≤ 43 years to $\leq 20\% \pm 2\%$ in those ≥ 61 years.

In patients aged ≤ 43 OR of a normal exam = 3.29. For those aged ≥ 61 , (OR = 0.32 for a normal exam). Note, all OR's in this study had $p < 0.0001$ significance.

Sex Examinations performed on females were more likely to be reported as normal compared to men (OR = 1.73). For women ≤ 43 , OR for normality = 3.88.

Priority Routine priority was strongly associated with normal colonoscopy, (OR = 1.99). Routine procedures on females ≤ 43 were very likely to be normal (OR = 4.90). These patients were very unlikely to have cancer (OR = 0.093).

Indications Abdominal pain, anaemia (iron deficient) and bowel habit changes (of all types) and family history of colonic cancer were all found to be associated with a $\geq 40\%$ rate of normal examinations, (OR = 3.57).

The highest incidence of normal examinations was found amongst women ≤ 43 undergoing routine colonoscopy for abdominal pain (OR = 7.85), followed by bowel habit changes (OR = 6.49), and anaemia (OR = 5.91).

Conversely, the highest rates of pathology were found in men ≥ 61 undergoing bowel cancer screening, (OR for pathology = 4.98; OR for malignancy = 2).

Conclusions We have developed a method for performing mass data analysis to identify trends in endoscopy data.

Our data can help improve future utilisation of other colonic investigational modalities like colon capsule for low risk individuals. This can release colonoscopy capacity for the patients most at need.

PTH-059 ANALYSIS OF 140000 PATIENTS WITH BILE DUCT STONES PRESENTING TO ENGLISH ACUTE TRUSTS, 2013–2016

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Common bile duct (CBD) stones 10%–20% of patients with gallstone disease. Endoscopic retrograde cholangio-pancreatography (ERCP)

Methods All adult patients with diagnosis (ICD-10) codes for calculus of bile duct with cholangitis/calculus of bile duct with cholecystitis/calculus of bile duct without cholangitis were used to select results from Hospital Episode Statistics (HES) data for the years 2013/14 – 2016/17. Episodes were excluded where there were episodes with one or more of these codes for the previous 2 financial years to censor patients already on a CBD pathway.

Results There were 140 890 patients identified, of which 91 178 (64.72%) were female. Mean age at first admission was 70. Of the 140 890 individual patients, 102 072 (72%) had an emergency first admission. The incidence of cases in each year was 33,557, 35,053, 35 621 and 36 659 respectively. were performed on 48 306 patients in this cohort over the study period. Of the 48 306 individuals who had an ERCP, 39 192 (65%) had only one procedure, 7105 (1%) had two procedures and 2009 (%) had three or more.

For the identified CBD cohort 60 793 cholecystectomies were performed over the study period with 17 063 patients having had both an ERCP and cholecystectomy.

PTH-060 AN ASSESSMENT OF QUALITY OF, AND FACTORS AFFECTING, OESOPHAGOGASTRODUODENOSCOPY (OGD)

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Introduction Oesophagogastroduodenoscopy (OGD) is the accepted gold standard investigation for upper GI symptoms although quality has rarely been assessed. In this study, quality of OGD and the effects of sedation, procedural tolerance and duration of examination were investigated.

Methods Consecutive out-patients undergoing OGD were recruited. Patients scored (none-severe: 0–10) procedural distress, abdominal discomfort (AD) and pain (AP). Video recordings of the OGDs were reviewed, scoring the views (score 1–5: $< 25\%$, $25\%–50\%$, $50\%–75\%$, $> 75\%$ and 100% of mucosa seen) of eight upper GI stations and time spent in retroflexion and in the duodenum. Scores and times are reported as mean ($\pm$ SEM).

Results OGD was performed on forty patients (58 ± 3 years old, 62.5% male, 25% sedated) by one of three endoscopists. There was a significant difference between visualisation scores (oesophagus, 4.5 (± 0.1); gastro-oesophageal junction, 4.5 (± 0.1); cardia, 4.0 (± 0.2); fundus, 3.7 (± 0.2); upper body, 3.8 (± 0.1); distal body, 4.1 (± 0.1); incisura, 4.0 (± 0.2) and antrum, 4.9 (± 0.1); Kruskal-Wallis H Test: $H(7) = 60.2$;