

## SUPPLEMENTARY MATERIALS

**Supplementary Table S1:** Code lists for study cohort identification

CODE	DESCRIPTION
<b>Colectomy (OPCS-4)</b>	
H04.x	Total excision of colon and rectum
H05.x	Total excision of colon
H06.x	Extended excision of right hemicolon
H07.x	Other excision of right hemicolon
H08.x	Excision of transverse colon
H09.x	Excision of left hemicolon
H10.x	Excision of sigmoid colon
H11.x	Other excision of colon
H29.x	Subtotal excision of colon
H33.x	Excision of rectum
<b>Ulcerative colitis (Read &amp; ICD-10)</b>	
14C4.11	H/O: ulcerative colitis
J41..12	Ulcerative colitis and/or proctitis
J41..12	Ulcerative colitis and/or proctitis
J410.00	Ulcerative proctocolitis
J410.00	Ulcerative proctocolitis
J410000	Ulcerative ileocolitis
J410100	Ulcerative colitis
J410200	Ulcerative rectosigmoiditis
J410300	Ulcerative proctitis
J410400	Exacerbation of ulcerative colitis
J410z00	Ulcerative proctocolitis NOS
J411.00	Ulcerative (chronic) enterocolitis
J412.00	Ulcerative (chronic) ileocolitis
J413.00	Ulcerative pancolitis
Jyu4100	[X]Other ulcerative colitis
N031000	Arthropathy in ulcerative colitis
N045400	Juvenile arthritis in ulcerative colitis
K51.x	Ulcerative colitis
<b>Crohn's disease (Read &amp; ICD-10)</b>	
J08z900	Orofacial Crohn's disease
J40..00	Regional enteritis - Crohn's disease
J40..11	Crohn's disease
J40..12	Granulomatous enteritis
J400.00	Regional enteritis of the small bowel
J400000	Regional enteritis of the duodenum
J400100	Regional enteritis of the jejunum
J400200	Crohn's disease of the terminal ileum
J400300	Crohn's disease of the ileum unspecified

J400400	Crohn's disease of the ileum NOS
J400500	Exacerbation of Crohn's disease of small intestine
J400z00	Crohn's disease of the small bowel NOS
J401.00	Regional enteritis of the large bowel
J401000	Regional enteritis of the colon
J401100	Regional enteritis of the rectum
J401200	Exacerbation of Crohn's disease of large intestine
J401z00	Crohn's disease of the large bowel NOS
J401z11	Crohn's colitis
J402.00	Regional ileocolitis
J40z.00	Regional enteritis NOS
J40z.11	Crohn's disease NOS
Jyu4000	[X]Other Crohn's disease
N045300	Juvenile arthritis in Crohn's disease
ZR3S.00	Crohn's disease activity index
ZR3S.11	CDAI—Crohn's disease activity index
K50.x	Crohn disease [regional enteritis]
<b>Cancer (Read &amp; ICD-10)</b>	
CXX.x (excluding C44.x)	Malignant neoplasms
See Khan NF et al. BMC Fam Pract (2010) <sup>1</sup> for Read code list	

<sup>1</sup> Khan, N. F., Perera, R., Harper, S. & Rose, P. W. Adaptation and validation of the Charlson Index for Read/OXMIS coded databases. BMC Fam. Pract. 11, 1 (2010).

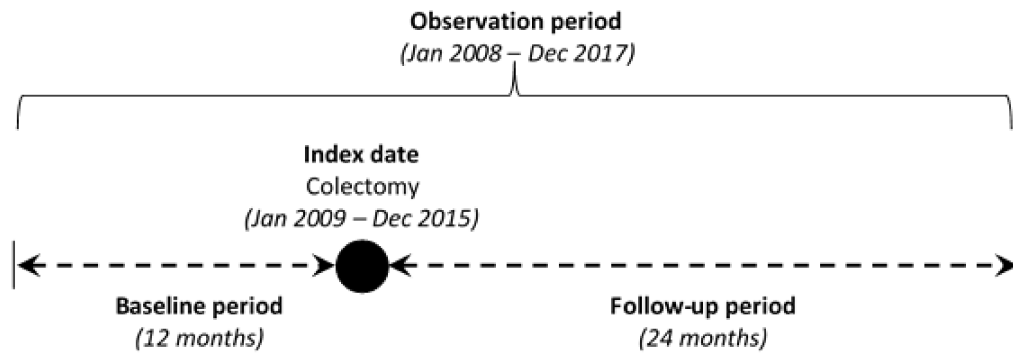
**Supplementary Table S2:** Post-operative complications

<b>Gastrointestinal complications</b> , including <ul style="list-style-type: none"><li>• Small bowel obstruction</li><li>• Anastomotic stricture</li><li>• Pouchitis</li><li>• Gastrointestinal bleeding</li><li>• Colostomy complication or malfunction</li></ul>
<b>Wound problems</b> , including <ul style="list-style-type: none"><li>• Fistula</li><li>• Haematoma/seroma</li><li>• Wound dehiscence</li></ul>
<b>Infections</b> , including <ul style="list-style-type: none"><li>• Sepsis and bacteraemia</li><li>• Abscess</li><li>• Wound infection</li><li>• Urinary tract infection</li></ul>
<b>Renal and endocrine complications</b> , including <ul style="list-style-type: none"><li>• Acute renal failure</li><li>• Fluid and electrolyte disorders (including hypokalaemia)</li><li>• Severe endocrine disorders</li></ul>
<b>Cardiovascular disorders</b> , including <ul style="list-style-type: none"><li>• Thrombosis/embolism</li><li>• Myocardial infarction</li><li>• Cardiac arrest</li></ul>
<b>Pulmonary complications</b> , including <ul style="list-style-type: none"><li>• Acute respiratory failure</li></ul>

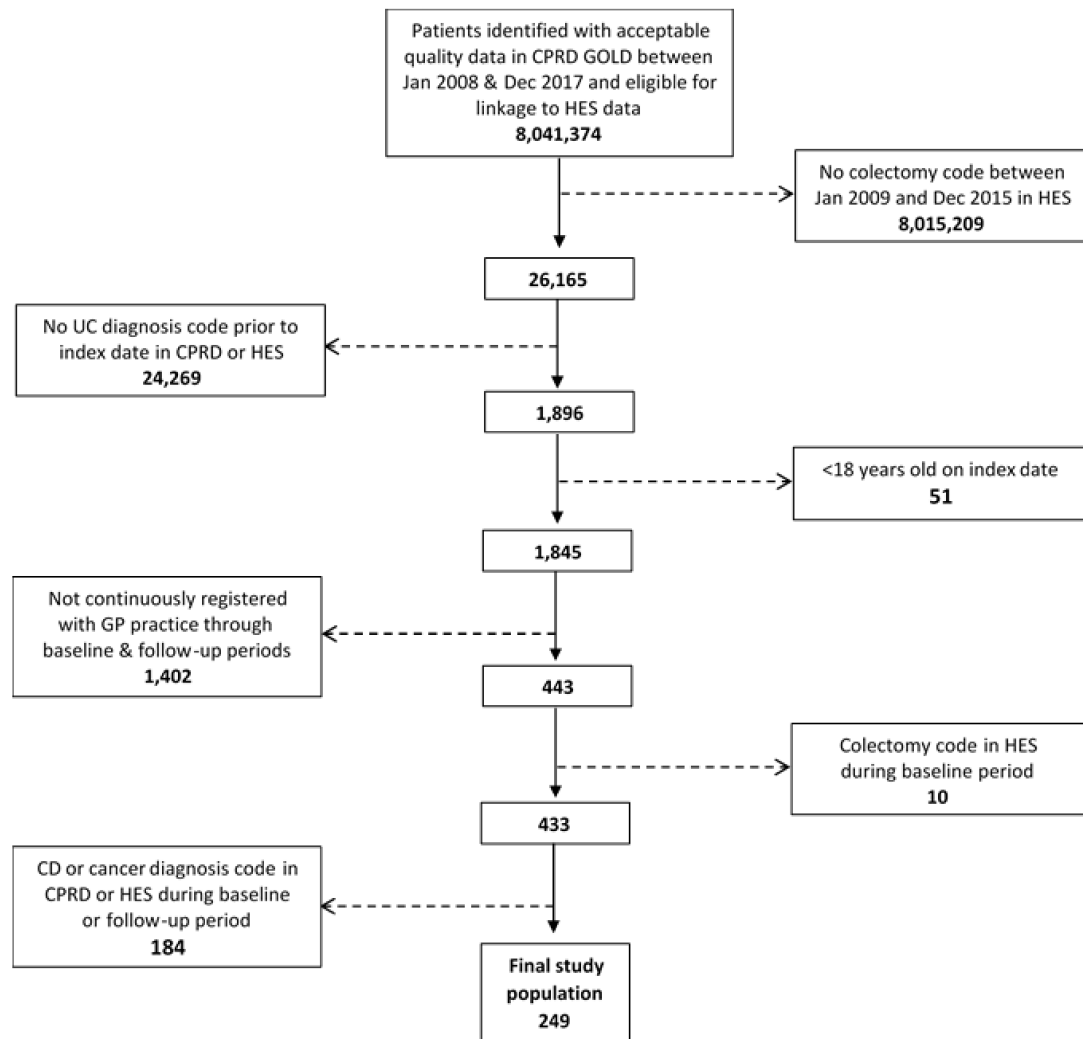
- Hypoxia
- Pleural effusion
- Pulmonary oedema

**Neurological disorders**, including

- Cerebrovascular disease

**Supplementary Figure 1.** Study design

Supplementary Figure 2. Consort flow-diagram



CD, Crohn's disease; CPRD, Clinical Practice Research Datalink; GP, General Practitioner; HES, Hospital Episode Statistics;

UC, ulcerative colitis