UK IBD Audit 2nd Round (2008) Report

National Results for the Organisation & Process of Adult IBD Care in the UK

Generic Hospital Report

Prepared by the
The UK IBD Audit Steering Group
on behalf of

- Association of Coloproctology of Great Britain and Ireland
- British Society of Gastroenterology
- British Society of Paediatric Gastroenterology, Hepatology and Nutrition
- Clinical Effectiveness & Evaluation Unit, Royal College of Physicians of London
- National Association of Colitis and Crohn's Disease

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The web based data collection tool was developed by Netsolving Ltd.

Thanks are due to the many people who have participated in the UK IBD Audit 2nd Round. The UK IBD Audit Steering Group recognise that this has involved many individuals spending time over and above an already heavy workload with no financial recompense.

Thanks are also due to

- The Health Foundation who funded the UK IBD Audit 1st and 2nd Round
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- All hospital staff who contributed towards organising the collection, retrieval and inputting of data including Clinical Audit, IT and coding staff in addition to the members of the multidisciplinary clinical teams working in support of IBD patients.

CONTENTS

Sections 4 to 7 report the overall national results for all of the questions asked during the 2008 UK IBD audit alongside corresponding results from the 1st round (2006) audit where available.

Section 4. Organisation and Structure of IBD services 2008 and 2006

Section 5. Clinical Audit: Ulcerative Colitis Inpatients 2008 and 2006

Section 6. Clinical Audit: Crohn's Disease (Inpatient) 2008 and 2006

***Note on the term "site" used throughout this report**

Lead clinicians (in almost every instance a Consultant Gastroenterologist) that were initially contacted within each Trust/Health Board with a view to taking part in the UK IBD Audit 2nd round,, were asked to register to participate and collect data on the basis of a unified IBD Service which would be registered as a named "site". This was typically a single hospital within the Trust/Health Board. Where a Trust/Health Board had more than one hospital offering independent IBD Services they entered data for separate "sites". Some institutions running a coordinated IBD Service across two or more hospitals with the same staff completed the audit as one Trust-wide site.

UK IBD Audit 2nd Round (2008)

Section 1. Executive Summary

Background

The Inflammatory Bowel Diseases, Ulcerative Colitis (UC) and Crohn's Disease (CD), are common causes of gastrointestinal morbidity. The total cost of IBD to the NHS has been estimated at £720 million, based on an average cost of £3,000 per patient per year with up to half of total costs for relapsing patients[1].

The UK Inflammatory Bowel Disease Audit 1st Round was the first UK-wide audit performed within gastroenterology. It demonstrated a marked variation in the resources and quality of care for IBD patients across the UK with particular deficits in some fundamental aspects of IBD care. The 1st Round of the audit was widely supported by clinicians with 75% of applicable UK hospitals participating. Following dissemination of results, change implementation was supported by a series of regional meetings, a web based document repository and selected hospital visits.

The second round of the audit in autumn 2008 assessed changes to the organisation and processes of IBD care following these interventions.

Although IBD was not part of the National Service Framework program, results from the first round of the audit were a catalyst for the development of the National Service Standards for the healthcare of people who have Inflammatory Bowel Disease (IBD) that were published in February 2009 (http://www.ibdstandards.org.uk). These Standards were developed by a collaboration of six health professional societies and NACC, the IBD patients' organisation and it is recommended that IBD Services should meet these standards by September 2010.

The aim of the IBD National Service Standards is to ensure that IBD patients receive consistent, high-quality care and that IBD Services throughout the UK are knowledge-based, engaged in local and national networking, based on modern IT and that meet specific minimum standards. The UK IBD Audit Steering Group strongly endorses the new standards and whilst the UK IBD Audit 2nd round did not directly measure against these new standards we anticipate that further rounds of the IBD Audit will do so.

Overall Summary

The results of the UK IBD Audit 2nd round (2008) demonstrate service improvements in many aspects of IBD care over a 2 year period. Some improvement has been seen in the provision of dedicated gastroenterology wards and there has been an increase in both the number of IBD Clinical Nurse Specialists and the time that they dedicate to IBD care. There has also been a considerable increase in the appropriate use of prophylactic heparin. Improvements have been seen in the collection of stool cultures and samples for Clostridium Difficile toxin but these are not yet at acceptable levels.

Meetings between physicians and surgeons are happening less and this may be a reflection of the time pressures imposed by other multi-disciplinary team meetings (MDTs), notably for cancer. Provision of dietetic services, toilet facilities and psychological support remain at unacceptably low levels and remain key priorities for improvement. There continues to be considerable variation across the United Kingdom.

This audit has demonstrated significant service change over a relatively short time period, although there is clearly still much to do. The implementation of the IBD National Service Standards is now needed and will, together with further rounds of audit, deliver improvements in the quality of care for IBD patients. The key action points are as follows:

- Health departments in England, Northern Ireland, Scotland and Wales must support future rounds of the UK IBD Audit in order that quality improvement in IBD care is sustained.
- All NHS Trusts/Health Boards should review their local audit results in relation to the new IBD National Service Standards and take any necessary action to improve their IBD Services.

Key Findings and Recommendations for action

It should be noted that the IBD Audit was established and 2nd round datasets agreed, before the IBD National Service Standards were published. Therefore, we did not specifically audit against them for the 2nd round. In order to reflect support for this landmark document the UK IBD Audit Steering Group has decided to group the Key Findings and Recommendations from the 2nd round results against the 6 core areas (A to F) of the new standards. Results quoted below in the key findings are from the national statistics stated in sections 4 -7 of the full report and compare data from the 2008 audit round with results from the 2006 audit.

Standard A – High Quality Clinical Care
High quality, safe and integrated clinical care for IBD patients, based on multi-disciplinary team working and effective collaboration across NHS organisational structures and boundaries.

Key findings:

Organisation of IBD Services

- There are more IBD Clinical Nurse Specialists (a rise from 56% to 62% of sites) and more of the sessions that they work (median from 6 to 8) are dedicated to IBD. Over one third of sites (38%) still do not have an IBD Clinical Nurse Specialist.
- Designated specialist ward areas are more common: Now available in 75% of sites, becoming more common since 2006 (when it was 67%).
- Meetings between physicians and surgeons have become less common (taking place in 66% of sites, down from 74% in 2006).
- Psychological support for patients with IBD is available in only a small minority (<10%) of sites
- Toilet facilities have not improved and are below the required standard of a minimum of 1 easily accessible toilet per 3 beds.

Quality of Care

- The prescription of prophylactic heparin has improved considerably (Ulcerative Colitis 54% to 73%; Crohn's Disease 55% to 71%).
- Stool cultures are now collected in 64% of patients admitted with IBD with diarrhoea, an improvement from 55% in 2006. The minority (about 2%) are positive.
- The collection of stool specimens for C. Diff toxin has also improved by about 10% but is still only done in just over half of patients (55%). These are positive in about 3%.
- More patients (57% vs. 52%) with Crohn's Disease are being weighed on admission but the provision of dietetic services remains poor: only 33% of Crohn's patients were visited by a dietitian in 2008 (37% in 2006) with a median of 2 (IQR 1-6) dietetic sessions per week dedicated to gastroenterology, the same as in 2006.
- More surgery is being undertaken laparoscopically (Ulcerative Colitis 20% vs. 10%; Crohn's Disease 13% vs. 8%).
- 77% of IBD Services still perform pouch operations. The median number per year is 3.
- Fewer Crohn's Disease patients (38% vs. 46%) have received steroids continuously for greater than 3 months but there has been no significant increase in the use of bone protection agents (49% vs. 45%).

Key recommendations:

- *There should be a renewed focus on multidisciplinary working with units moving towards the development of the IBD team as outlined in the IBD National Service Standards.*
- *Improvement in provision of specialist nurses to levels recommended in the IBD National Service Standards.*
- *Dietetic service provision remains poor and efforts to develop this should be continued.*
- *Psychological support is notably lacking and should be improved.*
- *Trusts/Health Boards should provide appropriate levels of toilet facilities.*
- *Efforts should be made to continue to improve stool culture and CDT collection rates.*

Standard B – Local delivery of care
Care for IBD patients that is delivered as locally as possible, but with rapid access to more specialised services when needed.

Key findings:

- Monitoring of immunosuppressive therapy is usually done well (at least 3 monthly for 86%) and often takes place in primary care.

Key recommendations:

- *A system for sharing of information about test results or treatment changes should be in place through the use of IT, written communication or a patient held record.*
- *IBD Services must continue to develop shared care between hospitals and primary care.*

Standard C – Maintaining a patient-centred service
Care for IBD patients that is patient-centred, responsive to individual needs and offers choice of clinical care and management where possible and appropriate.

Key findings:

- 67% of sites would see relapsing patients within 5 working days. This has risen from 63% in the first round of the audit.
- Written information on who to contact in event of relapse is available in 68% of units. This figure was 64% in 2006.
- Patient panel or other patient meetings remain uncommon (28%).
- Direct telephone contact with an IBD Specialist (IBD Clinical Nurse/Stoma Care Nurse) is available in 85% of sites with many offering contact via email (41% - up from 28% in 2006) or drop in clinics (13%).

Key recommendations:

- *IBD Services should aim to see all relapsing patients within 5 working days.*
- *Patient involvement in service development should increase.*

Standard D – Patient education and support
Care for IBD patients that assists patients and their families in understanding Inflammatory Bowel Disease and how it is managed and that supports them in achieving the best quality of life possible within the constraints of the illness.

Key findings:

- Written information about IBD is available in almost all (97%) of UK hospitals. The most common literature is that developed by NACC.

Key recommendations:

- *Units should consistently provide written information, education and support.*

Standard E – Information technology and audit
An IBD Service that uses IT effectively to support patient care and to optimise clinical management through data collection and audit.

Key findings:

- A searchable IBD database is available in 39% of sites compared with 34% in round 1.
- Participation rates in the UK IBD Audit have improved since 2006 (87% vs. 75%).

Key recommendations:

- *Every IBD Service should develop a searchable IBD database.*
- *Participation in national audit is a requirement for all IBD Services.*

Standard F – Evidence-based practice and research
A service that is knowledge-based and actively supports service improvement and clinical research

Key findings:

- There is virtually no participation in clinical research. Only 2 patients from the entire audit were entered into clinical trials.

Key recommendations:

- *Participation in clinical research must increase substantially. The development of the UK comprehensive research network may help wider participation in clinical trials.*

1. Luces C, Bodger K. Economic burden of inflammatory bowel disease: a UK perspective. Expert Review of Pharmacoeconomics & Outcomes Research 2006; 6(4):471-482.

The Burden of Inflammatory Bowel Disease

Although ignored by the National Service Framework program, the Inflammatory Bowel Diseases, Ulcerative Colitis (UC) and Crohn's Disease (CD), are common causes of gastrointestinal morbidity in the western world. The incidence of IBD has risen dramatically in recent decades with a combined incidence now of over 400/100 000. It is estimated that up to 0.5% of European and North American populations are affected.

IBD most commonly first presents in the second and third decade but much of the recent increase has been observed in childhood, with CD in children increasing 3 fold in 30 years. IBD is not curable, UC and CD are lifelong conditions following an unpredictable relapsing and remitting course. 25% of UC patients will require colectomy and approximately 80% of CD patients require surgery over their lifetime. The main symptoms are diarrhoea, abdominal pain and an overwhelming sense of fatigue but associated features such as arthritis, anal disease, fistulae, abscess and skin problems can also contribute to a poor quality of life. While overall mortality is low (<2% of inpatients) morbidity is considerable; there are wide ranging effects on growth and development, psychological health, work prospects, family life and pregnancy and conception. Effective multidisciplinary care can attenuate relapse, prolong remission, treat complications and improve quality of life.

UK IBD Audit Aims

The UK IBD Audit seeks to improve the quality and safety of care for IBD patients in hospitals throughout the UK by auditing individual patient care and the provision and organisation of IBD service resources.

As with the 1st Round this 2nd Round Report enables each participating site to compare or benchmark their performance against national statistics. Between the two rounds the UK IBD Audit Steering Group looked to facilitate, develop and instigate intervention strategies to improve the provision and quality of IBD patient care. This comprised the widespread dissemination of results to participating sites through the registered site clinical leads (normally a Consultant Gastroenterologist) as well as hospital board management. The 1st Round National Report was available publicly via the UK IBD Audit web page within the Clinical Effectiveness and Evaluation Unit section of the Royal College of Physicians website. The UK IBD Audit hosted 8 very well-attended regional meetings throughout the UK between June and October 2007 to discuss the audit results. Data from the 1st round was also presented at key professional and patient national meetings including those of the: British Society of Gastroenterology, Association of Coloproctology of Great Britain & Ireland, British Dietetic Association, Royal College of Nursing (IBD Nurse Forum), National Association for Colitis and Crohn's Disease.

A number of participating sites collaborated with members of the UK IBD Audit Steering Group to develop a model "Action Plan" for IBD Services that addressed the key messages from the 1st round report. The model action plan was accessible via the internet and contained freely adaptable reference documents such as care pathways, model business cases for IBD Nurse posts and patient information leaflets that could be downloaded and edited to meet local requirements. We also piloted site visits to 23 of the hospitals that participated in the 1st round of the IBD Audit during which a clinical member of the IBD Audit Steering Group worked alongside the health professional team responsible for IBD care to develop an action plan for their IBD Service that would address areas identified in their 1st round site specific report as requiring improvement.

Audit Governance

The audit is a collaborative partnership between Gastroenterologists (the British Society of Gastroenterology), Colorectal Surgeons (the Association of Coloproctology of Great Britain and Ireland), Patients (the National Association for Colitis and Crohn's Disease) and Physicians (the Royal College of Physicians of London).

Following the 1st round, members of the UK IBD Audit met with representatives of the British Society of Paediatric Gastroenterology, Hepatology and Nutrition and agreed to include Paediatric Gastroenterology (<16 years of age at the date of admission to hospital) in the 2nd round so that the UK IBD Audit could become a truly comprehensive audit to encompass IBD patients of all ages. As a consequence a separate report for the Organisation & Process of Paediatric IBD Care in the UK will be published by the UK IBD Audit Steering Group in April 2009.

The audit is funded by a grant from the Health Foundation as part of their *Engaging with Quality Initiative* which aims to improve the quality of clinical care by engaging clinicians in quality improvement. The audit is a four-year, UK-wide, full cycle comparative audit with initial audit, dissemination, change implementation and re-audit.

The audit is co-ordinated by the Clinical Effectiveness and Evaluation unit (CEEu) of the Royal College of Physicians of London. Each hospital identified an overall clinical lead who was responsible for data collection and entry for their IBD Service. Data were collected by hospitals using a standardised method. The audit was guided by a multidisciplinary UK IBD Audit Steering Group (Appendix 1) which oversaw the preparation, conduct, analysis and reporting of the audit. Any enquiries in relation to the work of the UK IBD Audit can be directed to: ibd.audit@rcplondon.ac.uk

Who participated in the 2nd Round?

Hospitals were eligible if they routinely admit IBD patients acutely. 270 hospitals that admit patients with Inflammatory Bowel Disease (IBD) in England, Northern Ireland, Scotland and Wales (plus the Isle of Man and the Channel Islands) were invited to take part. 209 sites submitted data (England 165, Northern Ireland 10, Scotland 18, Wales 15, Channel Islands 1). Of these 209 sites, 184 were single hospital sites within a Trust, 24 were Trust-wide sites combining 2 hospitals and 1 was a Trust-wide site combining 3 hospitals with a total of 235 (87%) hospitals contributing data.

We achieved 93% (161/174) participation at a Trust/Health Board level. This response was achieved through the hard work and time-commitment of clinical teams involved in the management of patients with IBD.

The audit of the organisation of IBD services was intended to be 'as of 1st September 2008' (together with activity data for all admissions for IBD (including multiple admissions for IBD for the same patient) from 1st June 2007 through to 31st August 2008) and 207 sites submitted data.

For individual patient care, 40 consecutive inpatient case notes were audited (20 Crohn's Disease and 20 Ulcerative Colitis) admitted from 31st August 2008 working backwards as far as 1st September 2007. For both Ulcerative Colitis (UC) and Crohn's Disease (CD), inpatient details were audited and for CD the last outpatient visit prior to admission was audited (so long as that visit did not directly prompt an acute admission to hospital and that it was not the only outpatient visit during the specified 12 month period).

In total, data were collected for 2981 Ulcerative Colitis patients (from 197 sites), median (IQR) of 17 (11-20) per site, and for 3154 Crohn's Disease patients (from 200 sites), median (IQR) of 18 (12-20) per site.

Presentation of Results

Sections 4 to 7 present the complete results of the audit, showing UK data for the 2nd round of 2008 alongside UK data from the 1st round of 2006. There is a largely overlapping but slightly different mix of hospitals that participated in each round. The results from each round represent the best cross-sectional estimates available regarding the organisation and process of IBD care at these times.

Pages 13 to 37 show Key Indicator data to emphasise Key Findings and Recommendations.

Key Indicator results are given for the Organisation & Structure of IBD Services, Ulcerative Colitis inpatient care, Crohn's Disease inpatient and Crohn's Disease outpatient care. A small number of indicators are given for all IBD patients (Ulcerative Colitis and Crohn's Disease patients combined).

Key indicator results:

- Indicate site variation in the 2008 UK audit data, including the use of histogram graphics and site medians and Inter-Quartile range (IQR) statistics. Alongside each summary we give the results from YOUR SITE.

- Compare key indicator data for 2008 for England, Northern Ireland, Scotland and Wales

- Compare key indicator data from the 1st (2006) and 2nd (2008) Audit rounds for those sites that participated in both rounds. This gives a better feel for the potential impact of the audit process than the overall results presented in sections 4-7.

The full report is supported by the UK IBD Audit Steering Group.

Key indicator results with YOUR SITE data

207 sites contributed organisational data to the audit.
Your site

197 sites submitted 2981 Ulcerative Colitis cases to the audit, median 17
Your site submitted

200 sites submitted 3154 Crohn's Disease cases to the audit, median 18
Your site submitted

Organisational / Structure

1. Timetabled meetings between Gastroenterologists and Colorectal Surgeons

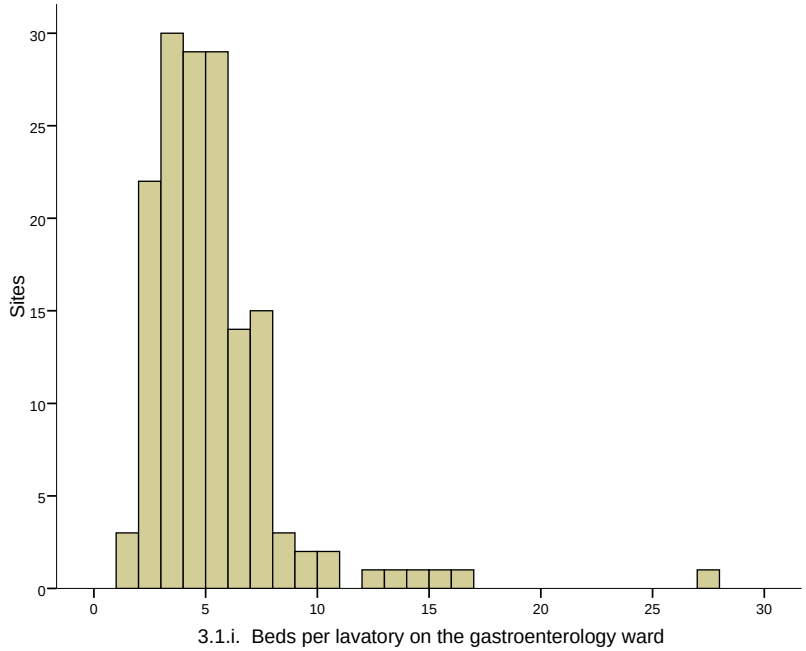
	National 2008 (207 sites)	YOUR SITE 2008
5.2 Timetabled meetings (where IBD patients are discussed) take place between Gastroenterologists and Colorectal Surgeons	66% (135/206)	

2. Gastro wards: dedicated gastroenterology ward (medical or surgical)

	National 2008 (207 sites)	YOUR SITE
3.1 Is there a dedicated Gastroenterology ward?	75% (155)	

3. Toilets on dedicated gastroenterology ward

Beds per lavatory on the gastroenterology ward



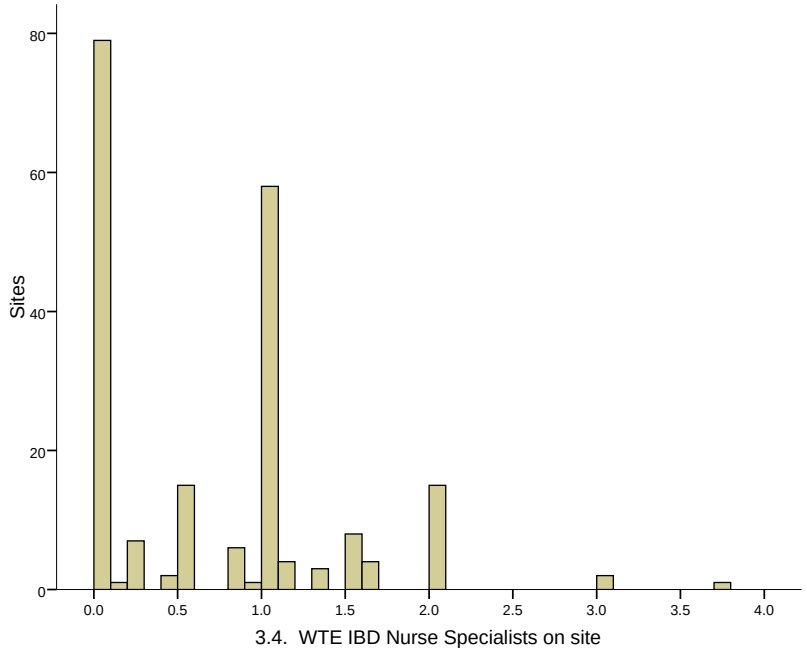
	National 2008 (207 sites)	YOUR SITE 2008
	Median: 4.3	
	IQR: 3.2-6.0	
	N=155	

4. Yearly activity (Period 1/9/07 to 31/8/08)

	National 2008 (207 sites)			YOUR SITE 2008
	Median	IQR	N	
Patients discharged with primary diagnosis of **Ulcerative Colitis**	47	24-90	199	
Patients discharged with primary diagnosis of **Crohn's Disease**	57	31-111	199	
Patients discharged having operation, primary indication **Ulcerative Colitis**	10	4-19	194	
Patients discharged having operation, primary indication **Crohn's Disease**	14	7-29	194	

5. IBD Clinical Nurse Specialists

IBD Clinical Nurse Specialists (WTE) on site



National 2008 (207 sites)

Median: 0.6

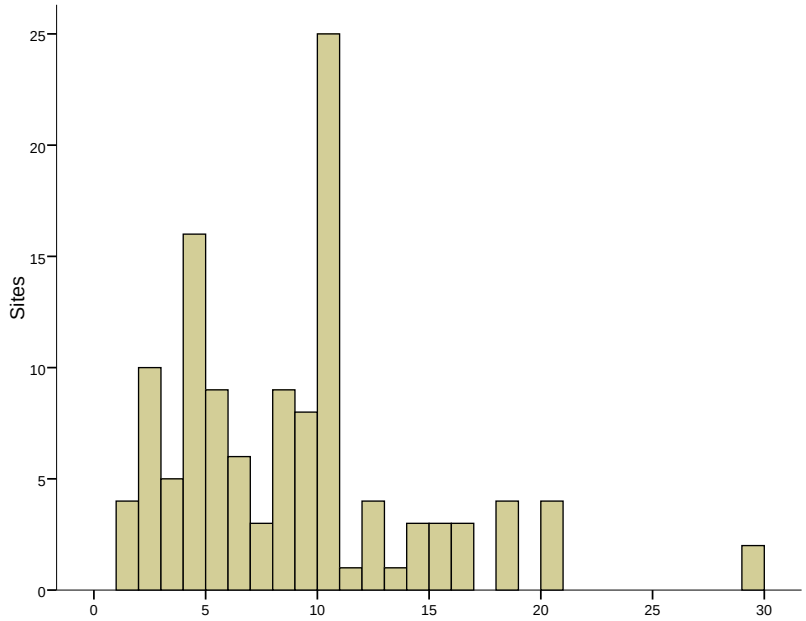
IQR: 0.0-1.0

N=206 with data

38% (79) NONE

YOUR SITE 2008

Sessions of IBD Clinical Nurse Specialist time dedicated to IBD care per week



3.5. Sessions of Specialist Nurse time dedicated to IBD care

National 2008 (207 sites)

Median: 8

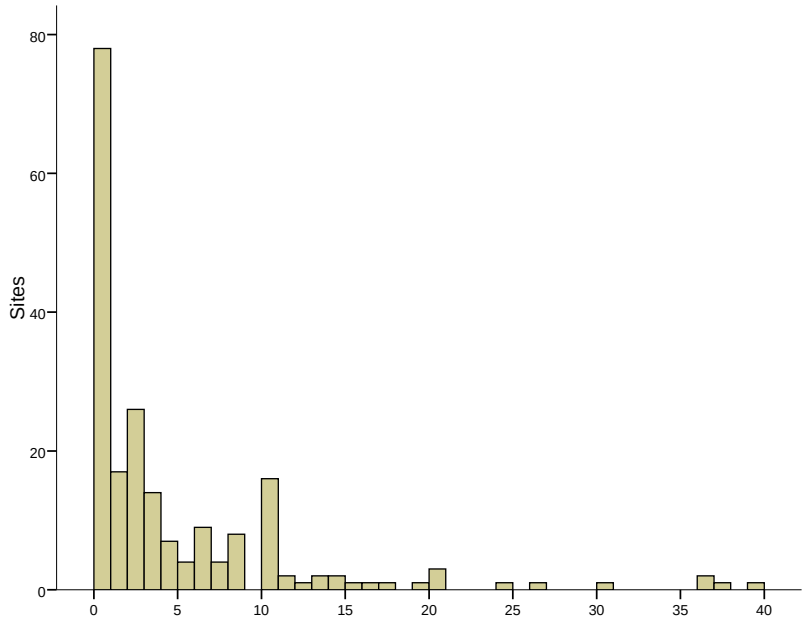
IQR: 4-10

N=120

YOUR SITE 2008

6. Dietetics

Dietetic sessions per week dedicated to GI disorders (not just IBD)



6.3. Dietetic sessions per week dedicated to GI disorders

National 2008

Median: 2

IQR: 0-6

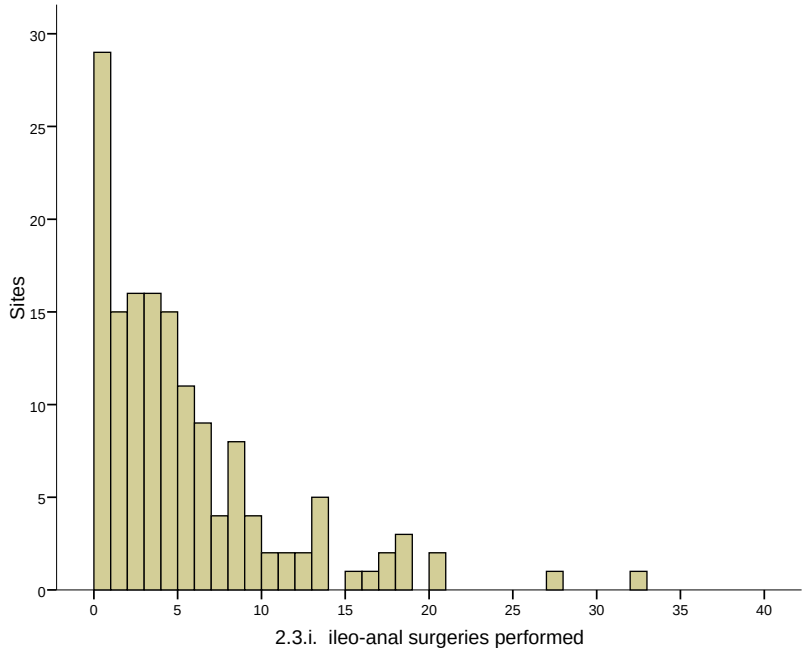
N=204

YOUR SITE 2008

7. Pouch surgery on-site

	National 2008 (207 sites)	YOUR SITE 2008
Surgeons perform ileo-anal pouch surgery on site	77% (157/205)	**NO**

Ileo-anal pouch operations performed:



National 2008

Median: 3

IQR: 1-7

N=149

YOUR SITE 2008

8. Searchable database of IBD patients on site

	National 2008 (207 sites)	YOUR SITE
5.1 Searchable database of IBD patients on site	39% (79/205)	

9. Patient meetings

	National 2008 (207 sites)	YOUR SITE
12.1 Hospital offers open forums or meetings for patients with IBD	28% (58/205)	
i. If yes, how often do these take place?		
a) Less than 4 monthly	17% (10)	
b) Every 4-8 months	43% (25)	
c) Every 8-12 months	33% (19)	

10. Psychological support

	National 2008 (207 sites)	YOUR SITE
10.3 Psychologists are attached to the Gastroenterology service	6% (12/205)	
10.4 Pathways exist for direct access to psychological support	21% (44/205)	

11. Joint or parallel clinics run on site

	National 2008 (207 sites)	YOUR SITE
7.4 Joint and/or parallel clinics run between Gastroenterologists and Surgeons	49% (101/206)	

12. Paediatric to adult handover clinic for young patients with IBD

	National 2008 (207 sites)	YOUR SITE
10.1 Paediatric to adult handover clinic for young patients with IBD	26% (54/205)	

13. Stoma Care Nurses (WTE)

	National 2008 Site variation				YOUR SITE 2008
	Median	IQR	N	Sites with NONE	
4.3 Stoma Nurses on site	2	1-3	205	4% (8)	

14. Written guidelines for acute or severe UC

	National 2008 (207 sites)	YOUR SITE
11.1 Written Trust guidelines exist for the management of acute or severe Colitis	69% (141/205)	

15. Access to care

	National 2008 (207 sites)	Your site
7.1 There is written information for patients with IBD on whom to contact in the event of a relapse	68% (141/206)	
7.2 In general, how soon could a relapsed patient expect to be seen in clinic?		
a) Less than 7 days	67% (137/206)	
b) Between 7-14 days	30% (61/206)	
c) Other (please specify)*	4% (8/206)	
7.3 Do patients have access to an IBD specialist by any of the following methods (tick all that apply)		
a) Telephone	85% (175)	
b) Drop-in clinic	13% (26)	
c) Email	41% (84)	
d) None of these	13% (27)	

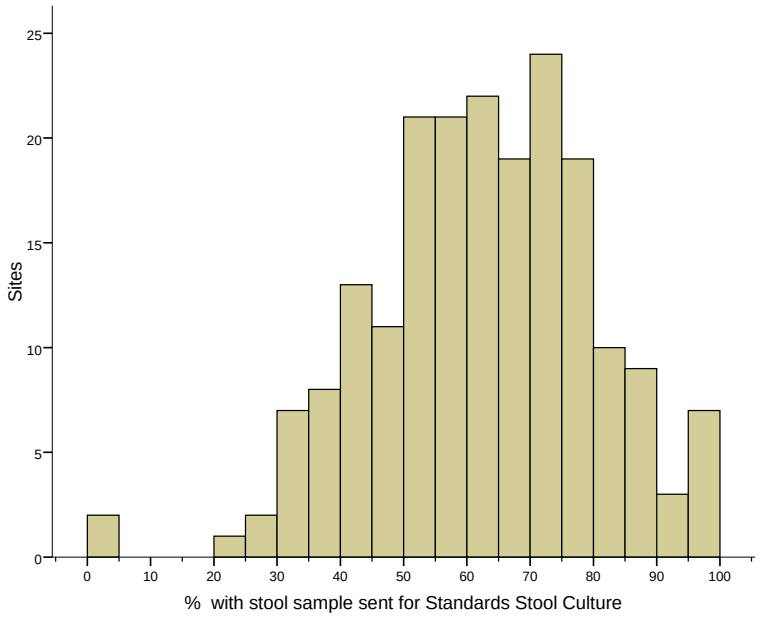
* 2008 Other comprised 14-28 days (2), 21 days, 7-28 days, 14-28 days, as required, variable, 1 slot per week in IBD nurse clinic

Results combined for Ulcerative Colitis & Crohn's Disease patients

1. Stool samples

Site variation results are given for Ulcerative Colitis (non-elective) patients and Crohn's Disease (non-elective, with diagnosis of diarrhoea) patients combined.

Site variation in % of stool sample sent for standards stool culture :



National 2008 Site variation

Median: 62%
IQR: 50-74%
N=199

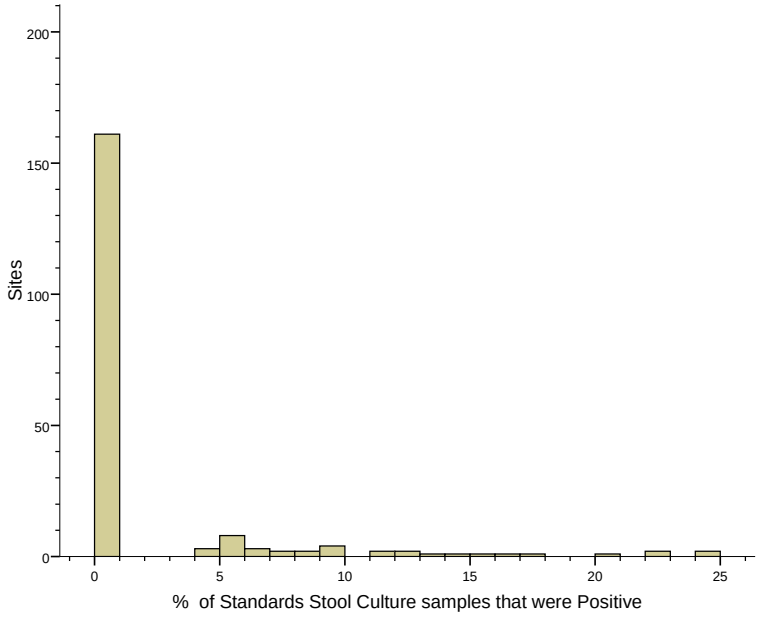
YOUR SITE 2008

Overall non-elective patient results:

Ulcerative Colitis: 67% (1628/2444)

Crohn's Disease: 53% (661/1237 with diarrhoea)

Site variation in % of standards stool culture samples that were positive :



National 2008 Site variation

82% (161/197) of sites had no positive samples in the audit

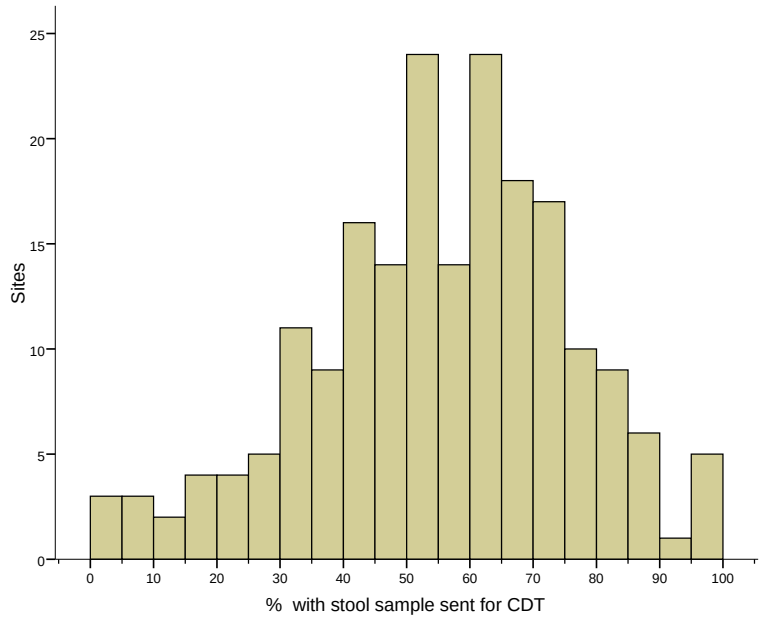
YOUR SITE 2008

Overall non-elective patient results:

Ulcerative Colitis: 2.1% (34/1627) were positive

Crohn's Disease: 1.7% (11/659) Were positive

Site variation in % of stool sample sent for CDT :



National 2008 Site variation

Median: 57%
IQR: 42-69%
N=199

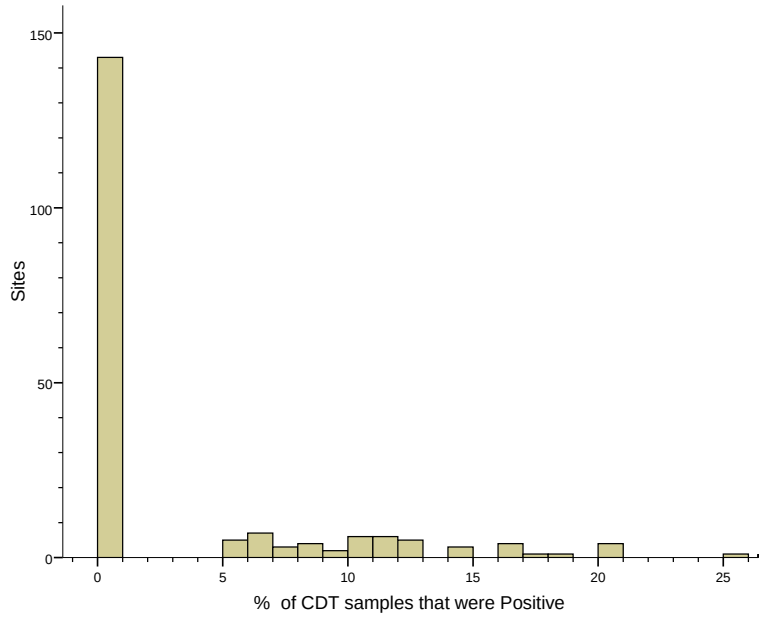
YOUR SITE 2008

Overall non-elective patient results:

Ulcerative Colitis: 59% (1439/2444)

Crohn's Disease: 47% (580/1237 with diarrhoea)

Site variation in % of CDT samples that were positive :



National 2008 Site variation

73% (143/196) of sites had no positive CDT samples in the audit

YOUR SITE 2008

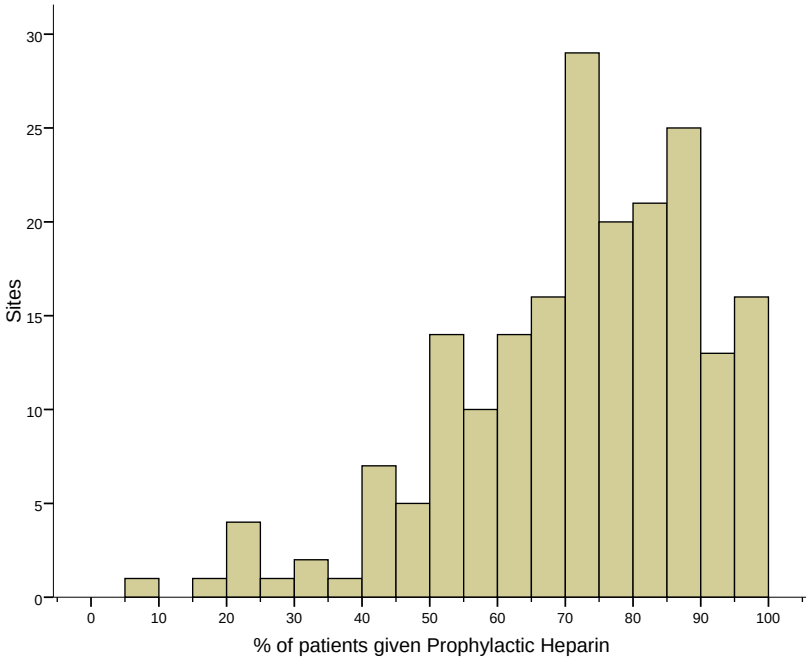
Overall non-elective patient results:

Ulcerative Colitis: 3.5% (50/1439)

Crohn's Disease: 2.6% (15/580)

2. Prophylactic heparin (non-elective patients)

Site variation in % of patients that received prophylactic heparin :



National 2008 Site variation

Median: 73%
IQR: 61-86%
N=200

YOUR SITE 2008

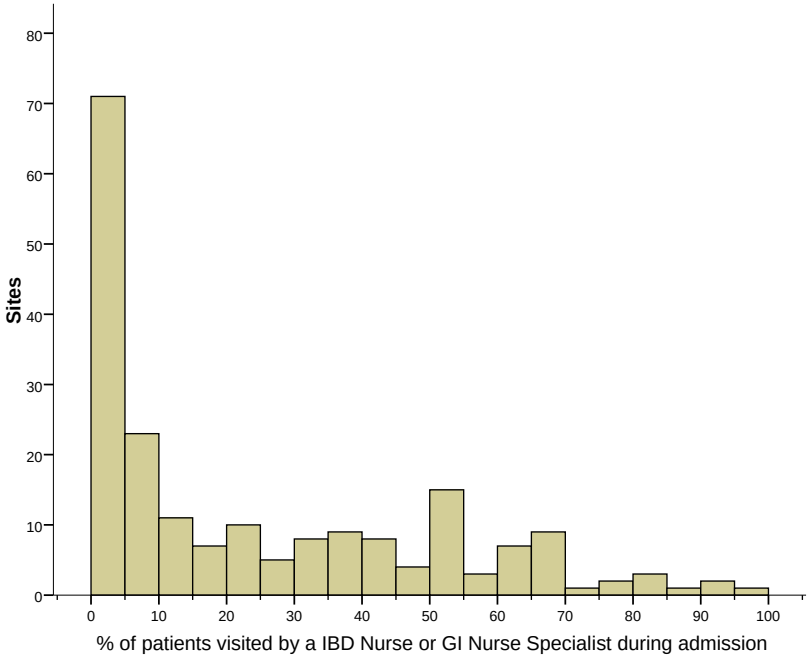
Overall non-elective patient results:

Ulcerative Colitis: 73% (1773/2444)

Crohn's Disease: 71% (1734/2456)

3. Patient seen by IBD nurse practitioner during stay

Site variation in % of patients (UC/CD) seen by IBD Nurse/GI Nurse specialist during admission:



National 2008 Site variation

Median: 13%
IQR: 0-44%
N=200

For 55/200 sites no audit patient was seen

YOUR SITE 2008

Overall non-elective patient results:

Ulcerative Colitis: 27% (672/2444)

Crohn's Disease: 21% (527/2456)

Results for Ulcerative Colitis

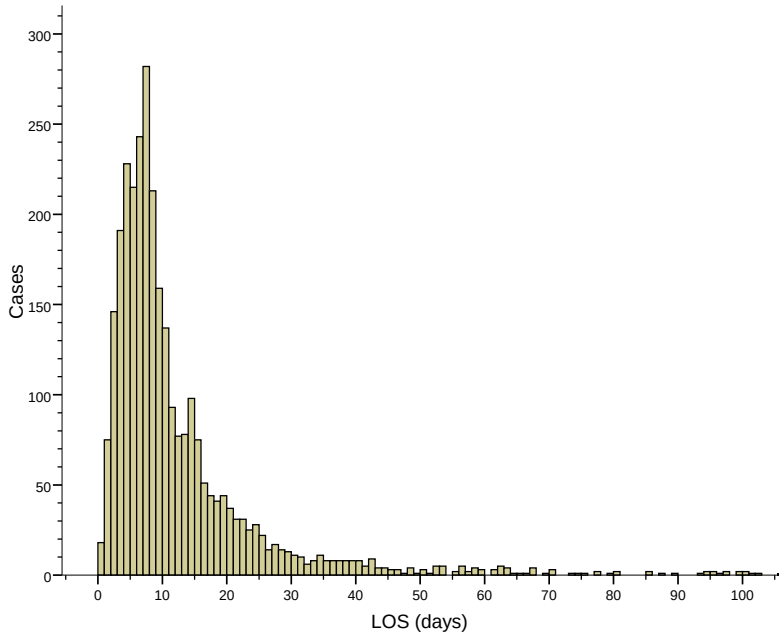
Results are for non-elective patients, apart from mortality and length of stay which refer to all patients.

1. Mortality

		National 2008	YOUR SITE
Patient died during admission	1.5% (46/2981)	38 sites had 1 death, 4 sites had two deaths in their audit sample.	

2. Length of stay (LOS)

Discharged patient variation in LOS:



National 2008

Overall median (IQR) was 8 (5-14) days , N=2920.

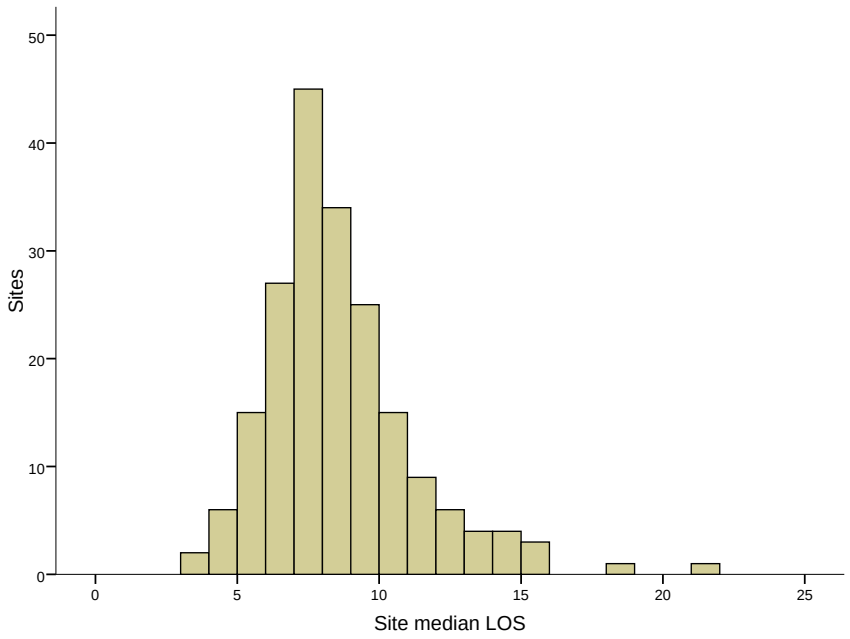
62% (1814/2920) had LOS of 7 or more days

27% (781/2920) had LOS of 14 or more days

Note that 21 outliers of >100 days were excluded from the histogram

YOUR SITE 2008

Variation in site median LOS:



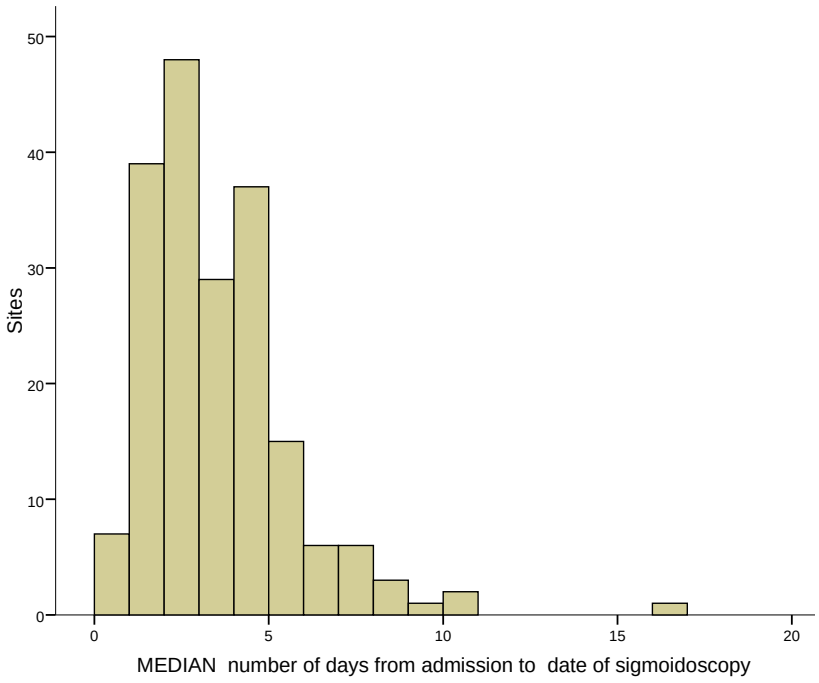
National 2008

The inter-quartile range for the site median LOS was 7- 9 days.

YOUR SITE 2008

3. Endoscopy (non-elective)

Site variation in median number of days from admission to sigmoidoscopy:



National 2008
Site variation

Median: 3 days
IQR: 2-4 days
N=194

YOUR SITE 2008

4. Abdominal X-ray (non-elective)

	National 2008 Site variation			Overall non-elective patient results	YOUR SITE 2008
	Median	IQR	N		
% with plain abdominal X-Ray performed	86%	71-93%	197	82% (2002/2444)	
% of plain abdominal X-Ray performed on same day as admission:	74%	60-84%	196	Same day: 71% (1430/2001)	

5. Acute severe UC (high stool frequency and high CRP) non-electives

Overall there were 205 patients (10% of non-electives) who were known to have high CRP (>45) and high stool frequency (>8 per day). 124 sites had 1 or more acute severe case within their UC audit sample, range 1-5.

	National audit (205 with acute severe UC)	Your site (2 with acute severe UC)
Ciclosporin	24% (50)	
Infliximab	7% (15)	
Surgery	43% (88)	
Days to surgery	Median (IQR): 10 (7-14) days from admission	
Mortality	2.9% (6)	

6. Clinical trials

No Ulcerative Colitis patients were entered into a clinical trial.

Results for Crohn's Disease

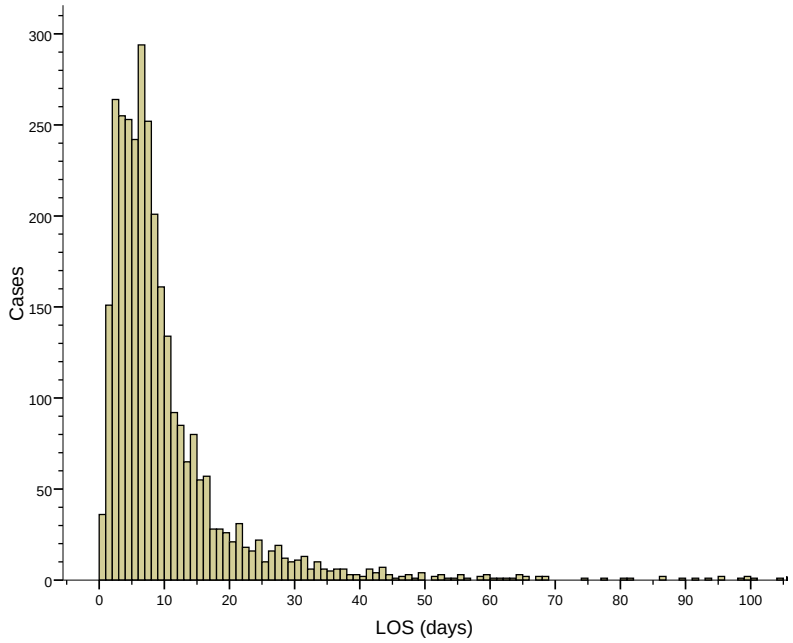
Inpatient results are for all patients, apart from weight and dietetics which refer to non-elective patients. Outpatient results are for all patients having an outpatient visit in the 12 months prior to the audit admission that did not directly initiate the audit admission.

1. Mortality

		National 2008	YOUR SITE
Patient died during admission	1.1% (34/3154)	28 sites had 1 death, 3 sites had two deaths in their audit sample.	

2. Length of stay (LOS)

Discharged patient variation in LOS:



National 2008

Overall median (IQR) was 7 (4-11) days , N=3104.

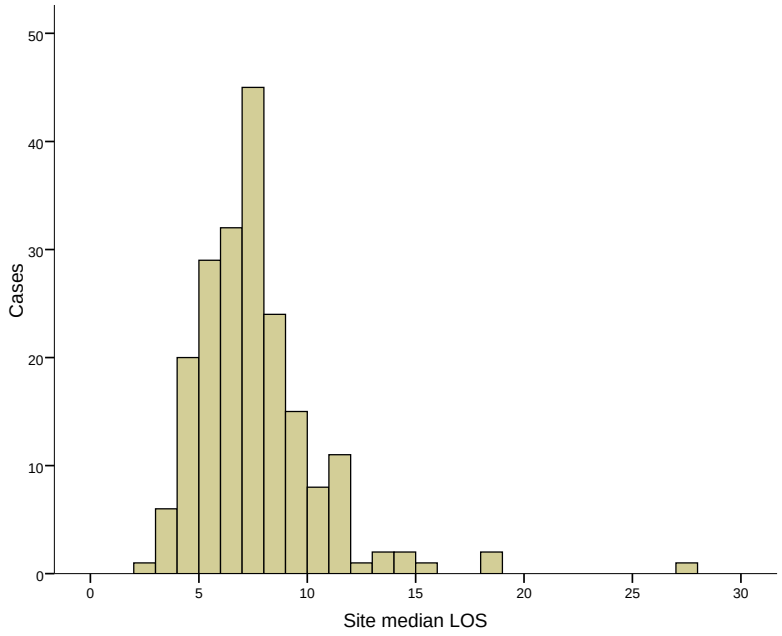
52% (1609/3104) had LOS of 7 or more days

20% (619/3104) had LOS of 14 or more days

Note that 24 outliers of >100 days were excluded from the histogram

YOUR SITE 2008

Variation in site median LOS:



National 2008

The inter-quartile range for the site median LOS was 6- 8 days.

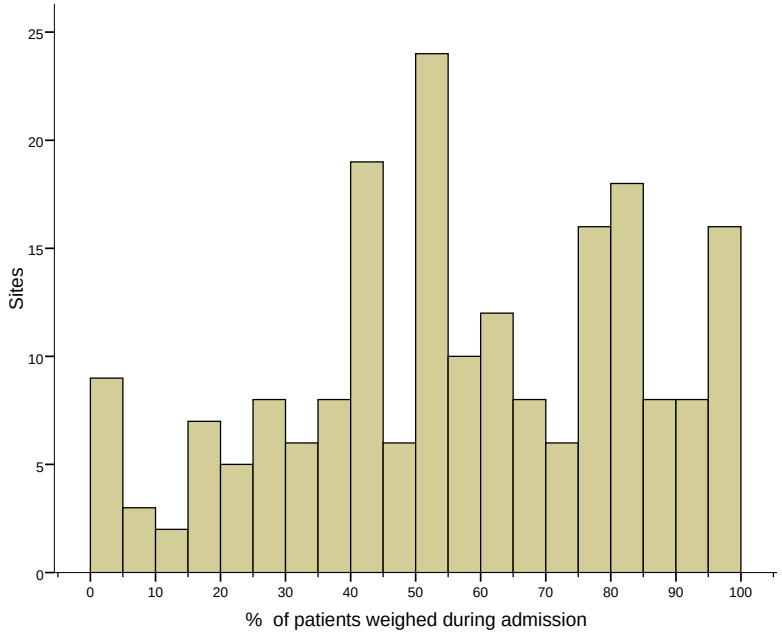
YOUR SITE 2008

3. Smoking status documented (all patients)

	National 2008 Site variation			Overall patient results	YOUR SITE 2008
	Median	IQR	N		
% with smoking status documented	90%	80-100%	200	86% (2722/3154)	

4. Weight and dietetics (non-electives)

Site variation for % of patients having their weight measured during admission:



National 2008 Site variation

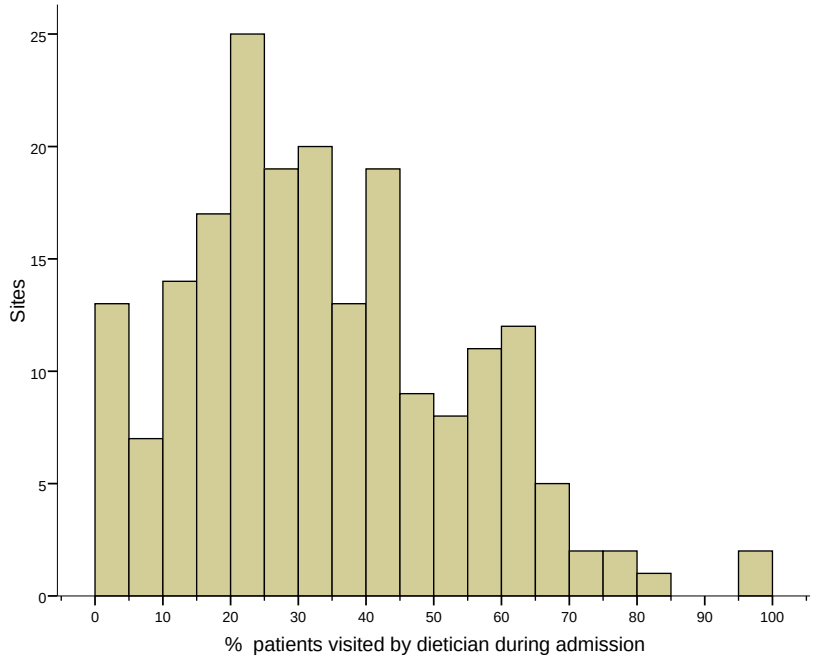
Median: 56%
IQR: 40-80%
N=199

YOUR SITE 2008

Overall non-elective patient results:

Weighed: 57% (1392/2456)

Site variation for % of patients visited by a dietitian during the visit:



National 2008 Site variation

Median: 32%
IQR: 18-45%
N=199

YOUR SITE 2008

Overall non-elective patient results:

Visited: 33% (808/2456)

	National 2008 Site variation Median	IQR	N	Overall non-elective patient results	YOUR SITE 2008
% of patients having dietary treatment initiated (by dietitian)	27%	11-40%	199	Initiated: 28% (698/2456)	
% of patients prescribed exclusive liquid enteral nutrition therapy (by dietitian)	0%	0-13%	199	Therapy: 8% (204/2456)	
	98/199 sites prescribed such therapy to at least 1 audit patient				

5. Laparoscopy (elective and non-elective)

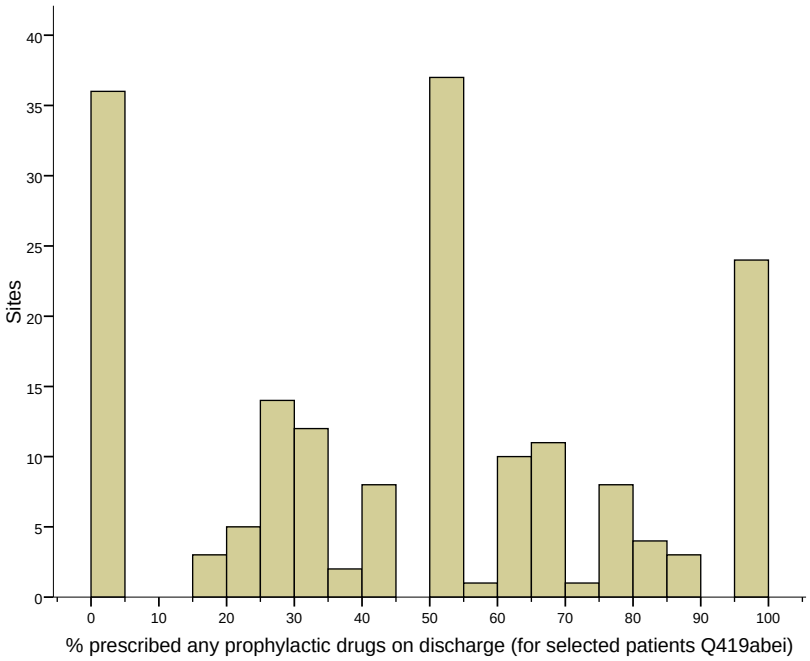
	National 2008 Site variation Median	IQR	N	Overall patient results	YOUR SITE 2008
% of surgical patients having surgery done laparoscopically or laparoscopically-assisted	13%	0-33%	186	20% (235/1184) of all surgical patients Elective: 24% (164/685) Non-elective: 14% (71/499)	

6. Post operative therapy

Included in the following results are those surgical patients having segmental/extended colectomy, subtotal colectomy, ileal/jejunal resection and ileocolonic resection.

Prophylactic therapy was taken as being any of the following drugs on discharge: Azathioprine, Mercaptopurine, Metronidazole, 5-ASA, Methotrexate. 179 sites had from 1 to 11 such patients, median 4 patients

Site variation for % of relevant surgical patients prescribed prophylactic therapy on discharge:



National 2008 Site variation

Median: 50%
IQR: 25-67%
N=179

36/179 sites did not prescribe any prophylactic therapy to their audit patients

Overall patient results: 46% (353/764) of all surgical patients

Elective: 52% (219/422)
Non-elective: 42% (134/322)

YOUR SITE 2008

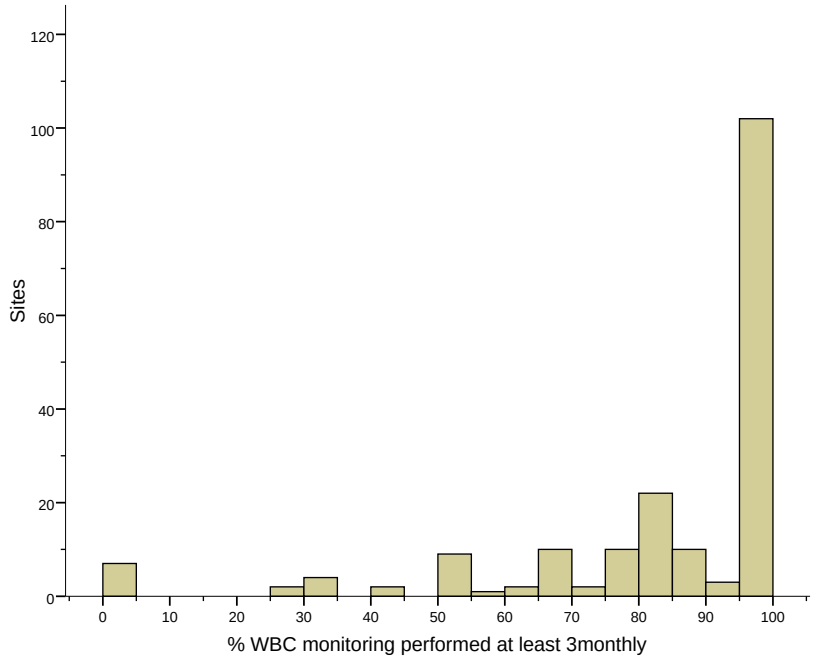
Crohn's Outpatient data

63% (1976/3154) had previous outpatient visits for Crohn's Disease in the previous 12 months. 1797 of these were visits that did not directly initiate the admission being audited, and these form the basic denominator for Crohn's outpatient results.

7. Immunosuppressive monitoring (Outpatient Data)

Denominator comprises 887 patients (from 1797) taking any of Azathioprine, Mercaptopurine or Methotrexate (Q6.4.1) in the 12 months prior to the start date of the audited admission.

Site variation for % of patients having WBC monitoring performed at least every 3 months:



National 2008 Site variation

Median: 100%
IQR: 75-100%
N=186

YOUR SITE 2008

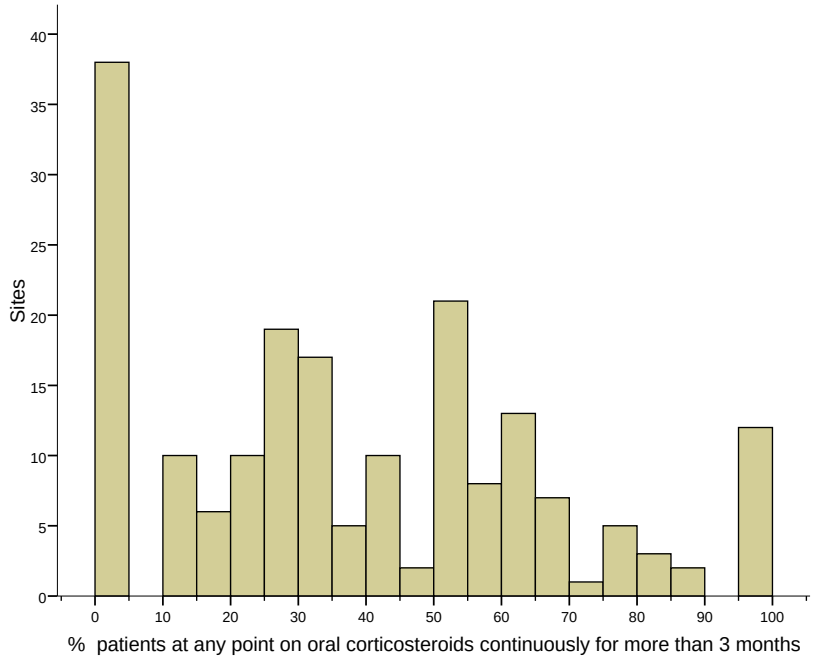
Overall patient results:

Monitored: 86% (766/887)

8. Steroid therapy

	National 2008 Site variation			Overall patient results	YOUR SITE 2008
	Median	IQR	N		
% of patients taking corticosteroids for their Crohn's Disease in 12 months prior to admission	55%	38-73%	1895	Therapy: 55% (982/1797)	

Site variation for % of patients at any point taking oral corticosteroids continuously for more than 3 months:



National 2008 Site variation

Median: 33%
IQR: 14-56%
N=189

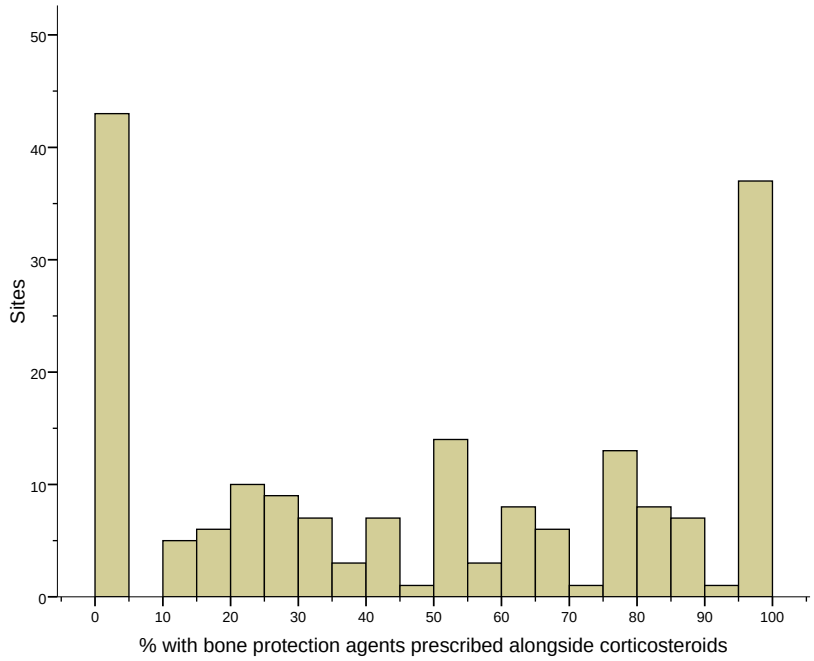
YOUR SITE 2008

Overall patient results:

>3 months:
38% (370/982)

9. Bone protection

Site variation for % of patients prescribed bone protection agents alongside corticosteroids



National 2008 Site variation

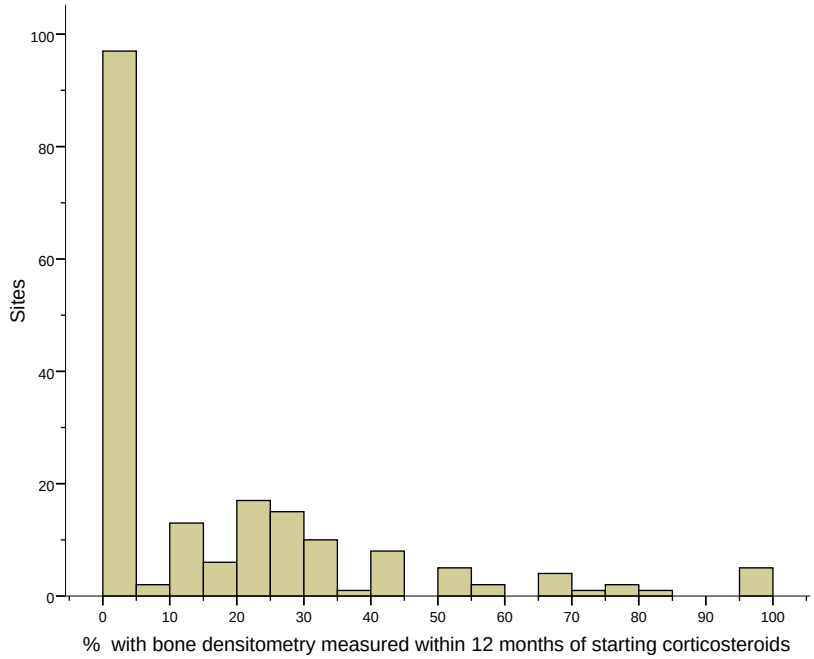
Median: 50%
IQR: 14-83%
N=189

YOUR SITE 2008

Overall patient results:

Agents:
49% (484/982)

Site variation for % of patients with bone densitometry measured within 12 months of starting corticosteroids



National 2008 Site variation

Median: 0%
IQR: 0-25%
N=189

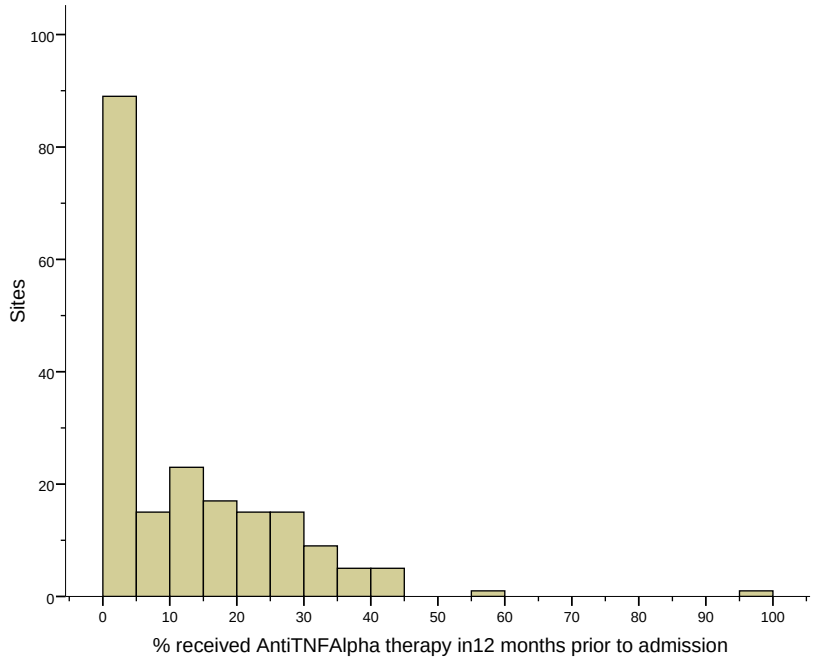
YOUR SITE 2008

Overall patient results:

Densitometry: 17% (165/982)

10. Anti-TNFα therapy

Site variation for % of patients receiving anti-TNF-α therapy in the 12 months prior to admission



National 2008 Site variation

Median: 8%
IQR: 0-20%
N=195

For 89/195 sites there were no audit patients receiving anti-TNF-α therapy

YOUR SITE 2008

Overall patient results:

Therapy: 12% (224/1797)

Overall there were 224 patients who had received anti-TNF-α therapy in the 12 months prior to admission. The number per site ranged from 1 to 9, median 2 patients. These 224 form the starting denominator for the following results:

	National audit (224 received therapy)	**Your site**
6.6.2 Anti-TNF-α therapy given for very first time at any point in 12 months before audited admission	58% (131/224)	
6.6.3 Patient had severely active Crohn's Disease at the time anti-TNF-α therapy was initiated.	95% (124/131)	
6.6.6 Fistulating disease was primary reason for decision to initiate anti-TNF-α therapy	27% (36/131)	
6.6.7 Patient had chest X-ray to exclude TB in 3 months before of initiating anti-TNF-α therapy	89% (116/131)	

11. Clinical Trials

Only 2 Crohn's Disease patients were entered into a clinical trial on the audited admission.

Key indicator results 2008 for England, Northern Ireland, Scotland & Wales

These exclude data from 1 "Island's" site.

Organisational / Structure

	England (163)	Northern Ireland (10)	Scotland (18)	Wales (15)
2.1 Patients discharged with a primary diagnosis of **Ulcerative Colitis**: Median (IQR)	52 (26-98), n=157	36 (10-55), n=9	48 (29-103), n=16	29 (16-49), n=15
2.1 Patients discharged with a primary diagnosis of **Crohn's Disease**: Median (IQR)	62 (33-112), n=157	37 (19-53), n=9	86 (51-169), n=16	33 (20-63), n=15
2.2 Patients discharged having had an operation where the primary indication was **Ulcerative Colitis**: Median (IQR)	10 (4-19), n=157	11 (2-18), ,n=7	6 (2-35), n=13	9 (3-21), n=15
2.2 Patients discharged having had an operation where the primary indication was **Crohn's Disease:** Median (IQR)	15 (7-28), n=157	10 (3-21), n=7	9 (4-55), n=13	8 (7-22), n=15
2.3 Surgeons perform ileo-anal pouch surgery on site	81% (131/161)	50% (5/10)	67% (12/18)	53% (8/15)
If yes, ileo-anal pouch operations performed: Median (IQR)	4 (1-6), n=126	1 (range 1-4)	7 (3-13), n=9	2 (0-7), n=8
3.1 Dedicated Gastroenterology ward	79% (129/163)	30% (3/10)	67% (12/18)	73% (11/15)
If yes, Beds per lavatory on the ward: Median (IQR)	4.5 (3.4-6.0), n=129	Values 2.5, 3.2 & 5.0	3.0 92.4-6.0), n=12	4.0 (3.5-6.0), n=11
3.4 IBD Nurse Specialists on site (WTE): Median (IQR)	1 (0-1), n=162 36% (59) NONE	0.3 WTE, n=1 90% (9/10) NONE	1 (0-1), n=18 17% (3/18) NONE	0 (0-1), n=15 47% (7/15) NONE
3.5 Sessions of Specialist Nurse time dedicated to IBD care per week?: Median (IQR)	8 (4-10), n=99	3 sessions, n=1	10 (3-10), n=12	6 (2-12), n=8
5.1 Searchable database of IBD patients on site	39% (63/161)	40% (4/10)	39% (7/18)	27% (4/15)
5.2 Timetabled meetings (where IBD patients are discussed) take place between Gastroenterologists and Colorectal Surgeons	71% (115/162)	20% (2/10)	44% (8/18)	60% (9/15)
6.3 Dietetic sessions per week dedicated to GI disorders (not just IBD): Median (IQR)	2 (0-8), n=161	0 (0-1), n=9	2 (1-5), n=18	1 (0-6), n=15
7.1 Is there written information for patients with IBD on whom to contact in the event of a relapse?	69% (112/162)	40% (4/10)	67% (12/18)	80% (12/15)
7.2 In general, a relapsed patient expected to be seen in clinic in less than 7 days	70% (114/162)	80% (8/10)	44% (8/18)	40% (6/15)
7.3 Patients have access to an IBD specialist by :				
a) Telephone	87% (142/163)	70% (7/10)	72% (13/18)	80% (12/15)
b) Drop-in clinic	13% (21/163)	0% (0/10)	17% (3/18)	13% (2/15)
c) Email	47% (77/163)	0% (0/10)	28% (5/18)	13% (2/15)
7.4 Joint or parallel clinics run between Gastroenterologists and Surgeons	50% (81/162)	10% (1/10)	44% (8/18)	73% (11/15)
10.1 Paediatric to adult handover clinic for young patients with IBD	28% (45/161)	10% (1/10)	33% (6/18)	13% (2/15)
10.3 Psychologists attached to the Gastroenterology service	6% (10/161)	10% (1/10)	0% (0/18)	7% (1/13)
10.4 Pathways exist for direct access to psychological support	24% (39/161)	0% (0/10)	28% (5/18)	0% (0/15)
11.1 Written trust guidelines exist for management of acute or severe colitis	73% (117/161)	30% (3/10)	61% (11/18)	67% (10/15)
12.1 Hospital offers open forums or meetings for patients with IBD	33% (53/161)	20% (2/10)	6% (1/18)	13% (2/15)
a) Less than 4 monthly	13% (7/53)	50% (1/2)	100% (1/1)	50% (1/2)
b) Every 4-8 months	47% (25/53)	0% (0/2)	-	-
c) Every 8-12 months	36% (19/53)	0% (0/2)	-	-

Results combined for Ulcerative Colitis & Crohn's Disease patients

Stool sample results are given for Ulcerative Colitis (non-elective) patients and Crohn's Disease (non-elective, with diagnosis of diarrhoea) patients combined. Results for heparin and IBD nurse specialists are given for non-elective Ulcerative Colitis and Crohn's Disease patients combined.

	England	Northern Ireland	Scotland	Wales
Stool sample sent for Standard Stool Culture	63% (1894/3024)	64% (93/146)	58% (164/282)	61% (133/219)
Stool sample was positive	2.1% (39/1891)	0% (0/93)	2.4% (4/164)	1.5% (2/133)
Stool sample sent for CDT	56% (1688/3024)	53% (77/146)	52% (148/282)	47% (102/219)
Stool sample was positive	3.3% (55/1687)	3.9% (3/77)	3.4% (5/148)	2.0% (2/102)
Patient given Prophylactic heparin	72% (2904/4017)	76% (163/214)	68% (249/365)	62% (177/286)
Patient visited by IBD Nurse/GI Nurse specialist during admission	26% (1044/4017)	11% (23/214)	22% (80/365)	18% (52/286)

Results for Ulcerative Colitis

Results below are for non-elective patients, apart from mortality & length of stay which refer to all patients.

	England	Northern Ireland	Scotland	Wales
1.3.1 Patient died during admission	1.5% (37/2481)	2.7% (3/110)	1.4% (3/208)	1.7% (3/179)
1.3.2 Length of stay (discharges) Median (IQR)	8 (5-14), n=2429	12,14,19 days n=3	7 (3-13), n=205	8 (5-12), n=176
2.3.1 Patient had sigmoidoscopy (Rigid/Flexible)	46% (931/2036)	41% (41/101)	43% (71/164)	46% (65/140)
Admission to sigmoidoscopy (days): median (IQR)	3 (1-5), n=931	2 (2-4), n=41	2 (1-4), n=71	2 (1-5), n=65
3.2.1. Plain abdominal X-ray performed	83% (1680/2036)	81% (82/101)	71% (117/164)	86% (121/140)
Performed same day as admission	71% (1192/1679)	73% (60/82)	76% (87/114)	75% (91/121)
Patients with acute/severe Ulcerative Colitis:*	176	10	12	4
• Ciclosporin	25% (44/176)	10% (1/10)	17% (2/12)	75% (3/4)
• Infliximab	7% (13/176)	10% (1/10)	8% (1/12)	0% (0/4)
• Surgery	47% (83/176)	30% (3/10)	8% (1/12)	25% (1/4)
• Days to surgery: Median (IQR)	10 (7-14), n=83	6,7,10 days, n=3	9 days, n=1	12 days, n=1
• Mortality	2.8% (5/176)	0% (0/10)	8% (1/12)	0% (0/4)

* Non-elective patients known to have high CRP (>45) and high stool frequency (>8 per day) during first 72 hours of steroid therapy

Results for Crohn's Disease

Inpatient results below are for all patients, apart from weight & dietetics which refer to non-elective patients.

	England	Northern Ireland	Scotland	Wales
1.3.1 Patient died during admission	1.0% (27/2575)	0% (0/133)	1.6% (4/246)	1.6% (3/188)
1.3.2 Length of stay Median (IQR)	7 (4-12), n=2533	7 (4-12), n=133	6 (3-12), n=241	7 (4-10), n=185
1.6.1 Smoking status documented	86% (2203/2575)	83% (111/133)	94% (231/246)	88% (166/188)
2.5.1 Patient weight measured	56% (1121/1986)	53% (60/113)	62% (125/201)	56% (82/146)
2.5.2 Patient visited by dietitian	32% (636/1986)	42% (48/113)	35% (71/201)	35% (51/146)
2.5.3 Dietary treatment was initiated	28% (564/1986)	33% (37/113)	26% (53/201)	29% (43/146)
Exclusive liquid enteral nutrition therapy prescribed	8% (168/1986)	7% (8/113)	8% (17/201)	8% (11/146)
4.1.9 Surgery done laparoscopically/laparoscopically-assisted	20% (201/989)	8% (3/37)	22% (19/86)	18% (12/68)
4.3.1 Prophylactic therapy* on discharge	46% (291/634)	36% (8/22)	51% (28/55)	46% (23/50)

* Azathioprine, Mercaptopurine, Metronidazole, 5-ASA or Methotrexate for patients having segmental/extended colectomy, subtotal colectomy, ileal/jejunal resection and ileocolonic resection.

Outpatient results are for all patients having an outpatient visit in the 12 months prior to the audit admission that did not directly initiate the audit admission.

	England	Northern Ireland	Scotland	Wales
Outpatient visits in previous 12 months	63% (1626/2575)	56% (75/133)	65% (159/246)	57% (107/188)
Visit did not directly initiate the audit admission	91% (1479/1626)	88% (66/75)	91% (145/159)	92% (98/107)
6.4.1 Taking Azathioprine, Mercaptopurine or Methotrexate in the 12 months before admission.	46% (679/1479)	39% (26/66)	50% (73/145)	56% (55/98)
6.4.3 WBC monitoring performed at least 3 monthly	91% (620/679)	88% (23/26)	93% (68/73)	93% (51/55)
6.5.1 Oral corticosteroids for Crohn's in 12 months before admission	54% (795/1479)	52% (34/66)	57% (82/145)	64% (63/98)
6.5.2 Oral corticosteroids taken at some point continuously for more than three months	37% (291/795)	38% (13/34)	38% (31/82)	48% (30/63)
6.5.3 Bone protection agents prescribed alongside corticosteroids	50% (395/795)	68 (23/34)	28% (23/82)	67% (42/63)
6.5.4 Bone densitometry measured within 12 months of initiation of corticosteroid therapy	17% (136/795)	21% (7/34)	16% (13/82)	14% (9/63)
6.6.1 Patient received anti-TNF-α therapy in the 12 months prior to admission	12% (181/1479)	20% (13/66)	13% (19/145)	8% (8/98)
6.6.2 Anti-TNF-α therapy given for very first time at any point in 12 months before audited admission	57% (103/181)	69% (9/13)	63% (12/19)	75% (6/8)
6.6.3 Patient had severely active Crohn's Disease at the time anti-TNF-α therapy was initiated.	95% (98/103)	89% (8/9)	100% (12/12)	100% (6/6)
6.6.6 Fistulating disease was primary reason for decision to initiate anti-TNF-α therapy	25% (26/103)	22% (2/9)	33% (4/12)	50% (3/6)
6.6.7 Patient had chest X-ray to exclude TB in 3 months before of initiating anti-TNF-α therapy	87% (90/103)	89% (8/9)	92% (11/12)	100% (6/6)

Key indicator results (2006 and 2008) for sites participating in both rounds

These tables compare the national audit results from 2008 with the national audit results from 2006 for those sites taking part in both audits. This will give a better indication of the potential impact of the audit process than the overall results presented in sections 4-7. Due to changes in Trust configuration and changes in site definition the total number of sites differs slightly between audit rounds. The number of sites submitting data is shown below:

	National 2006	National 2008
Organisational	155 sites	150 sites
Ulcerative Colitis cases	2325 from 145 sites	2293 from 144 sites
Crohn's Disease cases	2429 from 145 sites	2353 from 146 sites

Organisational / Structure

		National 2006 (155)	National 2008 (150)
2.1 Patients discharged with a primary diagnosis of **Ulcerative Colitis**:	Median (IQR)	50 (24-100), n=147	47 (26-85), n=143
2.1 Patients discharged with a primary diagnosis of **Crohn's Disease**:	Median (IQR)	61 (30-110), n=147	55 (33-109), n=143
2.2 Patients discharged having had an operation, primary indication **Ulcerative Colitis**:	Median (IQR)	12 (5-30), n=140	10 (5-21) , n=141
2.2 Patients discharged having had an operation ,primary indication **Crohn's Disease:**	Median (IQR)	17 (9-39), n=140	15 (8-29), n=141
2.3 Surgeons perform ileo-anal pouch surgery on site		76% (117/154)	77% (115/149)
If yes, how many ileo-anal pouch operations performed:	Median (IQR)	4 (2-7), n=111	4 (2-8), n=111
3.1 Dedicated Gastroenterology ward		70% (108/155)	80% (120/150)
If yes, Beds per lavatory on the ward:	Median (IQR)	4.5 (3.0-6.0), n=105	4.2 (3.0-6.0), n=120
3.4 IBD Nurse Specialists on site (WTE):	Median (IQR)	1 (0-1), n=154 41% (63) NONE	1 (0-1), n=150 33% (50) NONE
3.5 Sessions of Specialist Nurse time dedicated to IBD care per week?:	Median (IQR)	6 (4-10), n=82	8 (4-10), n=95
5.1 Searchable database of IBD patients on site		37% (57/154)	47% (70/149)
5.2 Timetabled meetings (where IBD patients are discussed) take place between Gastroenterologists and Colorectal Surgeons		76% (118/155)	73% (109/150)
6.3 Dietetic sessions per week dedicated to GI disorders (not just IBD):	Median (IQR)	2 (0-7), n=149	2 (0-8), n=148
7.1 Written information for patients with IBD on whom to contact in the event of a relapse		68% (104/154)	73% (110/150)
7.2 In general, a relapsed patient expected to be seen in clinic in less than 7 days		64% (99/155)	72% (108/150)
7.3 Patients have access to an IBD specialist by :			
a) Telephone		77% (119/155)	87% (131/150)
b) Drop-in clinic		15% (24/155)	15% (22/150)
c) Email		30% (47/155)	47% (70/150)
7.4 Joint or parallel clinics run between Gastroenterologists and Surgeons		47% (73/155)	55% (82/150)
10.1 Paediatric to adult handover clinic for young patients with IBD		23% (35/154)	28% (41/149)
10.3 Psychologists attached to the Gastroenterology service		8% (12/154)	7% (11/149)
10.4 Pathways exist for direct access to psychological support		22% (34/154)	26% (38/149)
11.1 Written trust guidelines exist for management of acute or severe colitis		50% (77/154)	72% (108/149)
12.1 Hospital offers open forums or meetings for patients with IBD		30% (47/155)	35% (52/149)
a) Less than 4 monthly		15% (7/47)	19% (10/52)
b) Every 4-8 months		38% (18/47)	42% (22/52)
c) Every 8-12 months		36% (17/47)	33% (17/52)

Results combined for Ulcerative Colitis & Crohn's Disease patients

Stool sample results are given for Ulcerative Colitis (non-elective) patients and Crohn's Disease (non-elective, with diagnosis of diarrhoea) patients combined. Results for heparin and IBD nurse specialists are given for non-elective Ulcerative Colitis and Crohn's Disease patients combined.

	National 2006	National 2008
Stool sample sent for Standard Stool Culture	55% 1670/3022	63% (1765/2799)
Stool sample was positive	Not asked	1.8% (32/1765)
Stool sample sent for CDT	44% 1318/3022	55% (1544/2799)
Stool sample was positive	Not asked	3.4% (52/1544)
Patient given Prophylactic heparin	56% 2225/3975	73% (2708/3687)
Patient visited by IBD Nurse/GI Nurse specialist during admission	21% 843/3974	28% (1032/3687)

Results for Ulcerative Colitis

Results below are for non-elective patients, apart from mortality & length of stay which refer to all patients.

	National 2006	National 2008
1.3.1 Patient died during admission	1.4% (33/2325)	1.5% (34/2293)
1.3.2 Length of stay (discharges) Median (IQR)	8 (5-15), n=2274	8 (5-14), n=2250
2.3.1 Patient had sigmoidoscopy (Rigid/Flexible)	43% (868/2003)	45% (844/1875)
Admission to sigmoidoscopy (days): median (IQR)	3 (1-6), n=868	3 (1-5), n=844
3.2.1. Plain abdominal X-ray performed	80% (1603/2001)	83% (1552/1875)
Performed same day as admission	67% (1072/1603)	72% (1121/1552)
Patients with acute/severe Ulcerative Colitis:*	179	156
• Ciclosporin	28% (51/179)	26% (41/156)
• Infliximab	4% (8/179)	8% (13/156)
• Surgery	42% (76/179)	45% (70/156)
• Days to surgery: Median (IQR)	11 (8-17), n=76	10 (7-13), n=70
• Mortality	2.2% (4/179)	2.6% (4/156)

* Non-electives who were known to have high CRP (>45) and high stool frequency (>8 per day).

Results for Crohn's Disease

Inpatient results are for all patients, apart from weight & dietetics which refer to non-elective patients.

	National 2006	National 2008
1.3.1 Patient died during admission	1.2% (29/2429)	1.0% (24/2353)
1.3.2 Length of stay Median (IQR)	8 (4-13), n=2382	7 (4-11), n=2326
1.6.1 Smoking status documented	85% (2073/2429)	88% (2060/2353)
2.5.1 Patient weight measured	53% (1052/1972)	58% (1046/1812)
2.5.2 Patient visited by dietitian	37% (726/1972)	34% (612/1812)
2.5.3 Dietary treatment was initiated	30% (598/1972)	29% (529/1812)
Exclusive liquid enteral nutrition therapy prescribed	6% (113/1972)**	8% (141/1812)
4.1.9 Surgery done laparoscopically/laparoscopically-assisted	10% (85/844)	19% (171/889)
4.3.1 Prophylactic therapy* on discharge	48% (320/670)	46% (264/573)

* Azathioprine, Mercaptopurine, Metronidazole, 5-ASA or Methotrexate for patients having segmental/extended colectomy, subtotal colectomy, ileal/jejunal resection and ileocolonic resection.

** 2006 question asked if parenteral nutrition was required.

Outpatient results are for all patients having an outpatient visit in the 12 months prior to the audit admission that did not directly initiate the audit admission.

	National 2006	National 2008
Outpatient visits in previous 12 months	65% (1571/2429)	63% (1483/2353)
Visit did not directly initiate the audit admission	Not asked	91% (1349/1483)
6.4.1 Taking Azathioprine, Mercaptopurine or Methotrexate in 12 months before admission.	46% (679/1479)	50% (669/1349)
6.4.3 WBC monitoring performed at least 3 monthly	84% (573/679)	87% (585/669)
6.5.1 Oral corticosteroids for Crohn's in 12 months before admission	57% (890/1571)	55% (746/1349)
6.5.2 Oral corticosteroids taken at some point continuously for more than three months	47% (416/890)	37% (273/746)
6.5.3 Bone protection agents prescribed alongside corticosteroids	47% (414/890)	55% (407/746)
6.5.4 Bone densitometry measured within 12 months of initiation of corticosteroid therapy	18% (160/890)	17% (128/746)
6.6.1 Patient received anti-TNF-α therapy in the 12 months prior to admission	7% (105/1456)	13% (169/1349)
6.6.2 Anti-TNF-α therapy given for very first time at any point in 12 months before audited admission	74% (78/105)	57% (97/169)
6.6.3 Patient had severely active Crohn's Disease at the time anti-TNF-α therapy was initiated.	82% (64/78)	97% (94/97)
6.6.6 Fistulating disease was primary reason for decision to initiate anti-TNF-α therapy	29% (23/78)	24% (23/97)
6.6.7 Patient had chest X-ray to exclude TB in 3 months before of initiating anti-TNF-α therapy	82% (64/78)	88% (85/97)

Section 2. Introduction

The specific aims of the UK IBD Audit set out at the inception of the project were to:

1. Assess current structure and organisation of care for IBD
2. Assess processes and outcomes of care delivery (inpatient and outpatient) in IBD
3. Enable Trusts to compare their performance against national standards
4. Identify resource and organisational factors that may account for observed variations in care
5. Facilitate, develop and institute an intervention strategy to improve quality of care.
6. Repeat the audit to prove that change has occurred
7. Establish measures for healthcare services to use to compare quality of IBD services
8. Develop a sustainability programme to maintain quality of care.

Further information on the work of the UK IBD Audit project can be accessed via the Clinical Effectiveness & Evaluation Unit section of the Royal College of Physicians website: http://www.rcplondon.ac.uk

Availability of audit results in the public domain

Individual hospital site results will not be placed in the public domain as agreed upon registration for this audit. The National Report of results will be made available to the Department of Health in England, NHS Quality Improvement Scotland, NHS Wales Health & Social Care Department and the Department of Health, Social Services and Public Safety in Northern Ireland. Executive summary report data will be made available to Strategic Health Authorities and Health Boards in relation to the combined site results for the hospitals that participated in their respective areas.

In addition, the Healthcare Commission, via consultation with members of the UK IBD Audit Steering Group, wish to include participation in the IBD Audit in their Annual Health Check and have also identified specific data points from the IBD Audit that will be used as part of their screening against Core Standards in the Health Check (the full list of these points appear as appendix 5). This will be in time for the 2008/9 report which will be published by the Care Quality Commission after it comes into being in April 2009.

This arrangement applies only to Trusts in England and the Paediatric aspect of the audit will not be included in this arrangement as it is yet to go through its first round.

Full and executive summary copies of the Report of the National Results from the 2nd round will be available in the public domain via the Clinical Effectiveness & Evaluation Unit section of the Royal College of Physicians external website: www.rcplondon.ac.uk

Section 3. Methods

Standards used in the 2nd round (2008) data collection process

Copies of the full datasets used in the audit are shown in Appendix 2. The standards and questions used in the 2nd round of the audit, which are listed in full through sections 4-7 of this report, are largely based on the BSG document 'Guidelines for the management of inflammatory bowel disease in adults' (Gut. 2004)*, along with standards agreed through consensus of the UK IBD Audit Steering Group for areas that were not covered by that document. A full list of the standards for this report appears as Appendix 3. The set of audit questions used in round 2 were very similar to those developed by the UK IBD Audit Steering Group for round 1 which had been assessed through extensive piloting. Consistency of datasets across both rounds allows for an assessment of change in standards over time, a high priority for hospitals.

* M J Carter, A J Lobo, S P L Travis, on behalf of the IBD Section of the British Society of Gastroenterology

Data collection tool

The web tool included context specific online help including definitions and clarifications, internal logical data checks and feedback to enable more complete and accurate data. Security and confidentiality were maintained through the use of site specific codes. Sites accessed the proformas by using unique identifiers and passwords and data could be saved during as well as at the end of an input session.

Definition of a 'site'

Lead clinicians contacted within each Trust/Health Board were asked to collect data on the basis of a unified IBD Service typically within a single hospital within the Trust. Where a Trust/Health Board had more than one hospital offering independent IBD services they entered data for separate "sites". Some institutions running an IBD Service across two or more hospitals with the same staff completed the audit as one Trust-wide site.

Recruitment

Three individuals from each hospital were approached: a lead Clinician, lead Surgeon and a lead from within their Clinical Audit Department. An overall "audit lead" (usually a consultant gastroenterologist) from each site was then identified following local discussion. This "audit lead" was responsible for quality of data collection and entry for their particular site. Trust/Health Board Chief Executives were alerted to the study.

Hospitals were eligible if they routinely admit IBD patients acutely. 270 hospitals that admit patients with Inflammatory Bowel Disease (IBD) in England, Northern Ireland, Scotland and Wales (plus the Isle of Man and the Channel Islands) were invited to take part. 209 sites submitted data (England 165, Northern Ireland 10, Scotland 18, Wales 15, Channel Islands 1). Of these 209 sites, 184 were single hospital sites within a Trust, 24 were Trust-wide sites combining 2 hospitals and 1 was a Trust-wide site combining 3 hospitals with a total of 235 (87%) hospitals entering data. The data were entered between 1st September and 31st December 2008.

Each participating site was provided with an appropriate login and password and help booklets. A telephone and email helpdesk was provided by the CEEu, RCP to answer any individual queries.

Data required

The audit of the site organisation of IBD services was of 1st September 2008. Some organisational questions related to discharges and operations during the 12 month period from 1st September 2007 to 31st August 2008. In total, organisational audit data was received from 207 sites.

For individual patient care, the case-notes were audited of consecutive inpatients (20 Crohn's Disease and 20 Ulcerative Colitis) admitted from 31st August 2008 working backwards as far as 1st September 2007 if necessary to identify the 40. Case identification was based on discharge diagnosis of IBD as this defined the standards a clinical team expects to be assessed against (the list of relevant ICD-10 Codes to search against that was provided to participating sites appears on the following page).

In total, data were collected for 2981 Ulcerative Colitis patients (from 197 sites), median (IQR) of 17 (11-20) per site, and for 3154 Crohn's Disease patients (from 200 sites), median (IQR) of 18 (12-20) per site.

Selection criteria for the patient cohorts (ICD-10 codes)

For the Crohn's Disease and Ulcerative Colitis clinical audits, case identification was based on the discharge diagnosis using the following relevant ICD codes:-

- Crohn's Disease K50.0 (small intestine), K50.1 (large intestine), K50.8 (other), K50.9 (unspecified).
- Ulcerative Colitis K51.0 (enterocolitis), K51.1 (ileocolitis), K51.2 (proctitis), K51.3 (rectosigmoiditis), K51.4 (pseudopolyposis of colon), K51.5 (mucosal proctocolitis), K51.8 (other), K51.9 (unspecified)

A patient was to be included in the clinical audit only once, this being for the most recent admission for IBD prior to 31st August 2008. For the Organisational audit all admissions for IBD during the year prior to 31st August 2008 (medical and surgical) meeting the criteria below were to be counted and in the case of the organisational dataset multiple admissions for IBD for the same patient were to be included.

Inclusion and Exclusion criteria

Patients were to be included in the audit if the primary reason for admission was because of IBD or symptoms that were later diagnosed as IBD and excluded if IBD was not indicated as the main reason e.g. a person with known IBD admitted because of a myocardial infarction.

Day cases were to be excluded, such as for endoscopy or drug infusions as were cases where a patient was admitted and stayed overnight but was discharged the following day within 24 hours of admission. Patients with a diagnosis of Indeterminate Colitis were also excluded as were patients under the age of 16 on the date of admission (for this Adult report).

Presentation of results

Wherever possible the 2008 audit question numbers have been added within tables of results to facilitate reference to the actual questions in the audit datasets as seen in Appendix 2. These may differ from the 2006 audit question numbers.

- Section 1 provides a breakdown of Key National Results, overall, by site variation, and by country. Local 'YOUR SITE' results are shown alongside national and site variation statistics for key indicators.
- Section 4 gives the 2008 national summary results for the organisational audit for all of the sites participating in this audit and (where applicable) a comparison against the 2006 results.
- Section 5 gives the national summary results for the 2008 audit of Ulcerative Colitis inpatient care and (where applicable) a comparison against the 2006 results
- Sections 6 & 7 give the national summary results for the 2008 audit of Crohn's Disease inpatient and outpatient care and (where applicable) a comparison against the 2006 results

National results are presented as percentages for categorical data and as median and inter-quartile range (IQR) for numerical data. Site variation is also summarised by the median and IQR and in graphical form by histogram plots.

Section 4. Organisation & Structure of IBD services as at 1st September 2008

Auditor Discipline

	National 2006 (181 sites)		National 2008 (207 sites)	
Consultant	78%	(142)	79%	(163)
Other medical staff	15%	(28)	39%	(80)
Nurse	22%	(39)	43%	(88)
Manager	na	na	8%	(16)
Clinical Audit staff	13%	(24)	51%	(106)
Other*	6%	(11)	11%	(22)

* Other (2006) comprised SPR (3), Dietitian (2), medical student (2) and 1 each of database manager, general manager, information staff and medical secretary.
* Other (2008) comprised information staff (11), IT staff (4), medical secretary (2), medical records (2), dietitian, pharmacy, medical student

General Hospital Demographics

Standard:
Hospitals where surgery is performed for IBD should have ITU beds with 24 hr care by anaesthetists/intensivists on-site.

		National 1/6/2006 (181 sites)	National 1/9/2008 (207 sites)
1.1 How many beds does your hospital have in total?	Median (IQR)	540 (396-798), n=177	512 (390-764) n=205
1.2 Does your hospital have either of the following?	Acute medicine unit	98% (178)	97% (201)
	Acute surgical unit	77% (138/180)	79% (163)
1.3 Is there an Intensive Therapy Unit (ITU) on site?	% YES	71% (128)	65% (134)
If yes, how many beds	Median (IQR)	7 (6-10), n=126	7 (6-10) n=133
1.4 Is there a High Dependency Unit (HDU) on site?	% YES	66% (120)	62% (129)
If yes, is it:	a) Medical	8% (9/118)	8% (10/128)
	b) Surgical	14% (16/118)	9% (11/128)
	c) Mixed	79% (93/118)	84% (107/128)
If yes, how many beds	Median (IQR)	6 (4-9), n=119	6 (4-11), n=128
1.5 Is there a combined Intensive Therapy (ITU) & High Dependency (HDU) Unit on site?	% YES	25% (45)	32% (66)
If yes, is it:	a) Medical	2% (1)	2% (1)
	b) Surgical	0% (0)	0% (0)
	c) Mixed	98% (44)	98% (65)
If yes, how many beds	Median (IQR)	10 (8-16), n=45	10 (8-14), n=66

Note 2006: There were 4 sites that did not have ITU nor HDU beds on site – all 4 of these had fewer than 150 beds.
Note 2008: There were 4 sites that did not have ITU nor HDU beds on site – 3 of these had fewer than 150 beds.

Inpatient Activity

Standard:
2.3 Patients undergoing surgery for Ulcerative Colitis should have the opportunity to have ileo-anal pouch surgery either locally, if available, or at a regional centre.

		National 2006 (Period 1/6/05 to 31/5/06) (181 sites)	National 2008 (Period 1/9/07 to 31/8/08) (207 sites)
2.1 How many patients were discharged with a primary diagnosis of **Ulcerative Colitis**	Median (IQR) Range	50 (25-105), n=167 1-481	47 (24-90), n=199 1-501
2.1 How many patients were discharged with a primary diagnosis of **Crohn's Disease**	Median (IQR) Range	61 (30-112), n=167 2-609	57 (31-111), n=199 2-516
2.2 How many patients were discharged having had an operation where the primary indication was **Ulcerative Colitis**	Median (IQR)	11 (5-30), n=159	10 (4-19), n=194
2.2 How many patients were discharged having had an operation where the primary indication was **Crohn's Disease**	Median (IQR)	16 (9-40), n=159	15 (7-29), n=194
2.3 Do surgeons perform ileo-anal pouch surgery on site?	% YES	72% (130/180)	77% (157/205)
If yes, how many ileo-anal pouch operations were performed?	Median (IQR)	4 (2-7), n=122	3 (1-7), n=149

Gastroenterology Services

Standards:
3.1 Specialty triage of emergency admitted IBD patients to appropriate medical or surgical gastroenterology.
3.1 No more than 3 patients per lavatory.
3.3 At least 2 WTE Medical Gastroenterologists.
3.4 and 3.5 At least 1 IBD specialist nurse with at least 5 sessions dedicated to IBD.

		National 1/6/06 (181 sites)	National 1/9/08 (207 sites)
3.1 Is there a dedicated Gastroenterology ward?	% YES	67% (122)	75% (155)
If yes, how many beds per lavatory on the ward	Median (IQR)	4.5 (3.0-6.0), n=118	4.3 (3.2-6.0), n=155
Are any of the toilets Mixed-sex?	% YES	na	48% (75/155)
3.2 How many WTE Gastroenterologists are there on site?	Median (IQR)	3 (2-4), range 1-9, n=181	3 (2-5), range 1-20 N=206
3.3 How many Gastroenterology staff of the following grades are there on site?			
i. Specialist Registrar (SpR)	Median (IQR)	2 (1-2), n=180, 12% (21) NONE	2 (1-3), n=206 9% (18) NONE
ii. Associate Specialist	Median (IQR)	0 (0-1), n=179 69% (124) NONE	0 (0-1), n=206 69% (143) NONE
3.4 How many IBD Nurse Specialists are there on site? (whole number 2006, WTE 2008)	Median (IQR)	1 (0-1), n=180 44% (80) NONE	0.6 (0-1.0), n=206 38% (79) NONE
If NONE, has a business case been submitted?	% YES	na	55% (42/77)
Was the business case successful?	% YES	na	52% (14/27), decision pending for 15/42
3.5 How many sessions of Specialist Nurse time are dedicated to IBD care per week?	Median (IQR)	6 (4-10), n=90/100 Range 1-50	8 (4-10), n=120/127 Range 1-30

NOTE 2006: In only 25% (30/118) of sites with a dedicated gastroenterology ward was there 3.0 or fewer beds per lavatory. In 26% (31/118) there was 6.0 or more beds per lavatory.

NOTE 2008: In only 23% (35/155) of sites with a dedicated gastroenterology ward was there 3.0 or fewer beds per lavatory. In 27% (42/155) there were 6.0 or more beds per lavatory.

Colorectal Services

Standards:
4.1 At least 2 WTE Colorectal surgeons.
4.3 and 4.4 At least 1 stoma-care nurse specialist with at least 5 sessions dedicated to stoma care.

		National 1/6/06 (181 sites)	**National 1/9/08** (207 sites)
4.1 How many WTE specialist Colorectal Surgeons are there on site?	Median (IQR)	3 (2-4), n=178 5% (9) NONE	3 (2-4), n=205 5% (10) NONE
4.2 How many Colorectal staff of the following grades are there on site?			
i. Specialist Registrar (SpR)	Median (IQR)	2 (1-2), n=177 12% (22) NONE	2 (1-3), n=204 10% (21) NONE
ii. Associate Specialist	Median (IQR)	0 (0-1), n=176 61% (107) NONE	0 (0-1), n=204 58% (120) NONE
4.3 How many WTE Stoma Nurses are there on site?	Median (IQR)	2 (1-3), n=177 4% (8) NONE	2 (1-3), n=205 4% (8) NONE
4.4 How many sessions of Stoma Nurse time are dedicated to stoma care per week?	Median (IQR)	10 (7-20), n=132/169 Range 1-85	10 (6-20), n=159/197 Range 1-50

Multi-Disciplinary Working

Standards:
5.1 Sites should have a searchable data-base to allow adequate audit.
5.2 A weekly multi-disciplinary meeting should take place between gastroenterologists, colorectal surgeons and radiologists. There should be regular histopathology conferences (at least 1 per month).
5.3 and 5.4 Each hospital should have a radiologist and pathologist with a special interest in gastroenterology.

		National 1/6/06 (181 sites)	**National 1/9/08** (207 sites)
5.1 Is there a searchable database of IBD patients on site?	% YES	34% (62/180)	39% (79/205)
5.2 Do timetabled meetings (**2008: where IBD patients are discussed**) take place between the following specialties:			
i. Gastroenterologists and Colorectal Surgeons	% YES	74% (134)	66% (135/206)
ii. Gastroenterologists and Pathologists	% YES	78% (142)	67% (138/205)
iii. Gastroenterologists and Radiologists	% YES	85% (153)	80% (163/205)
iv. Colorectal Surgeons and Pathologists	% YES	77% (139/180)	60% (122/205)
v. Colorectal Surgeons and Radiologists	% YES	84% (152/180)	73% (150/205)
5.3 Is there a specialist GI Pathologist?	% YES	67% (122)	74% (151/205)
5.4 Is there a specialist GI Radiologist?	% YES	71% (129)	83% (171/205)

Dietetics and Nutritional Services

Standards:
6.1-6.2 Each site should have a multidisciplinary nutrition team. This team should conduct ward rounds at least twice a week.
6.3 At least 5 dietetic sessions per week should be dedicated to gastroenterological diseases (includes inpatients and outpatients).

		National 1/6/06 (181 sites)	**National 1/9/08** (207 sites)
6.1 Is there a hospital nutrition team?	% YES	62% (112)	71% (146/206)
6.2 Does the team go on ward rounds?	% YES	79% (88/112)	79% (116/146)
If yes, how frequently?	%Daily	32% (28/88)	33% (38/116)
6.3 How many dietetic sessions per week are dedicated to GI disorders (**2008: not just IBD**)?	Median (IQR)	2 (0-5), n=171	2 (0-6), n=204

Outpatient Services

Standards:
7.1-7.3 A clear process for telephone access for ill patients should be established that allows review within one week. Written information for patients with IBD should be readily available in clinic areas (BSG guidelines).
7.4 Joint or parallel clinics should exist to discuss and refer patients between medical and surgical teams

		National 1/6/06 (181 sites)	**National 1/9/08** (207 sites)
7.1 Is there written information for patients with IBD on whom to contact in the event of a relapse?	% YES	64% (114/179)	68% (141/206)
7.2 In general, how soon could a relapsed patient expect to be seen in clinic?			
a) Less than 7 days	% YES	63% (113/179)	67% (137/206)
b) Between 7-14 days	% YES	32% (58/179)	30% (61/206)
c) Other (please specify)*	% YES	4% (8/179)	4% (8/206)
7.3 Do patients have access to an IBD specialist by any of the following methods (tick all that apply)			
a) Telephone	% YES	76% (136/180)	85% (175)
b) Drop-in clinic	% YES	14% (26/180)	13% (26)
c) Email	% YES	28% (50/180)	41% (84)
d) None of these	% YES	23% (41/180)	13% (27)
7.4 Are there any joint or parallel clinics run between Gastroenterologists and Surgeons?			
a) Joint	% YES	13% (24/180)	12% (25)
b) Parallel	% YES	37% (67/180)	38% (79)
c) Neither	% YES	53% (96/180)	51% (105)

* 2006 Other comprised 21 days (2), 3-4 weeks (2), 4-8 weeks, 7-28 days, very variable, not applicable.
* 2008 Other comprised 14-28 days (2), 21 days, 7-28 days, 14-28 days, as required, variable, 1 slot per week in IBD nurse clinic

Patient Information

Standard:
8.1 Written information on IBD should be provided to each patient with IBD. (BSG Guidelines)

		National 1/6/06 (181 sites)	National 1/9/08 (207 sites)
8.1 Are patients provided with written information about IBD?	% YES	95% (172/181)	97% (200/206)
i. If yes, is the information produced by (select all that apply):			
a) NACC	% YES	93% (160)	97% (193)
b)CICRA	% YES	na	8% (15)
c) Pharmaceutical	% YES	55% (95)	46% (92)
d) Locally written	% YES	48% (82)	56% (111)
e) Drug specific	% YES	53% (92)	66% (132)
f) Other (please specify)*	% YES	9% (15)	3% (6)

* Other (2006) comprised: 7 CORE, 4 Digestive Disease Foundation, 2 Ileostomy Association, 1 patient.co.uk website and 1 British Dietary Disorders Leaflet
* Other (2008) comprised: 1 CORE, 1 Core IBS dietitian, 1 BSG/P&G sponsored IBD booklets, 1 personal care record, 1 printed list of websites, 1 research article on specific drugs.

Monitoring of established immunosuppressive therapy

Standard:
9.1 Should be a written policy for mechanism of monitoring immunosuppressive therapy (National Patient Safety Agency)

		National 1/6/06 (181 sites)	National 1/9/08 (207 sites)
9.1 How is established immunosuppressive therapy monitored? (Please tick all that apply)			
a) By the GP	% YES	24% (43)	30% (63)
b) A dedicated monitoring service	% YES	20% (36)	18% (38)
c) During clinic visits	% YES	49% (88)	44% (92)
d) A combination of primary and secondary care monitoring	% YES	72% (131)	70% (145)

IBD Support Services

Standard:
10.1 There should be regular (usually 1 or 2 per year) transition clinics involving paediatricians and adult gastroenterologists for hand over of patients to adult services. These can be done on a regional basis.

		National 1/6/06 (181 sites)	National 1/9/08 (207 sites)
10.1 Is there a paediatric to adult handover clinic for young patients with IBD?	% YES	23% (42/180)	26% (54/205)
10.2 Is a registered counsellor available to patients as part of the IBD Service?	% YES	5% (9/179)	6% (12/205)
10.3 Are there any psychologists attached to the Gastroenterology service?	% YES	7% (12/179)	6% (12/205)
If yes, how many sessions per month dedicated to Gastroenterology service?	Median (IQR)	4, (1-7), n=12	2, (1-5), n=12
10.4 Do pathways exist for direct access to psychological support?	% YES	21% (37/179)	21% (44/205)
10.5 Is there an acute pain management team on site?	% YES	92% (166)	92% (189/205)

Management of Ulcerative Colitis

Standard:
Written trust guidelines should exist for the management of acute or severe colitis.

		National 1/6/06 (181 sites)	National 1/9/08 (207 sites)
11.1 Do written trust guidelines exist for the management of acute or severe colitis?	% YES	47% (84/180)	69% (141/205)

Interactions between your hospital and it's IBD patients

Standard:
12.1 There should be regular meetings (at least once a year and usually on a regional basis) between groups of patients with IBD (and their relatives or carers) and hospital staff, this should involve medical, surgical and nursing staff.

		National 1/6/06 (181 sites)	National 1/9/08 (207 sites)
12.1 Does your hospital offer open forums or meetings for patients with IBD?	% YES	30% (54)	28% (58/205)
i. If yes, how often do these take place?			
a) Less than 4 monthly	% YES	13% (7/53)	17% (10)
b) Every 4-8 months	% YES	36% (19/53)	43% (25)
c) Every 8-12 months	% YES	43% (23/53)	33% (19)
d) Other (please specify)*	% YES	8% (4/53)	7% (4)
ii. If yes, which staff attend these meetings? (select all that apply)			
a) Medical	% YES	89% (48/54)	90% (52/58)
b) Surgical	% YES	33% (18/54)	41% (24/58)
c) Nursing	% YES	80% (43/54)	78% (45/58)
d) Other**	% YES	na	22% (13/58)
12.2 Are any of the following activities or systems in place to involve patients in giving their views on the development of your IBD services? (Please tick all that apply)			
a) Regular patient surveys	% YES	27% (48)	28% (57)
b) Individual patient representatives	% YES	7% (13)	6% (13)
c) Patient panel meetings	% YES	7% (12)	12% (25)
d) None	% YES	65% (118)	57% (118)

* Other (2006) comprised: occasional, invitation by NACC, patient panels every 6 months, first forum June 06 then 6 monthly.
* Other (2008) comprised: 1-2 years (2), ad-hoc basis via NACC, only had one meeting.
** Other staff (2008) mentioned were: dietitian (11), pharmacy (4), stoma nurse, psychologist, pathologist, radiologist, paediatrician, complimentary therapists, visiting speakers

Section 5. Clinical Audit Ulcerative Colitis (inpatient)

2008: In total, data were collected for 2981 Ulcerative Colitis patients (from 197 sites), median (IQR) of 17 (11-20) per site, range 1-29**.**

2006: In total, data were collected for 2767 Ulcerative Colitis patients (from 185 sites), median (IQR) of 19 (11-20) per site, range 1-24**.**

Auditor Discipline:

	National 2006 (2767)		National 2008 (2981)	
	%	N	%	N
Consultant	23	632	17	513
Other medical staff	43	1188	46	1367
Nurse	28	788	33	981
Manager	0.5	15	0.1	2
Clinical Audit	6	158	10	313
Other (please specify)*	3	72	1	26

***** Other (2006) comprised medical student (51), medical secretary (21)

***** Other (2008) comprised medical student (24), Not known (2)

Patient Demographics

	National 2006 (2767)		National 2008 (2981)	
	Median	IQR	Median	IQR
Patient age* (years)	43	30-61	43	30-60

Derived from year of birth and year of admission

	National 2006 (2767)		National 2008 (2981)	
Gender	%	N	%	N
Male	53	1458	55	1634
Female	47	1309	45	1347

When were patients admitted?

2008 audit:
62% (1838/2981) of cases audited were admitted in the 6 month period prior to 1st September 2008.

2006 audit:
79% (2194/2767) of cases audited were admitted in the 12 month period prior to 1st June 2006.
95% (2638/2767) of cases audited were admitted in the 24 month period prior to 1st June 2006.

	Round 1(2006) audit*			Round 2 (2008) audit	
Admission	2004	2005	2006	2007	2008
January	4	35	239	-	220
February	4	34	230	-	218
March	3	45	263	-	223
April	6	63	255	-	291
May	6	83	237	-	320
June	17	112	33	-	369
July	19	117	16	6	391
August	34	106	16	27	244
September	23	128	10	181	-
October	26	162	9	160	-
November	39	171	2	169	-
December	26	174	1	162	-

*There were also 11 cases from 2003, 2 from 2002 and 6 from 2001 included in the audit.

Admission

Standards:
1.1.5 Patients should transferred to the care of medical gastroenterologist or colorectal surgeon within 24 hours of admission.
1.1.6 Patients should be seen by a consultant gastroenterologist or colorectal surgeon within 3 days of admission.
1.1.8 Patients should be seen by an IBD specialist nurse during admission.
1.1.9 Patients should be transferred to a specialist gastroenterology ward.

	National 2006 (2767)		National 2008 (2981)	
	%	N	%	N
1.1.2 What was the primary reason for admission?				
a) Emergency admission for active Ulcerative Colitis	75%	2074	63%	1882
b) Planned admission for active Ulcerative Colitis	11%	296	6%	175
c) Elective admission for surgery	14%	397	18%	537
d) New diagnosis of Ulcerative Colitis	na	na	13%	387
The rest of this table excludes the Elective admissions				
Remaining total cases		**2370**		**2444**
1.1.3 What was the source of admission to hospital?				
a) General Practitioner (GP)	35%	837	35%	865
b) Accident and Emergency (A&E)	31%	740	36%	874
c) Outpatients Department (OPD)	28%	664	25%	608
d) Other hospital	1%	33	2%	37
e) Not documented	4%	96	2%	60
1.1.4 What was the duration of active colitis (new or relapse) precipitating this admission?				
a) Less than two weeks	39%	933	40%	971
b) Two to three weeks	20%	481	22%	531
c) Four to eight weeks	20%	479	20%	495
d) More than eight weeks	15%	346	15%	363
e) Not documented	6%	131	3%	84
The rest of this table excludes the Elective admissions				
Remaining total cases		**2370**		**2444**
1.1.5 Which specialty was responsible for the patient's initial care 24 hours after admission?				
a) Acute Medicine	31%	739	24%	580
b) Gastroenterology	34%	808	45%	1109
c) Colorectal Surgery	10%	238	9%	213
d) Geriatrics	1%	28	1%	18
e) General Medicine	10%	234	10%	253
f) General Surgery	13%	299	10%	233
g) Other (please specify)	1%	24	2%	38
1.1.6 What date was the person first seen by a Consultant Gastroenterologist?				
Not Seen	20%	469	18%	441
Not required	27%	128/469	26%	114/441
If seen (days from admission)	Median (IQR)	N	Median (IQR)	N
	1 (1-3)	1901	1 (1-3)	1998
1.1.7 What date was the person first seen by a Consultant Colorectal Surgeon?				
Not Seen	65%	1545	66%	1609
Not required	54%	842/1545	60%	958/1609
If seen (days from admission)	Median (IQR)	N	Median (IQR)	N
	2 (1-7)	825	2 (1-7)	830
1.1.8 Was patient visited by an IBD Nurse/GI Nurse specialist during admission?				
YES	22%	533	27%	672
IN UNITS with a IBD Nurse (Organisational audit)**	36%	450/1243	41%	608/1500
1.1.9 Was the patient transferred to a specialist gastroenterology ward?				
a) Medical	51%	1215	54%	1324
b) Joint	5%	127	5%	134
c) Surgical	12%	285	12%	284
d) Not transferred	31%	743	29%	701

** Note for 2006 that the organisational audit asked about IBD services as at 1st June 2006, whereas almost all of the clinical audit cases were prior to 1st June 2006.

** Note for 2008 that the organisational audit asked about IBD services as at 1st September 2008, whereas all of the clinical audit cases were prior to 1st September 2008

2006: 10% (238/2370) were not seen by either a consultant gastroenterologist or a consultant colorectal surgeon.
2008: 10% (242/2444) were not seen by either a consultant gastroenterologist or a consultant colorectal surgeon.

2006: 3% (26/808) under the gastroenterology specialty after 24 hours were not seen by a gastroenterologist.
2008: 4% (45/1109) under the gastroenterology specialty after 24 hours were not seen by a gastroenterologist.

2006: 13% (31/238) under the colorectal surgery specialty after 24 hours were not seen by a colorectal surgeon.
2008: 11% (23/213) under the colorectal surgery specialty after 24 hours were not seen by a colorectal surgeon.

Comorbidity

		National 2006 (2767)		National 2008 (2981)	
		%	N	%	N
1.2.1	Does the patient have any significant co-morbid diseases? (please tick all that apply)				
	a) Heart Disease	10	264	9	281
	b) Peripheral Vascular Disease	1	30	1	42
	c) Respiratory	7	193	8	239
	d) Renal Failure	0.8	23	1	33
	e) Diabetes	6	168	6	193
	f) Stroke	2	59	2	62
	g) Liver Disease	1	36	1	32
	h) Active cancer	0.8	22	1	39
	i) None	77	2136	77	2290

Inpatient Mortality

		National 2006 (2767)		National 2008 (2981)	
		%	N	%	N
1.3.1	Did the patient die during admission?				
	YES*	1.6%	45	1.5%	46
		Median (IQR)	N	Median (IQR)	
	Date of death: days from admission	24 (18-44)	45	25 (8-48)	46

* 2006: 7 sites with two deaths, 31 with one death.
* 2008: 4 sites with two deaths, 38 with one death.

2006:
25 (56%) of deaths were directly related to UC. Two deaths were related to colon cancer. For the remainder, the primary cause of death was: 10 respiratory disease, 5 heart disease, 2 multi-organ failure, 1 cerebrovascular disease, 1 renal failure, 1 thromboembolic disease.

19 (42%) had no co-morbidity. 36 patients had co-morbidity (n=13 with more than 1): 18 had heart disease, 8 respiratory disease, 7 diabetes, 2 renal failure, 3 stroke and 1 active cancer. 15/45 had no antithrombotic prophylaxis (18 no prophylactic heparin, 27 no anti-thrombotic stockings). Three patients died of thrombotic complications (2 pulmonary embolism and one SMA thrombosis)- only one was not on prophylactic heparin.

2008:
16 (35%) of deaths were directly related to UC. For the remainder, the primary cause of death was: 9 multi-organ failure, 7 respiratory disease, 6 heart disease, 2 post-operative complications, 2 renal failure, 1 Stroke and 3 not documented

13 (28%) had no co-morbidity, 33 with co-morbidity (19 had >1) consisting of 21 heart disease, 11 respiratory, 9 diabetes, 8 stroke, 6 renal failure, 4 active cancer and 3 peripheral vascular disease

Length of stay (Discharged)

	National 2006 (2722 discharged)		National 2008 (2935 discharged)	
1.3.2 Date of discharge				
	Median (IQR)	N	Median (IQR)	N
Length of stay (days)	8 (5-15)	2680	8 (5-14)	2920
Length of stay:	%	N	%	N
0-1 days	3	74	3	92
2 days	6	150	5	143
3-6 days	26	703	30	871
7-13 days	37	992	35	1033
14-27 days	20	538	19	550
>=28 days	8	223	8	231

Assessment: Patient History

		National 2006 (2767)		National 2008 (2981)	
		%	N	%	N
2.1.1	Did the patient have a pre-admission diagnosis of Ulcerative Colitis?				
	YES	83%	2303	82%	2444
2.1.2	Has the patient had previous admissions with Ulcerative Colitis (2008: in the two years prior to this admission)?				
	YES	51%	1186/2303	45%	1102/2444
	If yes, how many times in the two years prior to this admission?	Median (IQR) 1 (1-2)	N 1186	Median (IQR) 1 (1-2)	N 1101

Assessment: Severity of Disease (Table excludes Elective admissions)

Standards:
2.2.1 Patients should have stool frequency documented in first 24 hours of admission. (BSG guidelines)
2.2.2 & 2.2.3 Pulse rate and temperature to be taken at least 4 times in first 24 hours of admission. (BSG guidelines)
2.2.4 Patients should have haemoglobin, albumin and CRP (or ESR) performed (BSG guidelines)
2.2.5 & 2.2.6 Patients with diarrhoea should have a standard stool culture and CDT performed (BSG guidelines) **within 48 hours of admission.**

		National 2006 (2370)		National 2008 (2444)	
		%	N	%	N
2.2.1	How many stools were passed in the (2006:24 hours) (2008: first full day) following admission?				
	Not applicable, patient had stoma	2%	44	2%	52
	Not documented	30%	711	26%	642
	If yes, how many times?	Median (IQR)	N	Median (IQR)	N
		7 (4-10)	1613/1615	6 (4-10)	1745/1750
2.2.2	What was the highest recorded pulse rate (bpm) during the (2006:24 hours) (2008: first full day) following admission?				
	Not documented	3%	81	3%	75
		Median (IQR)	N	Median (IQR)	N
	If documented	91 (82-102)	2287/2693	90 (80-100)	2363/2369
2.2.3	What was the highest temperature (°C) during the (2006:24 hours) (2008: first full day) following admission?				
	Not documented	4%	100	4%	86
		Median (IQR)	N	Median (IQR)	N
	If documented	37.0 (36.7-37.5)	2268/2270	37.0 (36.6-37.4)	2352/2358
2.2.4	At this admission, what was the initial result for **CRP** (mg/L)				
	Not documented	7%	176	5%	118
	Less than 5 mg/L	15%	352	14%	338
		Median (IQR)	N	Median (IQR)	N
	If documented and >5 mg/L	50 (20-116)	1840/1842	56 (22-119)	1987/1988
2.2.4	At this admission, what was the initial result for **Albumin** (g/L)				
	Not documented	9%	205	7%	164
		Median (IQR)	N	Median (IQR)	N
	If documented	36 (31-41)	2163/2165	36 (31-41)	2279/2280
2.2.4	At this admission, what was the initial result for **Hb** (g/dL)				
	Not documented	2%	52	2%	40
		Median (IQR)	N	Median (IQR)	N
	If documented	12.5 (10.9-13.9)	2316/2318	12.5 (10.9-13.9)	2403/2404
2.2.5	Was a stool sample sent for Standard Stool Culture*				
	YES	59%	1388	67%	1628
		Median (IQR)	N	Median (IQR)	N
	Date sent: Days from admission	1 (0-2)	1388	1 (0-2)	1627
2.2.5	Was it positive?				
	YES	na	na	2.1%	34/1627
	Date sent: Days from admission of positive sample	Median (IQR)	N	Median (IQR)	N
		na	na	3 (1-6)	34
2.2.6	Was a stool sample sent for CDT*				
	YES	46%	1102	59%	1439
		Median (IQR)	N	Median (IQR)	N
	Date sent: Days from admission	1 (0-2)	1102	1 (0-2)	1439
2.2.6	Was it positive?				
	YES	na	na	3.5%	50/1439
	Date sent: Days from admission of positive sample	Median (IQR)	N	Median (IQR)	N
		na	na	4 (2-10)	50

*2006: Stool sample was sent for both in 45% (1068)
*2008: Stool sample was sent for both in 56% (1371)

Assessment: Endoscopic Assessment (Table excludes Elective admissions)

Standards:
2.3.1 New cases of suspected Ulcerative Colitis admitted to hospital should have endoscopic sigmoidoscopy confirmation within 3 days of admission.
2.3.2 New cases of Ulcerative Colitis admitted to hospital should have biopsies taken for histology and these should be reported within 5 days.

		National 2006 (2370)		National 2008 (2444)	
		%	N	%	N
2.3.1	On this admission, did patient have any of the following procedures? (Please tick all that apply)				
	a) Rigid sigmoidoscopy	6%	140	3%	84
	b) Flexible sigmoidoscopy	38%	892	43%	1044
	c) Colonoscopy	10%	233	8%	207
	d) None of the above	49%	1156	47%	1145
		Median (IQR)	N	Median (IQR)	N
	Date of first procedure : days after admission	3 (1-6)	1212	3 (1-6)	1298
2.3.2	Were biopsies taken for histology?	77%	939	83%	1074
		Median (IQR)	N	Median (IQR)	N
	Date histology reported by histopathology: days after admission:	8 (6-14)	939	9 (6-15)	1074

*2006: Histology reports were approved by histology: Median 5 days, IQR 2-7 days after first procedure
*2008: Histology reported by histology: Median 6 days, IQR 3-9 days after first procedure

Specifically for the non-electives with no pre-admission diagnosis of Ulcerative Colitis:

2.3.1	On this admission, did patient have any of the following procedures? (Please tick all that apply)	National 2006 (464)		National 2008 (537)	
		%	N	%	N
	a) Rigid sigmoidoscopy	12%	56	8%	42
	b) Flexible sigmoidoscopy	67%	310	71%	383
	c) Colonoscopy	21%	96	18%	97
	d) None of the above	8%	35	7%	39
		Median (IQR)	N	Median (IQR)	N
	Date of first procedure : days after admission	2 (1-5)	429	2 (1-4)	497

* (2006): Biopsies were taken for 94% (404 of 429 with first procedures). For the 404 biopsies the median (IQR) date of histology approval was 8 (5-13) days from admission.

* (2008): Biopsies were taken for 94% (465 of 497 with first procedures). For the 465 biopsies the median (IQR) date of histology approval was 8 (5-14) days from admission.

Monitoring of Colitis – Post-Admission: General information

This table excludes Elective admission				
	National 2006 (2370)		National 2008 (2444)	
3.1.1 In the first 7 days following admission did the patient have a persistent Tachycardia (Pulse rate >90bpm on more than one occasion in 24 hours)				
YES	23%	523/2317	20%	491/2435
	Median (IQR)	N	Median (IQR)	N
Days after admission	1 (0-2)	523	1 (0-2)	491
3.1.2 In the first 7 days following admission did the patient have a Fever (Temperature >37.5°C on more than one occasion in 24 hours)				
YES	15%	350	13%	324/2435
	Median (IQR)	N	Median (IQR)	N
Days after admission	1 (0-2)	350	1 (0-3)	324
3.1.3 In the first seven days following admission, how often was stool frequency monitored?				
a) Daily	71%	1687	71%	1739
b) Every 2-3 days	5%	108	6%	155
c) Every 4-6 days	1%	17	1%	21
d) Once a week	1%	22	1%	36
e) Not applicable, stoma present	3%	62	2%	51
f) Not documented	20%	472	18%	442
3.1.4 In the first seven days following admission, how often was CRP monitored?				
a) Daily	24%	570	34%	843
b) Every 2-3 days	48%	1136	45%	1099
c) Every 4-6 days	8%	184	6%	141
d) Once	13%	308	10%	244
e) Not documented	7%	170	5%	117
3.1.5 At any point following the first 72-hours of steroid therapy was the patient's CRP level reported to be greater than >45mg/L (N with CRP monitoring known)				
YES	30%	658	29%	675
No	65%	1418	66%	1531
Not documented	6%	122	5%	121

The table above is for all patients, who stayed differing lengths of time in hospital. A breakdown of results by time in hospital (0-2 days, 3-6 days and 7 or more days) is given below.

	LOS (discharges/deaths)					
	0-2 days		3-6 days		7+days	
	2006 N=219	2008 N=220	2006 N=654	2008 N=743	2006 N=1464	2008 N=1466
3.1.1 In the first 7 days following admission did the patient have a persistent Tachycardia (Pulse rate >90bpm on more than one occasion in 24 hours YES	15%	9%	17%	13%	26%	25%
3.1.2 In the first 7 days following admission did the patient have a Fever (Temperature >37.5°C on more than one occasion in 24 hours) YES	9%	6%	11%	7%	18%	17%
3.1.3 In the first seven days following admission, how often was stool frequency monitored?						
a) Daily	50%	49%	67%	67%	76%	77%
b) Every 2-3 days	3%	4%	5%	7%	5%	6%
c) Every 4-6 days	-	-	1%	1%	1%	1%
d) Once a week	2%	2%	2%	2%	1%	1%
e) Not applicable, stoma present	3%	5%	2%	2%	3%	2%
f) Not documented	42%	40%	23%	21%	15%	13%
3.1.4 In the first seven days following admission, how often was CRP monitored?						
a) Daily	18%	30%	21%	29%	26%	38%
b) Every 2-3 days	21%	15%	45%	46%	54%	49%
c) Every 4-6 days	2%	1%	5%	5%	10%	7%
d) Once	33%	38%	21%	14%	7%	4%
e) Not documented	27%	16%	8%	5%	4%	3%
3.1.5 At any point following the first 72-hours of steroid therapy was the patient's CRP level reported to be greater than >45mg/L (N with CRP monitoring known)						
YES	11%	12%	18%	18%	37%	37%
No	79%	76%	74%	76%	59%	59%
Not documented	10%	12%	7%	6%	4%	4%

Monitoring of Colitis – Post-Admission: Radiology (Table excludes Elective admissions)

Standards:
3.2.1 Patients should have a plain abdominal X-ray (BSG guidelines) **within 24 hours of admission.**
3.2.2 If toxic megacolon is present the abdominal X-ray should be repeated the next day if emergency surgery is not undertaken. (BSG guidelines)

		National 2006 (2370)		National 2008 (2444)	
		%	N	%	N
3.2.1	Plain abdominal X-Ray performed	80%	1892	82%	2002
	Date requested:				
	Same day as admission	76%	1439	78%	1560
	Next day after admission	12%	229	12%	237
	Later	12%	227	10%	205
	Date performed:				
	Same day as request	90%	1696	89%	1773
	Next day after request	8%	158	8%	154
	Later	2%	38	4%	74
	Date reported by Radiologist:				
	Same day as X-Ray performed or next day	52%	604	48%	800
	2-3 days after X-Ray performed	14%	163	15%	249
	More than 3 days after X-Ray performed	34%	392	37%	603
3.2.2	Was toxic megacolon present in the x-ray?		N=1892		N=2000
	NA	1.4%	28	0.6%	13
	YES	2%	37/1864	2%	38/1991
	If yes, was a repeat x-ray (2008: or CT scan) performed?	70%	26/37	89%	34/38
	Days after abdominal X-ray (3.2.1) performed	Median (IQR) 1 (1-3)	N 26	Median (IQR) 1 (1-3)	N 34

Medical Intervention: Use of anti-thrombotic therapies (Table excludes Elective admissions)

Standard:
4.1.1 Patients should have prophylactic heparin (BSG guidelines).

Use of anti-thrombotic therapy		National 2006 (2370)		National 2008 (2444)	
		%	N	%	N
4.1.1	Patient given Prophylactic heparin	54%	1290	73%	1773

Medical Intervention: Steroid therapy (Table excludes Elective admissions)

Standards:
4.2.1 and 4.2.2 Appropriate intravenous steroid therapy (400 mg hydrocortisone or 60mg methylprednisolone) (BSG Guidelines) **should be initiated within 24 hours of admission in a suspected severe attack of Ulcerative Colitis.**
4.2.4 (together with 3.1.5) If the attack of colitis is not settling within 72 hours of appropriate steroid therapy the risk of colectomy is high. If there is no response to appropriate corticosteroids within 3 days, rescue therapeutic options need to be discussed with the patient (BSG guidelines) **(either surgery, ciclosporin or anti-TNFα therapy). A consultant colorectal surgeon should discuss the surgical option with the patient.** (BSG guidelines).

Steroid therapy		National 2006 (2370)		National 2008 (2444)	
		%	N	%	N
4.2.1	Were IV corticosteroids prescribed during this admission?				
	i. Yes	67%	1588	70%	1722
	ii. No, but oral corticosteroids were prescribed	18%	437	16%	381
	iii. No, neither IV or Oral corticosteroids were prescribed during this admission	14%	343	14%	335
Rest of the table is for those prescribed steroids					
4.2.2	Which of the following steroids were initially prescribed?		**N=2025**		**N=2103**
	Prednisolone	28%	561	23%	488
	Budesonide	0.2%	4	0.2	5
	Hydrocortisone	72%	1460	77%	1610
	Initial dose (Mg per day)	Median (IQR)	N	Median (IQR)	N
	Prednisolone	40 (30-40)	556	40 (30-40)	487
	Budesonide	Doses: 6, 9, 9	3	Doses: 5,5,5,5,5	5
	Hydrocortisone	400 (300-400)	1458	400 (300-400)	1610
4.2.3	Date therapy initiated or increased:				
	Same day as admission	63%	1269	61%	1292
	Next day after admission	18%	357	20%	414
	2-7 days after admission	15%	304	15%	317
	Later	4%	90	4%	79
4.2.4	At any point following the first 72-hours of steroid therapy did the patient produce stools at a frequency greater than 8 per day?				
	YES	22%	449	21%	443
	No	61%	1238	63%	1314
	Not documented	17%	338	16%	345
4.2.5	Did the patient respond to corticosteroids and not require any other significant therapy for Ulcerative Colitis?				
	YES	na	na	70%	1469
2006 audit	Did the patient achieve remission from steroid therapy? YES	71%	1447	na	na

2006: 207 patients (10%) prescribed steroids were known to have high CRP (>45) and high frequency stools (>8 per day) after 72 hours of steroid therapy:

2008: 205 patients (10%) prescribed steroids were known to have high CRP (>45) and high frequency stools (>8 per day) after 72 hours of steroid therapy:

Medical Intervention: Other Therapies (Table excludes Elective admissions)

		National 2006 (2370)		National 2008 (2444)	
		%	N	%	N
4.3.1	Ciclosporin	6%	150	7%	177
	Start date: Days after admission	Median (IQR) 6 (4-10)	N 150	Median (IQR) 7 (4-9)	N 175
	Patient achieved remission on ciclosporin therapy	55%	82/150	52%	91/176
4.3.2	Anti-TNF	2%	37	3%	77
	Start date: Days after admission	Median (IQR) 10 (7-14)	N 37	Median (IQR) 7 (3-10)	N 76
	Patient achieved remission on TNF therapy	54%	20/37	79%	58/73
4.3.3	Clinical Trial (please specify)*		2		0
	Start date: Days after admission	4 & 5 days			
	Patient achieved remission from clinical trial	0%	0		
4.3.5	Surgical therapy				
	YES	13%	318	12%	305

2006: 4.3.3 *Clinical trials were: UC-CAT (1), not documented (1)

Medical Intervention: Initiating Ciclosporin Therapy
(Table excludes elective admissions)

Standards:
4.4.1 Creatinine should be measured (BSG guidelines) **within the 48 hours prior to initiation of ciclosporin.**
4.4.2 and 4.4.3 Magnesium and cholesterol should be measured (BSG guidelines) **within the 48 hours prior to initiation of intravenous ciclosporin.**

		National 2006 (150)		National 2008 (177)	
		%	N	N	
4.4.1	Pre-treatment results for Creatinine (µmol/L)				
	Not documented	5%	7	3%	5
	Results	Median (IQR)	N	Median (IQR)	N
		74 (65-82)	143	75 (63-87)	172
	Date of sample:				
	3 days or more before ciclosporin started	6%	9	10%	17
	2 days before ciclosporin started	8%	11	9%	15
	1 day before ciclosporin started	38%	55	31%	53
	Same day as ciclosporin started	46%	66	50%	86
	1-2 days after ciclosporin started	1%	2	-	0
4.4.2	Pre-treatment results for Magnesium (mEq/L)				
	Not documented	35%	53	24%	43
	Results	Median (IQR)	N	Median (IQR)	N
		0.9 (0.8-0.9)	97	0.9 (0.8-0.9)	133
	Date of sample for intravenous ciclosporin:				
	3 days or more before ciclosporin started	12%	12	9%	11
	2 days before ciclosporin started	11%	11	13%	17
	1 day before ciclosporin started	31%	30	26%	34
	Same day as ciclosporin started	42%	41	52%	67
	1-2 days after ciclosporin started	3%	3	-	0
4.4.3	Pre-treatment results for Cholesterol (mmol/L)				
	Not documented	47%	71	37%	65
	Results	Median (IQR)	N	Median (IQR)	N
		3.6 (3.0-4.2)	79	3.8 (3.1-4.6)	112
	Date of sample for intravenous ciclosporin:				
	3 days or more before ciclosporin started	18%	14	19%	21
	2 days before ciclosporin started	15%	12	13%	14
	1 day before ciclosporin started	24%	19	19%	21
	Same day as ciclosporin started	39%	31	49%	53
	1-2 days after ciclosporin started	4%	3	-	0
4.4.4	How was the ciclosporin initially administered?				
	Oral	23%	35	22%	39
	IV	77%	115	77%	137
	Initial daily dose	Median (IQR)	N	Median (IQR)	N
		2 (2-4)	150	2 (2-4)	175

2006: When oral ciclosporin therapy was given magnesium levels were checked two or more days before therapy for 3/20, one day before for 9/20, the same day for 7/20 and the day after for 1/20.

2008: When oral ciclosporin therapy was given magnesium levels were checked two or more days before therapy for 5/26, one day before for 9/26 and the same day for 12/26.

2006: When oral ciclosporin therapy was given cholesterol levels were checked two or more days before therapy for 5/13, one day before for 5/13, the same day for 2/13 and the day after for 1/13.

2008: When oral ciclosporin therapy was given cholesterol levels were checked two or more days before therapy for 5/13, one day before for 4/13 and the same day for 4/13.

Medical Intervention: Monitoring Ciclosporin Therapy (N=150) (Table excludes Elective admissions)

Standards:
4.5.1 Ciclosporin levels should be checked daily after 3 days of IV therapy.

		National 2006 (150)		National 2008 (177)	
		%	N	%	N
4.5.1	After three days of ciclosporin therapy, how often were serum ciclosporin levels checked?				
	a) Daily	11%	16	13%	23
	b) Every two days	13%	19	18%	31
	c) Every three days	10%	15	19%	34
	d) Once a week	21%	31	14%	24
	e) Less than once a week	9%	14	8%	14
	f) Not documented	37%	55	29%	51

Surgical Interventions

Standards:

5.1.2 Consultant colorectal surgeons should be involved with the discussion with the patient regarding the decision to operate (BSG guidelines).
5.1.4 Patients having resectional surgery for Ulcerative Colitis should see a stoma nurse prior to the operation (BSG guidelines).
5.1.5 and 5.1.6 Operations should be performed or assisted by a consultant colorectal surgeon.
5.1.9 ASA status should be recorded pre-operatively.

		National 2006				National 2008			
		Electives (397)		Non-elective (318)		Electives (535)		Non-elective (305)	
		%	N	%	N	%	N	%	N
5.1.1	What date was the decision to operate made?								
	Not known	16%	63	4	12	13%	71	2%	7
	Date of decision: days from admission	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N
		-49 (-106 to -18)	334	7 (3-13)	306	-51 (-94 to -23)	466	7 (3-11)	298
5.1.2	Who made the decision to operate?								
	a) Consultant Colorectal Surgeon	77%	304	81%	259	91%	487	84%	255
	b) Consultant GI Surgeon (non-colorectal)	0.5%	2	4%	14	1%	5	3%	8
	c) Consultant General Surgeon	1%	5	6%	20	2%	12	5%	15
	d) Other Consultant Surgeon	0.3%	1	0.6%	2	0.2	1	-	0
	e) Specialist Registrar	3%	11	3%	9	5%	25	6%	19
	f) *Other (please specify)	3%	11	0.6%	2	1%	5	3%	8
	Not documented	16%	63	4%	12	0.4%	2	-	0
5.1.3	Date of Surgery: days from admission	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N
		1 (1-1)	396	10 (5-15)	318	1 (0-1)	535	9 (5-14)	305
5.1.4	Patient seen by stoma nurse during admission	54%	213	77%	245	64%	340	85%	259
	If yes, date first seen : days from admission	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N
		1 (0-3)	213	8 (5-15)	244	1 (0-2)	340	8 (5-12)	258
5.1.5	What was the grade of the operating surgeon?								
	a) Consultant Colorectal Surgeon	86%	340	72%	229	87%	465	68%	207
	b) Consultant GI Surgeon (non-colorectal)	1%	4	3%	9	1%	4	2%	5
	c) Consultant General Surgeon	3%	10	8%	25	2%	12	6%	17
	d) Other Consultant Surgeon	0.3%	1	0.6%	2	0.4%	2	0.3%	1
	e) Specialist Registrar	9%	35	13%	42	9%	48	21%	64
	f) Associate specialist	na	na	na	na	0.6%	3	2%	5
	g) Other	2%	6	3%	11	0.6%	3	2%	6
5.1.6	What was the grade of the assisting surgeon?								
	a) Consultant Colorectal Surgeon	11%	43	7%	22	14%	74	12%	37
	b) Consultant GI Surgeon (non-colorectal)	0.8%	3	0.6%	2	0.2%	1	0.7%	2
	c) Consultant General Surgeon	1%	5	0.9%	3	0.6%	3	2%	5

d) Other Consultant Surgeon	2%	6	0.6%	2	0.2%	1	-	0
e) Specialist Registrar	73%	289	66%	209	66%	355	63%	192
f) Associate specialist	na	na	na	na	8%	41	7%	20
f) Other	13%	50	25%	78	12%	62	16%	49

2006: Consultant colorectal surgeon as operating or assisting surgeon: Electives: 92% (363/396), Non-electives: 77% (242/316)
2008: Consultant colorectal surgeon as operating or assisting surgeon: Electives: 94% (501/535), Non-electives: 78% (239/305)

		National 2006				National 2008			
		Electives (397)		Non-elective (318)		Electives (535)		Non-elective (305)	
		%	N	%	N	%	N	%	N
5.1.7	What were the indications for surgery?(select all that apply)								
	a) Failure of Medical Therapy	58%	229	86%	274	53%	281	83%	254
	b) Toxic megacolon	-	0	7%	22	0.2%	1	8%	23
	c) Bleeding	6%	22	6%	18	4%	20	5%	15
	d) Obstruction	2%	9	3%	8	1%	5	2%	7
	e) High Grade Dysplasia	3%	13	0.3%	1	3%	18	-	0
	f) Low Grade Dysplasia	2%	8	-	0	4%	19	-	0
	g) Ungraded Dysplasia	2%	9	-	0	2%	10	0.3	1
	h) Cancer	1%	4	-	0	2%	10	1%	3
	i) Perforation	0.3%	1	6%	18	-	0	7%	21
	j) Abscess	3%	10	0.9%	3	1%	8	3%	8
	k) Formation of ileostomy	12%	47	2%	6	6%	33	4%	12
	m) Ileoanal Pouch	na	na	na	na	18%	96	0.7%	2
	l) Other indication (please specify)*	18%	73	2%	7	13%	69	2%	6
5.1.8	Type of intervention:								
	a) Subtotal colectomy	18%	73	71%	226	20%	107	76%	231
	b) Proctocolectomy	25%	101	22%	70	24%	127	13%	39
	c) Proctectomy	24%	97	1%	4	22%	119	1%	4
	d) Ileoanal pouch with stoma	18%	71	1%	4	19%	103	2%	6
	e) Ileoanal pouch without stoma	11%	43	0.3%	1	9%	48	0.7%	2
	f) Formation of ileostomy	24%	96	44%	140	22%	118	45%	136
	g) Other (please specify)**	11%	42	3%	9	13%	67	4%	11
5.1.8i	Was the surgery done laparoscopically/ laparoscopically-assisted?								
	YES	10%	37/384	5%	16/300	15%	81/535	10%	29/305
5.1.9	ASA status recorded pre-operatively	63%	251	65%	208	70%	376	64%	194
	If yes, what was the status?								
	1	22%	56	14%	29	24%	89	15%	30
	2	63%	159	49%	102	60%	227	50%	97
	3	12%	31	28%	58	13%	50	26%	50
	4	2%	4	7%	14	0.3%	1	8%	16
	5	-	-	1%	3	-	0	-	0
	N/A	0.4%	1	1%	2	2%	9	0.5%	1

2006: 5.1.7 l) *Other comprised: 42 Ileo-anal pouch procedures, 11 Completion Proctectomy, 2 Anal Pain, 6 Patient Choice 1 Colostomy Dysfunction, 1 Jejunostomy Closure, 1 Pouch Dysfunction 16 Not Documented

2008: 5.1.7 l) *Other comprised: 37 Closure of Stoma, 15 Completion Proctectomy, 10 Fistulae, 2 Incisional Hernia, 2 Strictures, 2 Wound complications, 1 CDT, 1 Stoma Complication, 1 Vaginal Prolapse and 4 Not documented

2006: 5.1.8 g) **Other comprised: 23 Ileostomy Reversals, 10 Perianal Procedures, 2 Release of adhesions, 1 Laparotomy, 1 Resection of Ileum, 1 Splenectomy, 1 Wound Exploration and 14 Unknown

2008: 5.1.8 g) **Other comprised: 49 Closure of Stoma, 11 Abscess Drainage, 4 Incisional Hernia Repair, 3 Fistula Repair, 3 Ileorectal Anastomosis, 2 Division of Adhesions, 2 EUA, 2 Stoma Repair, 1 Fistula and 1 Pouch Excision

Surgical Complications

		National 2006				National 2008			
		Electives (397)		Non-elective (318)		Electives (535)		Non-elective (305)	
		%	N	%	N	%	N	%	N
5.2.1	Did the patient suffer from any of these complications with their surgery?								
	a) Wound Infection	10%	41	7%	23	6%	31	14%	44
	b) Rectal stump complications	1%	4	1%	4	1%	6	5%	16
	c) Intra-abdominal bleeding	1%	4	2%	7	2%	11	2%	5
	d) Intra-abdominal sepsis	3%	12	6%	18	4%	19	10%	30
	e) Anastomatic leakage	2%	8	1%	4	1%	8	1%	3
	f) Stoma complications	3%	12	3%	10	4%	20	3%	8
	g) Deep vein thrombosis (DVT)	0.5%	2	2%	5	0.4%	2	1%	3
	h) Pulmonary embolus (PE)	0.3%	1	1%	4	0.6%	3	2%	7
	i) Small bowel obstruction	3%	10	3%	8	1%	7	2%	7
	j) Ileus requiring parenteral nutrition	2%	7	3%	8	2%	9	6%	18
	k) Cardiac	0.8%	3	4%	13	2%	10	4%	11
	l) Respiratory	4%	17	10%	31	3%	15	10%	31
	m) clostridium difficile-associated diarrhoea (CDAD)	na	na	na	na	0.6%	3	0.7%	2
	n) Other (please specify)*	3%	11	4%	12	1%	6	1%	3
	0) No Complications	73%	288	69%	219	79%	425	67%	204

2006: 5.2.1 m) *Other:
For elective there were 11 complications classified as 'other': 2 ureteric injury, 1 ureteric obstruction, 1 acute renal failure, 1 bacteraemia (unspecified), 1 cellulitis (unspecified), 1 epidural abscess, 1 post –operative haemorrhage (unspecified), 1 pyelonephritis, 1 thrombophlebitis, 1 splenectomy (indication not stated).

For non-elective surgery there were 12 complications classified as 'other': 1 ureteric injury, 2 acute renal failure, 1 'aretic surgery' case, 1 cellulitis (site not specified), 1 cannula related cellulitis, 2 epidural site abscess, 1 generalised seizure, 1 perforated gastric ulcer, 1 pyelonephritis, 1 sepsis (site not specified)

2008: 5.2.1 n) *Other:
For elective there were 6 complications classified as 'other': 2 acute renal failure, 1 mesenteric thrombosis, 1 portal vein thrombosis, 1 splenic injury and 1 stroke

For non-elective surgery there were 3 complications classified as 'other': 1 acute renal failure, 1 CMV infection and 1 septicaemic shock

Discharge Arrangements

Standards:
6.1.1 & 6.1.2 Patients discharged on oral steroids should have a steroid reduction programme stated on discharge.
6.1.3 Patients on oral steroids should be co-prescribed bone protection agents (such as calcium and vitamin D or bisphosphonates (BSG guidelines).

		National 2006 (2767)		National 2008 (2981)	
		%	N	%	N
6.1.1	Was the patient taking oral steroids on discharge?				
	YES	69%	1907	66%	1977
	No	28%	783	30%	892
	N/A	3%	77	4%	112
6.1.2	Was a steroid reduction programme stated on discharge (n=1907)		N=1907		N=1977
	YES	87%	1657	88%	1746
	No	12%	225	11%	212
	N/A	1%	25	1%	19
6.1.3	Were bone protection agents prescribed?		N=1907		N=1977
	YES	41%	788	51%	1011
	No	57%	1083	48%	949
	N/A	2%	36	1%	17

Section 6. Clinical Audit: Crohn's Disease (Inpatient)

2008: In total, data were collected for 3154 Crohn's Disease patients (from 200 sites), median (IQR) of 18 (12-20) per site, range 1-26

2006: In total, data were collected for 2914 Crohn's Disease patients (from 185 sites), median (IQR) of 19 (12-20) per site, range 2-24.

Auditor Discipline:

	National 2006 (2914)		National 2008 (3154)	
	%	N	%	N
Consultant	24	686	19	587
Other medical staff	45	1298	46	1450
Nurse	26	765	31	984
Manager	0.1	4	0.1	3
Clinical Audit	6	170	9	282
Other (please specify)*	2	70	2	48

*Other 2006 comprised: medical student (47), Nurse specialist (15), secretary (9)
* Other 2008 comprised: medical student (27), medical records (10), secretary (9), not known (2)

Patient Demographics

	National 2006 (2914)		National 2008 (3154)	
	Median	IQR	Median	IQR
Patient age* (years)	38	27-54	38	26-52

Derived from year of birth and year of admission

	National 2006 (2914)		National 2008 (3154)	
Gender	%	N	%	N
Male	40%	1168	44%	1399
Female	60%	1746	56%	1755

When were patients admitted?

2008: 65% (2045/3154) of cases audited were admitted in the 6 month period prior to 1st September 2008.

2006: 82% (2404/2914) of cases audited were admitted in the 12 month period prior to 1st June 2006.
95% (2766/2914) of cases audited were admitted in the 24 month period prior to 1st June 2006.

	Round 1(2006) audit*			Round 2 (2008) audit	
Admission	2004	2005	2006	2007	2008
January	3	34	291	-	241
February	3	36	265	-	239
March	7	41	345	-	258
April	4	56	285	-	293
May	4	59	283	-	358
June	18	88	42	-	370
July	17	93	22	3	440
August	14	138	13	20	326
September	17	136	9	141	-
October	22	152	11	165	-
November	25	181	7	159	-
December	23	147	1	141	-

* Also included were 12 cases from 2003, 7 from 2002 and 3 from 2001.

Admission

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
1.1.2	What was the primary reason for admission to this hospital?				
	a) Emergency admission for active Crohn's Disease	62%	1797	62%	1968
	b) Planned admission for active Crohn's Disease	10%	286	5%	153
	c) Elective admission for surgery	19%	556	22%	698
	d) New diagnosis of Crohn's Disease	9%	275	11%	335
	Rest of table excludes Elective admissions i.e.				
1.1.3	What was the source of admission?	**N=2358**		**N=2456**	
	a) General Practitioner (GP)	33%	786	33%	818
	b) Accident and Emergency (A&E)	39%	918	46%	1130
	c) Outpatients Department (OPD)	22%	513	16%	395
	d) Other hospital	2%	46	1%	28
	e) Not Documented	4	95	3%	85
1.1.4	What duration of new or relapse symptoms did the patient report prior to their admission?				
	a) Less than two weeks	55%	1287	59%	1446
	b) Two to three weeks	14%	322	13%	327
	c) Four to eight weeks	14%	338	11%	282
	d) More than eight weeks	13%	297	13%	330
	e) Not Documented	5%	114	3%	71

Admitting Specialty (Table excludes elective admissions)

Standards:

1.2.1 Patients admitted with Crohn's Disease should be under the care of medical gastroenterologists or colorectal surgeon within 24 hours of admission.

1.2.2 Patients should be transferred to a specialist gastroenterology ward.

1.2.3 and 1.2.4. All patients should be seen by a consultant gastroenterologist or colorectal surgeon within 3 days of admission.

1.2.5 All patients should be seen by an IBD specialist nurse during admission.

		National 2006 (2358)		National 2008 (2456)	
		%	N	%	N
1.2.1	Which specialty was responsible for the patient's (2006:initial) care 24 hours after admission?				
	a) Acute Medicine	23%	547	21%	506
	b) Gastroenterology	28%	657	32%	782
	c) Colorectal Surgery	14%	331	14%	349
	d) Geriatrics	0.3%	8	0.4%	10
	e) General Medicine	8%	190	8%	208
	f) General Surgery	25%	589	24%	578
	g) Other (Please specify)*	2%	36	1%	23
1.2.2	Was the patient transferred to a specialist gastroenterology ward?				
	a) Medical	41%	972	42%	1040
	b) Joint	6%	148	5%	123
	c) Surgical	19%	441	23%	555
	d) Not transferred	34%	797	30%	736
1.2.3	What date was the person first seen by a Consultant Gastroenterologist?				
	Not Seen	32%	744	31%	773
	Not required	29%	217	33%	252
		Median (IQR)	N	Median (IQR)	N
	Date seen: days from admission	2 (1-4)	1613	2 (1-3)	1677
1.2.4	What date was the person first seen by a Consultant Colorectal Surgeon?				
	Not Seen	58%	1376	59%	1458
	Not required	46%	630	53%	773
		Median (IQR)	N	Median (IQR)	N
	Date seen: days from admission	1 (0-3)	980	1 (0-3)	991
1.2.5	Was the patient visited by an IBD Nurse/GI Nurse specialist during admission?				
	YES	17%	406	21%	527

2006:
14% (331/2358) were not seen by either a consultant gastroenterologist or a consultant colorectal surgeon.
6% (37/657) of those under the gastroenterology specialty after 24 hours were not seen by a gastroenterologist.
7% (24/331) of those under the colorectal surgery specialty after 24 hours were not seen by a colorectal surgeon.

2008:
15% (365/2456) were not seen by either a consultant gastroenterologist or a consultant colorectal surgeon.
7% (57/782) of those under the gastroenterology specialty after 24 hours were not seen by a gastroenterologist.
11% (38/349) of those under the colorectal surgery specialty after 24 hours were not seen by a colorectal surgeon.

Comorbidity

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
1.4.1	Does the patient have any (2006: significant) (2008: important) co-morbid diseases? (please tick all that apply)				
	a) Heart Disease	6	177	6	191
	b) Peripheral Vascular Disease	0.9	25	1	31
	c) Respiratory Disease	7	206	7	217
	d) Renal Failure	0.9	26	0.9	27
	e) Diabetes	3	80	3	91
	f) Stroke	1	32	1	40
	g) Liver Disease	1	29	0.6	19
	h) Active cancer	0.4	13	0.3	9
	i) None of the above	83	2407	84%	2664

Inpatient Mortality

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
1.3.1	Did the patient die during admission?				
	YES*	1.2%	36	1.1	34
		Median (IQR)	N	Median (IQR)	N
	Date of death: days from admission	20 (10-67)	36	26 (10-37)	34

* 2008: 3 sites with two deaths, 28 with one death.
* 2006: 1 site with three deaths, 5 with two deaths, 23 with one death.

2006:
15 of the 36 deaths (42%) were judged directly related to Crohn's Disease. The remainder comprised 10 respiratory infections, 2 heart disease, 2 multi-organ failure, 2 unknown cause of death, 1 each of perforated peptic ulcer, CDT diarrhoea, 'old age', haemorrhage (unspecified), unexplained quadriplegia.

12 had no co-morbidity. 24 with co-morbidly (11 had >1) consisting of 16 heart disease, 8 respiratory disease, 5 peripheral vascular disease, 2 diabetes, 2 renal failure, 2 liver disease. 10/36 had no antithrombotic prophylaxis, 11 no prophylactic heparin, 22 no anti-thrombotic stockings.

2008:
7 of the 34 deaths (21%) were judged directly related to Crohn's Disease. The remainder comprised 11 multi-organ failure, 8 respiratory infections, 5 heart disease, 1 stroke and 2 not documented.

10 (42%) had no co-morbidity. 24 with co-morbidity (9 >1)18 heart disease 3 stroke 2 PVD 8 respiratory 3 renal failure 1 active cancer. 9/34 had no prophylactic heparin.

Length of stay (Discharged)

	National 2006 (2878 discharged)		National 2008 (3120 discharged)	
1.3.2 Date of discharge				
	Median (IQR)	N	Median (IQR)	N
Length of stay (days)	8 (4-13)	2831	7 (4-11)	3104
Length of stay:	%	N	%	N
0-1 days	5	147	6	187
2 days	7	210	9	264
3-6 days	28	802	34	1044
7-13 days	36	1012	32	990
14-27 days	16	441	14	427
>=28 days	8	219	6	192

Medication on Admission

	National 2006 (2914)		National 2008 (3154)	
	%	N		
1.5.1 What treatment was the patient taking for Crohn's Disease on admission? (select all that apply)				
a) 5-ASA	42	1219	38	1196
b) Azathioprine	22	630	24	755
c) Mercaptopurine	2	67	3	88
d) Methotrexate	3	78	3	106
e) Antibiotics	4	111	3	92
f) Corticosteroids	30	880	27	842
g) Dietary Therapy	2	44	1	35
h) Anti-TNF-α	2	65	6	145
i) None of the above	34	982	33	1040
j) Other (e.g. trial medicine please specify)*	0.3	10	0.2	5

*Other (2006) comprised 11 drugs (10 patients): 1 cyclophosphamide, 1 ciclosporin, 2 tacrolimus, 3 thalidomide, 1 fish oils, 2 mycophenolate, 1 study drug.
*Other (2008) comprised 3 mycophenolate, 2 trial drugs

Smoking Status

Standard:
1.6.1 Smoking status should be documented (BSG guidelines**) and smoking cessation support should be offered.**

	National 2006 (2914)		National 2008 (3154)	
	%	N	%	N
1.6.1 **What is the smoking status of the patient?**				
a) Current smoker	31	911	31	980
b) Lifelong non-smoker/ ex-smoker	54	1574	55	1742
c) Not documented	15	429	14	432

Patient History

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
1.7.1	Did the patient have a pre-admission diagnosis of Crohn's Disease?				
	YES	86	2493	86	2705
1.7.2	What is the extent of the disease?				
	a) Small bowel (2008: small bowel only)	23	663	23	739
	b) Colonic	23	667	24	752
	c) Ileo-colonic	39	1142	34	1087
	d) Perianal	3	76	8	257
	e) Not known	8	228	6	184
	f) Other (mainly combinations of a to d above)	5	138	2	73
1.7.3	Has patient had previous admissions to your hospital with Crohn's Disease in the last 2 years?				
	YES	52	1305/2493	50	1364/2701
	If yes, how many times in the two years prior to this admission?				
	Once	54	704	49	674
	Twice	25	325	26	355
	More than twice	21	270	25	334

Assessment: Severity of Disease (excludes elective admissions)

Standards:
2.1.1 Patients should have stool frequency documented in the first 24 hours following admission.
2.1.5 Patients should have haemoglobin, albumin and CRP (or ESR) performed in the first 24 hours following admission.

		National 2006 (2358)		National 2008 (2456)	
		%	N	%	N
2.1.1	Was diarrhoea recorded as a symptom upon admission?				
	YES	52%	1236	50%	1237
	No	42%	987	43%	1054
	Patient has Stoma	6%	135	7%	160
2.1.2	How many stools were passed in the (2006: 24 hours) (2008: first full day) following admission?				
	Not documented	39%	486/1236	37%	452/1237
	If documented	Median (IQR)	N	Median (IQR)	N
		5 (3-9)	750	5 (3-8)	785
2.1.3	What was the highest recorded pulse rate (bpm) during the (2006: 24 hours) (2008: first full day) following admission?				
	Not documented	4%	106	3%	73
	If documented	Median (IQR)	N	Median (IQR)	N
		90 (80-104)	2252	90 (80-102)	2383
2.1.4	What was the highest recorded temperature (^{o}C) during the (2006: 24 hours) (2008: first full day) following admission?				
	Not documented	5%	125	4%	97
	If documented	Median (IQR)	N	Median (IQR)	N
		37.0 (36.7-37.5)	2234	37.0 (36.6-37.5)	2359
	Did the patient have a fever (temperature >37.5°C on more than one occasion in 24 hours) within the first 7 days of admission?				
	YES	17%	403	16%	384
	No	76%	1785	77%	1882
	Not documented	7%	170	8%	190
2.1.5	At this admission, what was the initial result for **CRP** (mg/L)				
	Not documented	9%	222	7%	171
	Less than 5 mg/L	14%	329	13%	317
	If documented and >5 mg/L	Median (IQR)	N	Median (IQR)	N
		55 (20-129)	1807	61 (23-127)	1968
2.1.5	At this admission, what was the initial result for **Albumin** (g/L)				
	Not documented	11%	251	10%	241
	If documented	Median (IQR)	N	Median (IQR)	N

		37 (31-42)	2107	37 (32-42)	2215
2.1.5	At this admission, what was the initial result for **Hb** (g/dL)				
	Not documented	3%	66	3%	72
	If documented	Median (IQR)	N	Median (IQR)	N
		12.6 (11.1-14.1)	2292	12.7 (11.2-14.1)	2384

Assessment: Exclusion of Infection (excludes elective admissions)

Standards:
2.2.1 & 2.2.2 Patients with diarrhoea should have a standard stool culture and CDT performed within 48 hours of admission.

		National 2006 (1236 with diarrhoea)		National 2008 (1237 with diarrhoea)	
		%	N	%	N
2.2.1	Was a stool sample sent for Standard Stool Culture*				
	YES	47%	586/1236	53%	661/1237
	Date sent: Days from admission	Median (IQR)	N	Median (IQR)	N
		1 (0-2)	584	1 (0-2)	658
2.2.1	Was it positive				
	YES	na	na	1.7%	11/659
	Date of positive sample: Days from admission	Median (IQR)	N	Median (IQR)	N
		na	na	2 (1-4)	11
2.2.2	Was a stool sample sent for CDT*				
	YES	36%	444/1236	47%	580/1237
	Date sent: Days from admission	Median (IQR)	N	Median (IQR)	N
		1 (0-3)	444	1 (0-2)	577
2.2.2	Was it positive				
	YES	na	na	2.6%	15/580
	Date of positive sample: Days from admission	Median (IQR)	N	Median (IQR)	N
		na	na	4 (2-9)	15

* 2006: Stool sample sent for both in 35% (432/1236)
* 2008: Stool sample sent for both in 45% (556/1237)

Assessment: Documentation of Sepsis (excludes elective admissions)

Standards:
2.3.2 Patients with fever (>37.5° C on two occasions) should have blood cultures performed.

		National 2006 (403 with fever)		National 2008 (384 with fever)	
		%	N	%	N
2.3.1	Were antibiotics given? N with fever (2.1.4)				
	YES	75	303	73	282
	No	24	96	26	98
	Not documented	1	4	1	4
2.3.2	Were blood cultures taken? N with fever				
	YES	54	216	57	219
	If yes, were the cultures Positive	7	15	7	15
	If yes, were the cultures Negative	93	201	93	204

Assessment: Imaging

Standards:

2.4 For suspected abdominal sepsis, imaging should be performed within 48 hours of request and reported within 24 hours of being done.

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
2.4.1	Ultrasound Scan performed	15%	432	10%	331
	Date requested:				
	Same day as admission	30%	129	32%	104
		Median (IQR)	N	Median (IQR)	N
		1 (0-4)	432	1 (0-3)	330
	Date performed:				
	Performed same day as request	53%	227	54%	179
	1-2 days after request	36%	157	36%	120
	3-5 days after request	8%	36	8%	26
	6 or more days after request	3%	11	2%	5
2.4.2	CT Scan of the abdomen performed	17%	506	26%	815
	Date requested:				
	Same day as admission	28%	140	29%	238
		Median (IQR)	N	Median (IQR)	N
		1 (0-5)	506	1 (0-3)	814
	Date performed:				
	Performed same day as request	42%	212	55%	446
	1-2 days after request	40%	202	36%	292
	3-5 days after request	14%	70	7%	59
	6 or more days after request	4%	21	2%	17
2.4.3	MRI performed	2%	72	4%	113
	Date requested:				
	Same day as admission	21%	15	21%	24
		Median (IQR)	N	Median (IQR)	N
		3 (1-7)	72	2 (1-5)	111
	Date performed:				
	Performed same day as request	28%	20	32%	36
	1-2 days after request	27%	19	32%	35
	3-5 days after request	25%	18	18%	20
	6 or more days after request	20%	14	18%	20
2.4.4	Abscess found during imaging YES	11%	113	15%	159
	No	81%	807	85%	926
	NA	8%	76		
	If drainage was undertaken , was it:		N=113		N=159
	a) Surgical	71%	80	45%	72
	b) Radiological	25%	28	24%	38
	c) Not drained	4	5	31%	49

Assessment: Weight Assessment and Dietetic Support (excludes elective admissions)

Standards:
2.5.1 Patients should be weighed (BSG guidelines) **and BMI calculated.**
2.5.2 Non-elective admissions should be seen by a dietitian.
2.5.3 & 2.5.4 Nutritional support should be provided for malnourished patients (BSG guidelines).

	National 2006 (2358)		National 2008 (2456)	
	%	N	%	N
2.5.1 Was the patient's weight measured during admission?				
YES	52%	1223	57%	1392
BMI measured	31%	377/1223	45%	633/1392
2.5.2 Did a dietitian visit the patient?				
YES	37%	874	33%	808
2.5.3 Was dietary treatment initiated?				
YES	31%	728	28%	698
2008: Exclusive liquid enteral nutrition therapy prescribed			29%	204/698
2006: Crohn's-specific dietary therapy prescribed	43%	313/728		
2.5.4 Was parenteral nutrition (2006:required) (2008:given)?				
YES	6%	144	5%	120

Medical Intervention:

Standard:
3.1.1 Patients should have prophylactic heparin (BSG guidelines**).**

(excludes elective admissions)	National 2006 (2358)		National 2008 (2456)	
	%	N	%	N
3.1.1 Was the patient given:				
i. Prophylactic heparin	55%	1307	71%	1734
3.2.1 Were IV corticosteroids prescribed during this admission?				
i. Yes	44%	1034	48%	1175
ii. No, but oral corticosteroids were administered	23%	535	20%	488
iii. No, neither IV or Oral corticosteroids were administered	33%	789	32%	785
3.2.2 Which of the following steroids were (2006: initially) prescribed? (N on steroids)				
Prednisolone	36%	562	31%	512
Budesonide	4%	59	4%	59
Hydrocortisone	60%	948	66%	1092
Initial dose (Mg per day)	Median (IQR)	N	Median (IQR)	N
Prednisolone	40 (30-40)	562	40 (30-40)	511
Budesonide	9 (9-9)	59	9 (9-9)	59
Hydrocortisone	400 (300-400)	948	400 (300-400)	1092
3.2.3 Date therapy initiated or increased: (N on steroids)				
Same day as admission	54%	846	55%	906
Next day after admission	20%	312	22%	363
2-7 days	18%	288	20%	324
Later	8%	118	4%	68

Medical Intervention: Initiation of Treatment with anti-TNF-α During Admission

Standard:
3.3.2 All patients given anti-TNF-α for the first time should have a chest X-ray within the previous 3 months (Joint Tuberculosis Committee of the BTS in conjunction with the BSG and British Society of Rheumatology).

		National 2006 (2358)		National 2008 (2456)	
		%	N	%	N
3.3.1	Anti-TNF-α therapy given during this admission				
	YES	5%	111/2201	6%	151
	Start date: Days after admission	Median (IQR)	N	Median (IQR)	N
		7 (3-14)	111	7 (3-12)	151
3.3.2	Is there evidence of a chest x-ray performed in the three months prior to the initiation of anti-TNF-α therapy?				
	YES	70%	84/120	82%	124/151

Clinical Trials

		National 2006 (2358)		National 2008 (2456)	
		%	N	%	N
3.4.1	Was the patient entered into a Clinical Trial on this admission?				
	Clinical Trial (please specify)*	na	na	0.1	2
	Start date: Days after admission	na	na		3 days (n=1), unknown (n=1)

*small bowel ultrasound study (1), not stated (1)

Surgical Interventions

Standards:
4.1.3 Consultant colorectal surgeons should be involved with the discussion with the patient regarding the decision to operation (BSG guidelines).
4.1.4 Patients having resectional surgery for Crohn's Disease should see a stoma nurse prior to operation (BSG guidelines).
4.1.6 & 4.1.7 Operation should be performed or assisted by a consultant colorectal surgeon.
4.1.10 Patients should have ASA status documented prior to surgery.

		National Audit 2006				National Audit 2008			
4.1.1	Did the patient have surgery on this admission?	Electives 98% (547/556)		Non-electives 23% (545/2358)		Electives 98% (685/698)		Non-electives 20% (499/2456)	
4.1.2	What date was the decision to operate made?								
	Not known	15%	84	4%	20	11%	75	3%	14
	Date of decision: days from admission	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N
		-28 (-57 to -9)	463	2 (0-7)	525	-33 (-63 to -14)	610	1 (1-5)	485
4.1.3	Which Surgeon made the decision to operate?								
	a) Consultant Colorectal Surgeon	75%	411	67%	367	90%	618	73%	364
	b) Consultant GI Surgeon (non-colorectal)	3%	14	7%	40	2%	16	6%	29
	c) Consultant General Surgeon	3%	18	10%	54	4%	26	9%	45
	d) Other Consultant Surgeon	-	-	1%	6	0.3%	2	2%	11
	e) Specialist Registrar	2%	11	9%	47	2%	16	9%	44
	f) Other	2%	10	2%	13	1%	7	1%	6
	g) Not documented	15%	83	3%	18	-	0	-	0
4.1.4	Patient seen by a stoma nurse during this admission	24%	133	32%	172	29%	201	32%	161
	If yes, date first seen : days from admission	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N
		1 (0-3)	131	6 (2-13)	172	1 (0-2)	201	5 (2-11)	161
4.1.5	Date of Surgery: days from admission	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N	Median (IQR)	N
		1 (1-1)	547	4 (1-10)	545	1 (0-1)	685	3 (1-7)	498

4.1.6	What was the grade of the operating surgeon?							
	a) Consultant Colorectal Surgeon	78%	427	60%	325	81%	553	56%	280
	b) Consultant GI Surgeon (non-colorectal)	3%	15	6%	32	2%	16	5%	26
	c) Consultant General Surgeon	3%	18	10%	57	3%	22	10%	48
	d) Other Consultant Surgeon	-	-	0.7%	4	0.1%	1	0.8%	4
	e) Specialist Registrar	14%	78	19%	103	13%	89	23%	116
	f)Associate specialist	na	na	na	na	0.3%	2	3%	14
	g) Other	2%	9	4%	24	0.3%	2	2%	11
4.1.7	What was the grade of the assisting surgeon?							
	a) Consultant Colorectal Surgeon	12%	64	8%	41	12%	80	10%	50
	b) Consultant GI Surgeon (non-colorectal)	0.5%	3	2%	10	0.9%	6	1%	5
	c) Consultant General Surgeon	2%	9	2%	9	0.7%	5	3%	14
	d) Other Consultant Surgeon	0.4%	2	0.4%	2	0.4%	3	0.6%	3
	e) Specialist Registrar	65%	358	62%	336	67%	458	58%	289
	f)Associate specialist	na	na	na	na	6%	41	6%	28
	g) Other	20%	111	27%	147	13%	92	22%	110

2006: Consultant colorectal surgeon as operating or assisting surgeon: Electives: 87% (475/547), Non-electives: 65% (353/545)
2008: Consultant colorectal surgeon as operating or assisting surgeon: Electives: 90% (616/685), Non-electives: 64% (319/499)

		National Audit 2006				**National Audit 2008**			
		Electives (547)		Non-electives (545)		Electives (685)		Non-electives (499)	
		%	N	%	N	%	N	%	N
4.1.8	What were the indications for surgery?								
	a) Failure of Medical Therapy	44%	239	23%	123	48%	328	23%	114
	b) Obstruction	42%	232	38%	208	41%	282	39%	197
	c) Intra-abdominal Abscess	6%	31	17%	95	4%	25	16%	81
	d) Intra-abdominal fistula	10%	57	9%	50	11%	73	7%	33
	e) Stoma complications	2%	10	0.6%	3	3%	22	0.6%	3
	f) Perineal disease	7%	40	9%	47	7%	49	12%	58
	g) Toxic megacolon	0.2%	1	0.9%	5	-	0	2%	9
	h) Bleeding	0.7%	4	1%	8	1%	8	1%	7
	i) Dysplasia	0.5%	3	-	-	1%	7	0.2%	1
	j) Cancer	2%	10	0.2%	1	0.4%	3	0.6%	3
	k) Perforation	0.2%	1	10%	52	0.9%	6	11%	57
	l) Other (please specify)*	8%	45	8%	46	5%	36	6%	29
4.1.9	Type of intervention :								
	a) Segmental/Extended Colectomy	11%	60	12%	67	12%	81	14%	70
	b) Subtotal Colectomy	8%	43	10%	57	6%	41	12%	59
	c) Proctocolectomy	6%	31	2%	9	5%	34	1%	7
	d) Stricturoplasty	8%	43	6%	30	6%	42	4%	20
	e) Ileal/Jejunal Resection	13%	72	17%	93	15%	105	12%	59
	f) Resection of Intra-abdominal Fistula	5%	28	4%	24	6%	40	3%	14
	g) Proctectomy	6%	33	0.7%	4	2%	16	0.4%	2
	h) Completion proctectomy	na	na	na	na	2%	16	0.4%	2
	i) Ileocolonic Resection	40%	220	38%	208	42%	285	35%	176
	j) Drainage of abscess	3%	17	12%	65	2%	17	15%	76
	k) Formation of ileostomy or colostomy	10%	53	12%	68	11%	74	17%	86
	l) Revision of Stoma	6%	33	1%	8	5%	33	1%	6
	m) Perineal procedure	4%	22	5%	27	5%	33	6%	31
	n) Other intervention (please specify)**	4%	20	11%	59	6%	39	8%	41
4.1.9i	Was the surgery done laparoscopically/ laparoscopically-assisted?								
	YES	12%	65/521	8%	39/505	24%	164	14%	71
4.1.10	ASA status recorded pre-operatively	64%	349	60%	327	69%	475	64%	317
	If yes, what was the status?								
	1	26%	90	27%	88	25%	118	21%	65
	2	61%	213	57%	186	62%	295	54%	172
	3	12%	41	11%	36	11%	53	19%	60
	4	0.6%	2	4%	12	0.6%	3	4%	14
	5	0.3%	1	0.6%	2	-	0	0.3%	1
	N/A	0.6%	2	0.9%	3	1%	6	2%	5

$$ Total is more than 100% because multiple procedures performed at same operation

(2006) For elective surgery 14% (51/366) of elective segmental/extended colectomy, subtotal colectomy, ileal/jejunal resections or ileocolonic resections were done laparoscopically or were laparoscopically assisted.

(2008) For elective surgery 29% (139/478) of elective segmental/extended colectomy, subtotal colectomy, ileal/jejunal resections or ileocolonic resections were done laparoscopically or were laparoscopically assisted.

*Other (2006) comprised: 45 cases for elective surgery comprising of 24 closure of colostomy or ileostomy, 3 completion proctectomy, 5 not known and 1 each of abnormal CT (not specified), anal leakage, Crohn's Disease (unspecified), dehydration, diversion colitis, faecal incontinence, findings from CT scan & histology (unspecified), Ileo-anal pouch formation, laparotomy and resection (unspecified), large inflammatory polyp, rectal induration, repeated hospital admissions, severe abdominal pain.
46 cases for emergency surgery consisted of 23 suspected appendicitis, 5 'abdominal pain', 8 'explorative laparotomy', 3 not known, 1 each of: lymphoma, malnutrition, renal calculi, retained enteroscopy capsule, reversal of stoma, 'severe disease', insert Hickman line for TPN.

*Other (2008) comprised: 36 cases for elective surgery comprising of 24 closure of colostomy or ileostomy, 2 proctectomy, 1 inguinal hernia, 1 lymphoma and 1 peritoneal cyst and 1 not known
29 cases for emergency surgery consisted of 27 suspected appendicitis, 1 'abdominal pain' and 1 perforated gallbladder.

**Other (2006) comprised: for elective surgery 20 procedures: 4 division of adhesions, 1 appendectomy, 5 anastomotic resection (not specified site), 2 diagnostic laparoscopy/laparotomy, 2 ileo-anal pouch, 4 not known and 1 each for partial cystectomy and colonoscopy. For emergency surgery, there were 59 procedures comprising: 16 division of adhesions, 12 appendectomy, 4 closure of perforation, 9 diagnostic laparoscopy/laparotomy, 1 ileo-anal pouch, 8 not known, 2 oophrectomy, 2 splenectomy and 1 each for cholecystectomy, endoscopic dilatation (not specified), excision of complex peritoneal cyst, peritoneal lavage, removal of renal calculi.

**Other (2008) comprised: for elective surgery 39 procedures: 17 closure of stoma, 12 division of adhesions, 4 incisional hernia repair, 3 gastrojejunostomy, 1 appendectomy, 1 colonic stent, and 1 pouch excision.
For emergency surgery, there were 41 procedures comprising: 19 diagnostic laparoscopy/laparotomy, 11 division of adhesions, 7 appendectomy, 1 gastrojejunostomy, 1 incisional hernia repair 1 oversewing of DU and 1 stoma closure.

		National Audit 2006				**National Audit 2008**			
		Electives (547)		Non-electives (545)		Electives (685)		Non-electives (499)	
		%	N	**%**	N	%	N	**%**	N
4.2.1	Did the patient suffer from any of these complications (2006: with) (2008 :following) their surgery?								
	a) Wound Infection	7%	41	7%	36	10%	67	9%	46
	b) Rectal stump complications	0.2%	1	0.2%	1	0.3%	2	0.6%	3
	c) Intra-abdominal bleeding	0.5%	3	1%	6	0.6%	4	1%	5
	d) Intra-abdominal sepsis	4%	21	5%	25	4%	25	6%	32
	e) Anastomatic leakage	1%	7	3%	18	3%	21	4%	18
	f) Stoma complications	0.4%	2	1%	7	2%	11	2%	8
	g) Deep vein thrombosis (DVT)	0.2%	1	0.9%	5	-	0	0.4%	2
	h) Pulmonary embolus (PE)	-	-	0.7%	4	-	0	0.8%	4
	i) Ileus requiring TPN	0.9%	5	2%	13	1%	8	4%	19
	j) Cardiac	0.7%	4	1%	8	1%	7	2%	12
	k) Respiratory	3%	16	6%	33	4%	25	5%	27
	l) Clostridium difficile-associated diarrhoea (CDAD)	na	na	na	na	0.4%	3	0.6%	3
	m) No complications	83%	455	76%	414	76%%	523	70%	350
	n) Other (please specify)*	0.7%	4	2%	9	1%	8	1%	6

*Other (2006) comprised: for elective surgery: 2 central line sepsis, 1 each of renal failure and ureteric injury. For emergency surgery: 2 central line sepsis, and 1 each of bowel ischaemia, jejunal stricture, multiorgan failure with ARDS, perineal infection, post-operative perforated peptic ulcer, quadriplegia, renal failure.

*Other (2008) comprised: for elective surgery: 5 obstructions and 1 each of multi organ failure, splenic injury and septic shock. For emergency surgery: 1 each of obstruction, persistent perianal abscess, premature labour-perinatal death, renal failure, septic shock, and stroke.

Post-Operative Prophylactic Therapy

Standard:

4.3.1 Prophylactic therapy to try to reduce recurrence should be discussed with Crohn's Disease patients having resectional surgery with anastomosis (BSG Guidelines).

There are some types of intervention where post operative prophylactic therapy is indicated and others where it is not. The indications are for Segmental/Extended Colectomy, Subtotal Colectomy, Ileal/Jejunal Resection and Ileocolonic Resection (4.1.9). These form the denominator for the next table.

		National Audit 2006				National Audit 2008			
		Electives (386)		Non-electives (411)		Electives (442)		Non-electives (322)	
		%	N	%	N	%	N	%	N
4.3.1	Was patient prescribed any of the following drugs on discharge? (please select all that apply)								
	a) Azathioprine	21%	80	16%	64	22%	97	11%	36
	b) Mercaptopurine	2%	7	1%	5	3%	14	2%	8
	c) Metronidazole	7%	26	6%	26	5%	21	7%	21
	d) 5-ASA	35%	137	27%	112	28%	123	25%	80
	e) Methotrexate	1%	6	2%	7	2%	9	2%	6
	f) None	46%	178	56%	232	50%	223	58%	188

Discharge Arrangements

Standards:

5.1.3 Patients discharged on oral steroids should have a steroid reduction programme stated on discharge.

5.1.4 Patients on oral steroids should be co-prescribed bone protection agents (such as calcium and vitamin D or bisphosphonates (BSG Guidelines).

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
5.1.2	Was the patient taking oral steroids on discharge?				
	YES	56%	1628	52%	1628
	No	42%	1214	46%	1436
	N/A	2%	72	3%	90
5.1.3	Was a steroid reduction programme stated on discharge? (N on steroids)				
	YES	80%	1305	84%	1363
	No	17%	275	15%	248
	N/A	3%	48	1%	17
5.1.4	Were bone protection agents prescribed? (N on steroids)				
	YES	40%	645	46%	746

Section 7. Clinical Audit: Crohn's Disease (Outpatient)

For this section we were interested in data recorded at the patient's last documented OPD visit for review of their Crohn's Disease during the 12 months prior to the admission audited in the previous Crohn's Disease inpatient sections so long as that visit did not directly initiate that, or any other, acute admission to hospital for IBD.

Patient History

Standard:
6.1.3 Ccontinuity of care in hospital outpatient visits matters to patients - patients dislike seeing different individuals at each visit (BSG guidelines**). Patients should be offered the opportunity to see an IBD specialist (nurse or doctor) at last once a year.**

		National 2006 (2914)		National 2008 (3154)	
		%	N	%	N
6.1.1	Has patient had previous outpatient visits for Crohn's Disease at this hospital in last 12 months?				
	YES	64%	**1866**	63%	**1976**
6.1.2	How many times was the patient reviewed for their Crohn's Disease in an outpatient's clinic in the 12 months prior to the start date of this admission?				
		Median (IQR)	N	Median (IQR)	N
		4 (2-5)	1866	3 (2-5)	1976
6.1.3	Approximately how many times was the patient seen by the following staff in the 12 months prior to the start date of this admission? (If the patient was seen by more than one of the following staff in a single clinic visit please count each staff member individually)*				
		Median (IQR)	N	Median (IQR)	N
	Consultant	2 (1-4)	1866	2(1-4)	1976
	IBD Nurse Specialist	0 (0-0)	1866	0 (0-0)	1974
	Specialist Registrar	0 (0-1)	1866	0 (0-1)	1974
	F2 (SHO)	0 (0-0)	1739	0 (0-0)	1974
6.1.4	What was the date of the last visit at the Outpatient Department prior to admission?				
		Median (IQR)	N	Median (IQR)	N
	Days before current admission	-42 (-95 to-14)	1839	-50 (-106 to -22)	1976
6.1.4i	Did this visit directly initiate the admission being audited in the previous sections?				
	YES	na	na	9%	179
	NO			91%	1797

* 2006: For 91% (1699/1866) of cases patient was seen by a consultant, in 24% (455/1866) by an IBD specialist nurse, in 41% (767/1866) by a specialist registrar and in 12% (209/1739) by a SHO.

* 2008: For 90% (1784/1976) of cases patient was seen by a consultant, in 24% (466/1974) by an IBD specialist nurse, in 42% (835/1974) by a specialist registrar and in 7% (141/1974) by a SHO.

The rest of the Crohn's Disease outpatient results (6.2.1 to 6.6.7) are for those patients audited who were said to have had a previous outpatient visit for review of their Crohn's Disease during the 12 months prior to the admission being audited in the previous Crohn's inpatient sections 1 – 5 so long as that visit did not directly initiate that or any other acute admission for IBD. The same criteria applied across both 2006 and 2008 however, the explicit question 6.1.4i **"**Did this visit directly initiate the admission being audited in the previous sections?" was only asked in only 2008.

Assessment of Crohn's Activity

Standard:
6.2.1 – 6.2.7i Patients should have general well being, stool frequency, presence and severity of abdominal pain documented. Weight should be documented (BSG guidelines)**. CRP (ESR) and albumin should be checked.**

		National 2006 (1866)		National 2008 (1797)	
		%	N	%	N
6.2.1 Number of liquid stools per day		Median (IQR)	N	Median (IQR)	N
		3 (1-6)	807	3 (1-6)	861
6.2.2 General well being:		%	N		
	Well	28	517	28	501
	Mild symptoms	20	378	23	410
	Moderate symptoms	32	605	32	576
	Severe symptoms	10	185	8	149
	Not documented	8	158	9	161
6.2.3 Abdominal Pain					
	None	34	627	37	656
	Present	47	879	48	859
	Not documented	18	337	16	282
6.2.4 Abdominal Mass					
	None	57	1066	60	1075
	Present	7	124	6	106
	Not documented	35	653	34	616
6.2.5 Did the patient report any of the following complications at this clinical visit?					
	a)Mouth ulcers	2	34	2	28
	b)Arthralgia	4	78	6	108
	c)Pyoderma Gangrenosum	0.4	8	0.3	5
	d) Anal fissure	1	21	2	41
	e) Fistula	7	128	6	110
	f) Erythaema Nodosum	0.5	9	0.8	15
	g) Abscess	2	38	2	38
	h) Iritis	0.3	5	0.4	7
6.2.6 **CRP**					
	CRP low <5	13%	251	18%	322
		Median (IQR)	N	Median (IQR)	N
	CRP (if 5 and above)	24 (12-50)	636	21 (11-47)	658
6.2.7 **Albumin** (g/L)					
	If documented	Median (IQR) 39 934-42)	N 920	Median (IQR) 39 (35-42)	N 1056
6.2.7 **Hb** (g/dL)					
	If documented	Median (IQR) na	N na	Median (IQR) 12.7 (11.4-13.8)	N 1136
6.2.7 Was the patient weighed during this clinic visit?		%	N	%	N
	YES	77	1332/1739	80	1446
6.2.7i Was there evidence of unintentional weight loss of more than 3kgs prior to this clinic visit?					
	No	69	997	80	1152
	Yes	19	279	14	199
	Not documented	11	160	7	95

Smoking Status

Standard:
6.3.1 Smoking status should be documented (BSG guidelines**) and smoking cessation support should be offered.**

		National 2006 (1866)		National 2008 (1797)	
		%	N	%	N
6.3.1	What was the smoking status of the patient during this clinic visit?				
	a) Current smoker	25	467	23%	412
	b) Lifelong non-smoker/ex-smoker	41	766	39%	698
	c) Not documented	34	633	38%	687

Monitoring of immunosuppressive therapy

Standard:
6.4.2 – 6.4.3 Full blood count should be monitored at least 3 monthly for patients on established immunosuppressive therapy (BSG guidelines).

		National 2006 (1866)		National 2008 (1797)	
		%	N	%	N
6.4.1	Was patient taking any of these drugs in the 12 months prior to the start date of this admission?				
	Azathioprine	35%	662	39%	704
	Mercaptopurine	4%	81	5%	90
	Methotrexate	6%	103	7%	118
	None of these	57%	1060	51%	911
6.4.2	Was the patient's white blood cell (WBC) count routinely measured? (denominator comprises those on any of the three drugs in 6.4.1)				
	YES	92%	743/806	94%	837/887
6.4.3	How often was WBC monitoring performed?		N=743		N=837
	At least once a month	38%	279	30%	253
	Every 2-3 months	53%	392	61%	513
	(2006: Less frequent than 3 monthly) (2008: other)	1%	10	3%	26
	Not documented	8%	62	6%	47
6.4.4	Did patient's WBC fall below $3x10^9$ at any time during 12 months before this admission?				
	YES	4%	28/743	2%	18/837
6.4.5	If the white blood cell count was less than $3.0x10^9$ what action was taken?				
	Reduced dose	14%	4	22%	4
	Stopped drug	71%	20	56%	10
	No action taken	14%	4	22%	4
6.4.6	What was the outcome of the reduced white blood cell count?				
	No sequelae (resolved)	96%	27	83%	15
	Treatment required (e.g. prophylactic antibiotics)	-	0	-	0
	Admission	4%	1	17%	3

Use of Corticosteroids

Standards:
6.5.2 Prolonged use of steroid therapy is of no benefit in maintaining remission in Crohn's Disease, increases the risk of septic complications and is associated with an increased mortality. Prolonged use of steroids (>3 months oral prednisolone or budesonide) should be avoided.
6.5.3 Patients on oral steroids should be co-prescribed bone protection agents (BSG Guidelines).

		National 2006 (1866)		National 2008 (1797)	
		%	N	%	N
6.5.1	Was the patient taking oral corticosteroids for their Crohn's Disease in the 12 months prior to the start date of this admission?				
	YES	56%	1047	55%	982
	If YES to Q6.5.1				
6.5.2	Was there any point at which the patient was taking oral corticosteroids continuously for more than three months?				
	YES	46%	484/1047	38%	370/982
6.5.3	Were bone protection agents prescribed alongside corticosteroids?				
	YES	45%	475/1047	49%	484/982
6.5.4	Was bone densitometry measured within 12 months of initiation of the corticosteroid therapy?				
	YES	18%	184/1047	17%	165/982

2006: Of those who were on corticosteroids for > 3 months 45% (219/484) were not on bone protection agents
2008: Of those who were on corticosteroids for > 3 months 43% (158/370) were not on bone protection agents

Use of anti-TNF-α therapy

Standards:
6.6.1 Patients initiated on infliximab should have severely active Crohn's Disease (NICE guidance**).**
6.6.5 All patients receiving infliximab therapy should be on concomitant immunosuppressive therapy if tolerated (BSG Guidelines).
6.6.7 Infliximab treated patients should have a documented chest X-ray within 3 months prior to first treatment (Joint Tuberculosis Committee of the BTS in conjunction with the BSG and British Society of Rheumatology).

		National 2006 (1866)		National 2008 (1797)	
		%	N	%	N
6.6.1	Did the patient receive anti-TNF-α therapy in the 12 months prior admission?				
	YES	8%	131/1739	12%	224
6.6.2	Was anti-TNF-α therapy initiated (2008: given for the very first time) at any point in the 12 months prior to the start date of this admission?				
	YES	78%	102/131	58%	131/224
6.6.3	Did the patient have severely active Crohn's Disease at the time anti-TNF-α therapy was initiated?				
	YES	82%	84/102	95%	124/131
6.6.4	What was the CRP prior to the first anti-TNF-α (2006: transfusion) (2008: infusion) on record?	Median (IQR)	N	Median (IQR)	N
		33 (13-78)	58	36 (19-72)	97
		Low <5	13		15
6.6.5	Was the patient on immunosuppressive therapy at this time?				
	YES	72%	73/102	71%	93/131
	If NO, is there any evidence that patient was intolerant of these immunosuppressive therapies?				
	YES	45%	13/29	53%	20/38
6.6.6	Was fistulating disease the primary reason for the decision to initiate anti-TNF-α therapy?				
	YES	26%	27/102	27%	36/131
6.6.7	Did the patient have a chest X-ray to exclude TB in the three months prior to initiation of anti-TNF-α therapy?				
	YES	86%	88/102	89%	116/131

2006: Of those on corticosteroids for > 3 months , 11% (55/484) received anti-TNF-α therapy in the 12 months prior admission
2008: Of those on corticosteroids for > 3 months, 14% (50/370) received anti-TNF-α therapy in the 12 months prior admission

Appendix 1

UK IBD Audit Steering Group – February 2008

Chair & UK IBD Audit Clinical Director
Dr Ian Arnott, Consultant Gastroenterologist, Western General Hospital, Edinburgh, NHS Lothian

Association of Coloproctology of Great Britain and Ireland
Miss Asha Senapati, Consultant Surgeon, Portsmouth Hospitals NHS Trust

British Dietetic Association
Dr Miranda Lomer, Locum Consultant Dietitian in Gastroenterology, Guy's and St Thomas' NHS Foundation Trust

British Society of Gastroenterology
Dr Stuart Bloom, Consultant Physician and London Gastroenterologist, University College London Hospitals NHS Foundation Trust.

British Society of Gastroenterology
Dr Keith Leiper, Consultant Gastroenterologist, Royal Liverpool and Broadgreen University Hospitals NHS Trust & UK IBD Audit Clinical Director

British Society of Gastroenterology
Professor Jonathan Rhodes, Professor of Medicine, University of Liverpool

British Society of Gastroenterology
Mrs Chris Romaya, Executive Secretary

British Society of Gastroenterology
Dr Simon Travis, Clinical Director of Gastroenterology & Endoscopy, Oxford Radcliffe Hospitals NHS Trust

British Society of Gastroenterology
Dr Ian Shaw, Consultant Gastroenterologist, Gloucestershire Hospitals NHS Foundation Trust

British Society of Gastroenterology
Dr Abraham Varghese, Consultant Gastroenterologist, Causeway Hospital, Northern Health and Social Care Trust

British Society of Paediatric Gastroenterology Hepatology and Nutrition
Dr Sally Mitton, Consultant / Senior Lecturer Paediatric Gastroenterology, St George's Hospital, Paediatric Gastroenterology Unit.

British Society of Paediatric Gastroenterology Hepatology and Nutrition
Dr Richard Russell, Consultant Paediatric Gastroenterologist, Royal Hospital for Sick Children (Yorkhill), NHS Greater Glasgow & Clyde

National Association for Colitis and Crohn's Disease (NACC)
Mr Richard Driscoll, Chief Executive (NACC)

Newport Local Health Board
Mr John Frankish, Head of Service Modernisation, Newport Local Health Board

Royal College of Nursing Crohn's and Colitis Special Interest Group
Ms Lindsey Hurst, IBD Clinical Nurse Specialist, North Tees and Hartlepool NHS Foundation Trust

Royal College of Nursing Crohn's and Colitis Special Interest Group
Ms Karen Kemp, IBD Clinical Nurse Specialist, Central Manchester University Hospitals NHS Foundation Trust

UK IBD Audit Report 2nd Round (2008) Steering Group

Royal College of Nursing Crohn's and Colitis Special Interest Group
Ms Allison Nightingale, IBD Clinical Nurse Specialist, Cambridge University Hospitals NHS Foundation Trust

Royal College of Physicians
Ms Rhona Buckingham, Manager, Clinical Effectiveness and Evaluation Unit

Royal College of Physicians
Mr Calvin Down, Project Manager, UK IBD Audit

Royal College of Physicians
Dr Barney Hawthorne, Consultant Gastroenterologist, Cardiff and Vale NHS Trust

Royal College of Physicians
Ms Jane Ingham, Director of Clinical Standards

Royal College of Physicians
Ms Clare Moloney, Project Co-ordinator, UK IBD Audit

Royal College of Physicians
Dr Jonathan Potter, Clinical Director, Clinical Effectiveness and Evaluation Unit

Royal Pharmaceutical Society of Great Britain
Ms Jackie Eastwood, Senior Specialist Gastroenterology Pharmacist, St. Mark's Hospital

UK IBD Audit 2008
Organisation and Structure Proforma

This Proforma relates to your IBD Services as at the 1st September 2008

Auditor Discipline: **Which people have been involved in the collection and input of data for this form?** (Select all that apply)

a) Consultant ☐ b) Other medical staff ☐ c) Nurse ☐ d) Manager ☐

e) Clinical Audit staff ☐ f) Other (please specify): ☐

1 General Hospital Demographics

1.1 **How many beds does your hospital have in total?** ☐☐☐☐

1.2 **Does your hospital have either of the following?**

i. Acute medicine unit Yes ☐ No ☐

ii. Acute surgical unit Yes ☐ No ☐

1.3 **Is there an Intensive Therapy Unit (ITU) on site?** Yes ☐ No ☐

i. If yes, how many beds? ☐☐☐

1.4 **Is there a High Dependency Unit (HDU) on site?** Yes ☐ No ☐

i. If yes is it: a) Medical ☐ b) Surgical ☐ c) Mixed ☐

ii. If yes, how many HDU beds? ☐☐☐

1.5 **Is there a combined Intensive Therapy (ITU) & High Dependency (HDU) Unit on site?** Yes ☐ No ☐

i If yes is it: a) Medical ☐ b) Surgical ☐ c) Mixed ☐

ii If yes, how many combined Intensive Therapy (ITU) & High Dependency (HDU) beds? ☐☐☐

2 Inpatient Activity

2.1 **How many patients aged 16 or over at the date of admission were discharged between 1st September 2007 and 31st August 2008 with a primary diagnosis of:**

i Ulcerative Colitis ☐☐☐

ii Crohn's Disease ☐☐☐

2.2 **How many patients aged 16 or over at the date of admission were discharged between 1st September 2007 and 31st August 2008 having had an operation where the primary indication was:**

i Ulcerative Colitis ☐☐☐

ii Crohn's Disease ☐☐☐

2.3 **Do surgeons perform ileo-anal pouch surgery on site?** Yes ☐ No ☐

i. If yes, how many ileo-anal pouch operations were performed on site between **1st September 2007 and 31st August 2008**? ☐☐☐

3 Gastroenterology Services

3.1 Is there a dedicated Gastroenterology ward? Yes ☐ No ☐

i. If yes, how many beds per lavatory on the ward? ☐☐.☐

ii. Are any of the toilets Mixed-Sex? **Yes** ☐ **No** ☐

3.2 How many WTE Gastroenterologists are there on site? ☐☐.☐

3.3 How many Gastroenterology staff of the following grades are there on site?

i. Specialist Registrar (SpR) ☐☐

ii. Associate Specialist ☐☐

3.4 How many WTE IBD Nurse Specialists are there on site? ☐☐.☐

i. If 0, has a business case been submitted? Yes ☐ No ☐

ii. Was the business case successful? Yes ☐ No ☐ Decision pending ☐

3.5 How many sessions of Specialist Nurse time are dedicated to IBD care per week? ☐☐

4 Colorectal Services

4.1 How many WTE specialist Colorectal Surgeons are there on site? ☐☐.☐

4.2 How many Colorectal staff of the following grades are there on site?

i. Specialist Registrar (SpR) ☐☐

ii. Associate Specialist ☐☐

4.3 How many WTE Stoma Nurses are there on site? ☐☐.☐

4.4 How many sessions of Stoma Nurse time are dedicated to stoma care per week? ☐☐

5 Multi-Disciplinary Working

5.1 Is there a searchable database of IBD patients on site? Yes ☐ No ☐

5.2 Do timetabled meetings where IBD patients are discussed take place between the following specialties:

i. Gastroenterologists and Colorectal Surgeons Yes ☐ No ☐

ii. Gastroenterologists and Pathologists Yes ☐ No ☐

iii. Gastroenterologists and Radiologists Yes ☐ No ☐

iv. Colorectal Surgeons and Pathologists Yes ☐ No ☐

v. Colorectal Surgeons and Radiologists Yes ☐ No ☐

5.3 Is there a specialist GI Pathologist? Yes ☐ No ☐

5.4 Is there a specialist GI Radiologist? Yes ☐ No ☐

6 Dietetics and Nutritional Services

6.1 Is there a hospital nutrition team? Yes ☐ No ☐

6.2 Does the team go on ward rounds? Yes ☐ No ☐

i. If yes, how frequently? Daily ☐ Weekly ☐ Other (please specify): ☐

6.3 How many dietetic sessions per week are dedicated to GI disorders (not just IBD)? ☐☐

7 Outpatient Services

7.1 Is there written information for patients with IBD on whom to contact in the event of a relapse? Yes ☐ No ☐

7.2 In general, how soon could a relapsed patient expect to be seen in clinic?

a) Less than 7 days ☐ b) Between 7-14 days ☐ c) Other (please specify): ☐

7.3 Do patients have access to an IBD specialist by any of the following methods (tick all that apply)

a) Telephone ☐ b) Drop-in clinic ☐ c) Email ☐ d) None of these ☐

7.4 Are there any joint or parallel clinics run between Gastroenterologists and Surgeons?

a) Joint ☐ b) Parallel ☐ c) Neither ☐

8 Patient Information

8.1 Are patients provided with written information about IBD? Yes ☐ No ☐

i. If yes, is the information produced by: (select all that apply)

a) NACC ☐ b) CICRA ☐

c) Pharmaceutical ☐ d) Locally written ☐ e) Drug specific ☐

f) Other (please specify) ☐

9 Monitoring of established immunosuppressive therapy

9.1 How is established immunosuppressive therapy monitored? *(Please tick all that apply)*

a) By the GP ☐ c) During clinic visits ☐

b) A dedicated monitoring service ☐ d) A combination of primary and secondary care monitoring ☐

10 IBD Support Services

10.1 Is there a paediatric to adult handover clinic for young patients with IBD? Yes ☐ No ☐

10.2 Is a registered counsellor available to patients as part of your IBD Service? Yes ☐ No ☐

10.3 Are there any psychologists attached to the Gastroenterology service? Yes ☐ No ☐

i. If yes, how many sessions per month are dedicated to the Gastroenterology service? ☐☐.☐

10.4 Do pathways exist for direct access to psychological support? Yes ☐ No ☐

10.5 Is there an acute pain management team on site? Yes ☐ No ☐

11 Management of Ulcerative Colitis

11.1 Do written trust guidelines exist for the management of acute or severe colitis? Yes ☐ No ☐

12 Interactions between your hospital and it's IBD patients

12.1 Does your hospital offer open forums or meetings for patients with IBD? Yes ☐ No ☐

i. If yes, how often do these take place?

- a) Less than 4 monthly ☐
- b) Every 4-8 months ☐
- c) Every 8-12 months ☐
- d) Other (please specify) ☐

ii. Which staff attend these meetings? (select all that apply)

- a) Medical ☐
- b) Surgical ☐
- c) Nursing ☐
- d) Other ☐ Please specify:

12.2 Are any of the following activities or systems in place to involve patients in giving their views on the development of your IBD services? (Please tick all that apply)

- a) Regular patient surveys ☐
- b) Individual patient representatives ☐
- c) Patient panel meetings ☐
- d) None ☐
- e) Other (please specify) ☐

UK IBD Audit 2008
Adult Ulcerative Colitis Proforma

Pre-section: Patient Demographics

A **Auditor Discipline:** a) Consultant ☐ b) Other medical staff ☐ c) Nurse ☐ d) Manager ☐ e) Clinical Audit ☐ f) Other (please specify): ☐

B **Patient Audit Number:** (Once you begin to enter this case onto the audit website it will be allocated a Patient ID number, record this on the paper form for reference) ☐☐☐☐

C **What was the patient's age at admission?** ☐☐☐

D **Gender:** Male ☐ Female ☐

E **What are the first 2 characters of the patient's postcode?** ☐☐

Section 1: Admission / Mortality

1.1 Admission

1.1.1 **What was the date of admission to this hospital?** ☐☐/☐☐/☐☐

1.1.2 **What was the primary reason for admission?**

*Please note that if option **c) Elective admission for surgery** was the primary reason for admission then you do not need to answer the following questions:

Section 1: Questions 1.1.3 through to 1.1.9
Section 2: Questions 2.2.1 through to 2.2.6 2.3.1 and 2.3.2
Section 3: None of the questions in Section 3
Section 4: None of the questions in section 4 apart from 4.1.1

a) Emergency admission for active Ulcerative Colitis ☐
b) Planned admission for active Ulcerative Colitis ☐
c) Elective admission for surgery ☐
d) New diagnosis of Ulcerative Colitis ☐

*If none of the above options a) – d) can be chosen please disregard this patient's notes and choose the next case to enter

1.1.3 **What was the source of admission to this hospital?**

a) General Practitioner (GP) ☐
b) Accident and Emergency (A&E) ☐
c) Outpatients Department (OPD) ☐
(Includes referrals from a formally booked IBD telephone clinic)
d) Other hospital ☐
e) Not documented ☐

1.1.4 **What was the duration of active colitis (new or relapse) precipitating this admission?**

a) Less than two weeks ☐
b) Two to three weeks ☐
c) Four to eight weeks ☐
d) More than eight weeks ☐
e) Not documented ☐

1.1.5 Which specialty was responsible for the patient's care 24 hours after admission?

a) Acute Medicine ☐ b) Gastroenterology ☐ c) Colorectal Surgery ☐

d) Geriatrics ☐ e) General Medicine ☐ f) General Surgery ☐

g) Other (please specify) ☐

1.1.6 What date was the patient first seen by a Consultant Gastroenterologist? ☐☐/☐☐/☐☐ Not Seen ☐ Not required ☐

1.1.7 What date was the patient first seen by a Consultant Colorectal Surgeon? ☐☐/☐☐/☐☐ Not Seen ☐ Not required ☐

1.1.8 Was the patient visited by an IBD Nurse/GI Nurse specialist during admission? Yes ☐ No ☐

1.1.9 Was the patient transferred to a specialist gastroenterology ward?

a) Medical ☐ b) Joint ☐ c) Surgical ☐ d) Not transferred ☐

1.2 Comorbidity

1.2.1 Does the patient have any significant co-morbid diseases? (please tick all that apply)

a) Heart Disease ☐ b) Peripheral Vascular Disease ☐

c) Respiratory ☐ d) Renal Failure ☐

e) Diabetes ☐ f) Stroke ☐

g) Liver Disease ☐ h) Active Cancer ☐

i) None ☐

1.3 Discharge/Mortality

1.3.1 Did the patient die during admission? Yes ☐ No ☐

If yes

i. Date of death ☐☐/☐☐/☐☐

ii. Primary cause of death: _____

iii. Please use this space to enter any further details of death if required:
(max of 300 characters)

If no

1.3.2 Date of discharge ☐☐/☐☐/☐☐

Section 2: Assessing the extent of UC

2.1 Patient History

2.1.1 Did the patient have a pre-admission diagnosis of Ulcerative Colitis? Yes ☐ No ☐

2.1.2 Has the patient had previous admissions with Ulcerative Colitis in the two years prior to this admission? Yes ☐ No ☐

i. If yes, how many times in the two years prior to this admission? ☐☐

2.2 Severity of Disease

2.2.1 How many stools were passed in the first full day following admission? ☐☐ Not documented ☐

Not applicable, patient had stoma ☐

2.2.2 What was the highest recorded pulse rate during the first full day following admission? ☐☐☐ bpm

Not documented ☐

2.2.3 What was the highest temperature recorded during the first full day following admission? ☐☐.☐ °C

Not documented ☐

2.2.4 At this admission, what was the initial result for:

i. CRP ☐☐☐ mg/L Less than 5 ☐ Not documented ☐

ii. Albumin ☐☐ g/L Not documented ☐

iii. Hb ☐☐.☐ g/dL Not documented ☐

2.2.5 Was a stool sample sent for Standards Stool Culture?

Yes ☐ No ☐

i. Date sent: ☐☐/☐☐/☐☐

ii. Was it positive? Yes ☐ No ☐

iii. Date of positive sample ☐☐/☐☐/☐☐

2.2.6 Was a stool sample sent for CDT?

Yes ☐ No ☐

i. Date sent: ☐☐/☐☐/☐☐

ii. Was it positive? Yes ☐ No ☐

iii. Date of positive sample ☐☐/☐☐/☐☐

2.3 Endoscopic Assessment

2.3.1 On this admission, did the patient have any of the following procedures? (Please tick all that apply)

a) Rigid sigmoidoscopy ☐ b) Flexible Sigmoidoscopy ☐ c) Colonoscopy ☐

d) None of the above ☐

i. Date of first procedure: ☐☐/☐☐/☐☐

2.3.2 Were biopsies taken for histology? Yes ☐ No ☐

i. Date histology reported by histopathology: ☐☐/☐☐/☐☐

Section 3: Monitoring of Colitis – Post-Admission

3.1 General information

3.1.1 In the first 7 days following admission did the patient have a persistent Tachycardia (Pulse rate >90bpm on more than one occasion in 24 hours) Yes ☐ No ☐

i. If yes, date recorded ☐☐/☐☐/☐☐

3.1.2 In the first 7 days following admission did the patient have a Fever (Temperature >37.5°C on more than one occasion in 24 hours) Yes ☐ No ☐

i. If yes, date recorded ☐☐/☐☐/☐☐

3.1.3 In the first seven days following admission, how often was stool frequency monitored?

a) Daily ☐ b) Every 2-3 days ☐ c) Every 4-6 days ☐

d) Once a week ☐ e) Not applicable, stoma present ☐ f) Not documented ☐

3.1.4 In the first seven days following admission, how often was CRP monitored?

a) Daily ☐ b) Every 2-3 days ☐ c) Every 4-6 days ☐

d) Once ☐ e) Not documented ☐

3.1.5 At any point following the first 72-hours of steroid therapy was the patient's CRP level reported to be greater than 45mg/L?

Yes ☐

No ☐

Not documented ☐

3.2 Monitoring of Colitis – Radiology

3.2.1 Was a plain abdominal X-Ray performed? Yes ☐ No ☐

i. Date requested ☐☐/☐☐/☐☐

ii. Date performed ☐☐/☐☐/☐☐

iii. Date reported by Radiologist ☐☐/☐☐/☐☐

3.2.2 Was toxic megacolon present in the x-ray? Yes ☐ No ☐ N/A ☐

i. If yes, was a repeat x-ray or CT Scan performed? Yes ☐ No ☐

ii. Date performed ☐☐/☐☐/☐☐

Section 4: Medical Interventions

4.1 Use of Anti-thrombotic therapy

4.1.1 Was the patient given prophylactic heparin? Yes ☐ No ☐

4.2 Steroid therapy

4.2.1 Were IV corticosteroids prescribed during this admission?

i. Yes ☐

ii. No, but oral corticosteroids were prescribed ☐

iii. No, neither IV or Oral corticosteroids were prescribed during this admission ☐

4.2.2 Which of the following steroids were initially prescribed? (see help notes)

Prednisolone ☐

Budesonide ☐

Hydrocortisone ☐

i. Initial dose ☐☐☐ Mg/day

4.2.3 Date therapy initiated or increased: ☐☐/☐☐/☐☐

4.2.4 At any point following the first 72-hours of steroid therapy did the patient produce stools at a frequency greater than 8 per day? Yes ☐ No ☐

Not documented ☐

4.2.5 Did the patient respond to corticosteroids and not require any other significant therapy for Ulcerative Colitis?

Yes ☐ No ☐

4.3 Other Therapies

Which other therapies did the patient receive?

4.3.1 Ciclosporin ☐

i. Start Date ☐☐/☐☐/☐☐

ii. Did the patient achieve remission on ciclosporin therapy? Yes ☐ No ☐

4.3.2 Anti TNF ☐

i. Start Date ☐☐/☐☐/☐☐

ii. Did the patient achieve remission on Anti TNF therapy? Yes ☐ No ☐

4.3.3 Clinical Trial (please specify) ☐

i. Start Date ☐☐/☐☐/☐☐

ii. Did the patient achieve remission from the clinical trial? Yes ☐ No ☐

4.3.4 Significant Other therapies ☐ please specify:

i. Start Date ☐☐/☐☐/☐☐

ii. Did the patient achieve remission on other therapy? Yes ☐ No ☐

4.3.5 **Surgical therapy** ☐ *On the audit website 4.3.5 must be ticked to enable you to enter Surgical Intervention data in section 5*

4.4 Initiating Ciclosporin Therapy

What were the pre-treatment results for:

4.4.1 **Creatinine** ☐☐☐ µmol/L **i.** Date sample taken: ☐☐/☐☐/☐☐

Not Documented ☐

4.4.2 **Magnesium** ☐.☐☐ mEq/L **i.** Date sample taken: ☐☐/☐☐/☐☐

Not Documented ☐

4.4.3 **Cholesterol** ☐☐.☐ mmol/L **i.** Date sample taken: ☐☐/☐☐/☐☐

Not Documented ☐

4.4.4 **How was the Ciclosporin initially administered?** Oral ☐ IV ☐

i. What was the initial daily dose? ☐.☐ mg/kg

4.5 Monitoring Ciclosporin Therapy

4.5.1 **After *three days* of ciclosporin therapy, how often were serum ciclosporin levels checked?**

a) Daily ☐ b) Every two days ☐ c) Every three days ☐

d) Once a week ☐ e) Less than once a week ☐ f) Not documented ☐

Section 5: Surgical Interventions

5.1 Surgical Therapy

5.1.1 **What date was the decision to operate made?** ☐☐/☐☐/☐☐

Not Known ☐

5.1.2 **Who made the decision to operate?**

a) Consultant Colorectal Surgeon ☐

b) Consultant GI Surgeon (non-colorectal) ☐

c) Consultant General Surgeon ☐

d) Other Consultant Surgeon ☐

e) Specialist Registrar ☐

f) Other Surgeon (please specify below) ☐

5.1.3 **What was the date of surgery?** ☐☐/☐☐/☐☐

5.1.4 **Was the patient seen by a stoma nurse during this admission?** Yes ☐ No ☐

i. If yes, what date was the patient first seen by a stoma nurse? ☐☐/☐☐/☐☐

5.1.5 What was the grade of the operating surgeon?

a) Consultant Colorectal Surgeon ☐
b) Consultant GI Surgeon (non-colorectal) ☐
c) Consultant General Surgeon ☐
d) Other Consultant Surgeon ☐
e) Specialist Registrar ☐
f) Associate Specialist ☐
f) Other Surgeon (please specify below) ☐

5.1.6 What was the grade of the assisting surgeon?

a) Consultant Colorectal Surgeon ☐
b) Consultant GI Surgeon (non-colorectal) ☐
c) Consultant General Surgeon ☐
d) Other Consultant Surgeon ☐
e) Specialist Registrar ☐
f) Associate Specialist ☐
g) Other Surgeon (please specify below) ☐

5.1.7 What were the indications for surgery? (select all that apply)

a) Failure of Medical Therapy	☐	e) High Grade Dysplasia	☐	i) Perforation	☐
b) Toxic megacolon	☐	f) Low Grade Dysplasia	☐	j) Abscess	☐
c) Bleeding	☐	g) Ungraded Dysplasia	☐	k) Formation of ileostomy	☐
d) Obstruction	☐	h) Cancer	☐	l) Other indication (please specify below)	☐

5.1.8 Type of intervention:

a) Subtotal colectomy	☐	e) Ileoanal pouch without stoma	☐
b) Protocolectomy	☐	f) Formation of ileostomy	☐
c) Proctectomy	☐	g) Other (please specify)	☐
d) Ileoanal pouch with stoma	☐		

i. Was the surgery done laparoscopically/ laparoscopically-assisted? Yes ☐ No ☐

5.1.9 Was the ASA status recorded pre-operatively? Yes ☐ No ☐

i. If yes, what was the status? 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A ☐

5.2 Surgical Complications

5.2.1 Did the patient suffer from any of these complications with their surgery? (select all that apply)

a) Wound Infection	☐	i) Small bowel obstruction	☐
b) Rectal stump complications	☐	j) Ileus requiring parenteral nutrition	☐
c) Intra-abdominal bleeding	☐	k) Cardiac	☐
d) Intra-abdominal sepsis	☐	l) Respiratory	☐
e) Anastomotic leakage	☐	m) Clostridium difficile-associated diarrhoea (CDAD)	☐
f) Stoma complications	☐	n) No Complications	☐
g) Deep vein thrombosis (DVT)	☐	o) Other (please specify below)	☐
h) Pulmonary embolus (PE)	☐		

Section 6: Discharge Arrangements

6.1 Discharge Arrangements

6.1.1	**Was the patient taking oral steroids on discharge?**	Yes	☐	No	☐	N/A ☐
6.1.2	**Was a steroid reduction programme stated on discharge?**	Yes	☐	No	☐	N/A ☐
6.1.3	**Were bone protection agents prescribed?**	Yes	☐	No	☐	N/A ☐

UK IBD Audit 2008
Adult Crohn's Disease Proforma

Pre-section: Patient Demographics

A **Auditor Discipline:** a) Consultant ☐ b) Other medical staff ☐ c) Nurse ☐ d) Manager ☐ e) Clinical Audit ☐ f) Other (please specify): ☐

B **Patient Audit Number:** (Once you begin to enter this case onto the audit website it will be allocated a Patient ID number, record this on the paper form for reference) ☐☐☐☐

C **What was the patient's age at admission?** ☐☐☐

D **Gender:** Male ☐ Female ☐

E **What are the first 2 characters of the patient's postcode?** ☐☐

Section 1: Admission / Mortality

1.1 Admission

1.1.1 **What was the date of admission to this hospital?** ☐☐/☐☐/☐☐

1.1.2 **What was the primary reason for admission to this hospital?**

*Please note that if option **c) Elective admission for surgery** was the primary reason for admission then you do not need to answer the following questions:

- Section 1: Questions 1.1.3 1.1.4 1.2.1 1.2.2 1.2.3 1.2.4 and 1.2.5
- Section 2: Questions 2.1.1 through to 2.1.5 2.2.1 and 2.2.2 2.3.1 and 2.3.2 2.5.1 through to 2.5.4
- Section 3: Questions 3.2.1 through to 3.2.3 3.3.1 and 3.3.2 3.4.1

a) Emergency admission for active Crohn's Disease ☐

b) Planned admission for active Crohn's Disease ☐

c) Elective admission for surgery ☐

d) New diagnosis of Crohn's Disease ☐

*If none of the above options a) – d) can be chosen please disregard this patient's notes and choose the next case to enter

1.1.3 **What was the source of admission?**

a) General Practitioner (GP) ☐

b) Accident and Emergency (A&E) ☐

c) Outpatients Department (OPD) (Includes referrals from a formally booked IBD telephone clinic) *(*please also see the note at the start of section 6)* ☐

d) Other hospital ☐

e) Not Documented ☐

1.1.4 **What duration of new or relapse symptoms did the patient report prior to their admission?**

a) Less than two weeks ☐

b) Two to three weeks ☐

c) Four to eight weeks ☐

d) More than eight weeks ☐

e) Not Documented ☐

1.2 Admitting Specialty

1.2.1 Which specialty was responsible for the patient's care 24 hours after admission?

a) Acute Medicine ☐
b) Gastroenterology ☐
c) Colorectal Surgery ☐
d) Geriatrics ☐
e) General Medicine ☐
f) General Surgery ☐
g) Other (Please specify below) ☐

1.2.2 Was the patient transferred to a specialist gastroenterology ward?

a) Medical ☐ b) Joint ☐ c) Surgical ☐ d) Not transferred ☐

1.2.3 What date was the patient first seen by a Consultant Gastroenterologist? ☐☐/☐☐/☐☐ Not Seen ☐ Not required ☐

1.2.4 What date was the patient first seen by a Consultant Colorectal Surgeon? ☐☐/☐☐/☐☐ Not Seen ☐ Not required ☐

1.2.5 Was the patient visited by an IBD Nurse/GI Nurse specialist during admission? Yes ☐ No ☐

1.3 Discharge/Mortality

1.3.1 Did the patient die during admission? Yes ☐ No ☐

If yes

i. Date of death ☐☐/☐☐/☐☐

ii. Primary cause of death: _____

iii. Please use this space to enter any further details of death if required:
(max of 300 characters)

If no

1.3.2 Date of discharge ☐☐/☐☐/☐☐

1.4 Co-morbidity

1.4.1 Does the patient have any important co-morbid diseases? (please select all that apply)

a) Heart Disease ☐
b) Peripheral Vascular Disease ☐
c) Respiratory disease ☐
d) Renal Failure ☐
e) Diabetes ☐
f) Stroke ☐
g) Liver Disease ☐
h) Active Cancer ☐
i) None of the above ☐
h) Other (Please specify below) ☐

1.5 Medication on Admission

1.5.1 What treatment was the patient taking for Crohn's Disease on admission? (select all that apply**)**

a) 5-ASA ☐
b) Azathioprine ☐
c) Mercaptopurine ☐
d) Methotrexate ☐
e) Antibiotics ☐
f) Corticosteroids ☐
g) Dietary Therapy ☐
h) anti-TNF-α ☐
i) None ☐
j) Other (e.g. trial medicine, please specify below) ☐

1.6 Smoking Status

1.6.1 What is the smoking status of the patient?

a) Current smoker ☐
b) Lifelong non-smoker/ ex-smoker ☐
c) Not documented ☐

1.7 Patient History

1.7.1 Did the patient have a pre-admission diagnosis of Crohn's Disease? Yes ☐ No ☐

1.7.2 What is the extent of the disease?

a) Small bowel only ☐
b) Colonic ☐
c) Ileo-colonic ☐
d) Perianal ☐
e) Not known ☐
f) Other (please specify) ☐

1.7.3 Has the patient had previous admissions to your hospital with Crohn's Disease in the last two years? Yes ☐ No ☐

i. If yes, how many times in the two years prior to this admission? ☐☐

Section 2: Assessing the Severity of Crohn's Disease

2.1 Severity of Disease

2.1.1 Was diarrhoea recorded as a symptom upon admission? Yes ☐ No ☐ Patient has Stoma ☐

2.1.2 How many stools were passed in the first full day following admission? ☐☐ Not documented ☐

2.1.3 What was the highest recorded pulse rate during the first full day following admission? ☐☐☐ bpm

Not documented ☐

2.1.4 What was the highest temperature recorded during the first full day following admission? ☐☐.☐ °C

Not documented ☐

i Did the patient have a fever (temperature >37.5°C on more than one occasion in 24 hours) within the first 7 days of admission Yes ☐ No ☐ Not documented ☐

2.1.5 Following admission, what was the initial result for:

i. CRP ☐☐☐ Mg/L Less than 5 ☐ Not documented ☐

ii. Albumin ☐☐☐ g/L Not documented ☐

iii. Hb ☐☐.☐ g/dL Not documented ☐

2.2 Exclusion of Infection

2.2.1 Was a stool sample sent for Standard Stool Culture?

Yes ☐ No ☐

i. Date sent: ☐☐/☐☐/☐☐

ii. Was it positive? Yes ☐ No ☐

iii. Date of positive sample ☐☐/☐☐/☐☐

2.2.2 Was a stool sample sent for CDT?

Yes ☐ No ☐

i. Date sent: ☐☐/☐☐/☐☐

ii. Was it positive? Yes ☐ No ☐

iii. Date of positive sample ☐☐/☐☐/☐☐

2.3 Documentation of Sepsis

2.3.1 Were antibiotics given? Yes ☐ No ☐ Not documented ☐

2.3.2 Were blood cultures taken? Yes ☐ No ☐

i. Were the cultures: Positive ☐ Negative ☐

2.4 Imaging

2.4.1 Was an Ultrasound Scan performed? Yes ☐ No ☐

i. Date requested ☐☐/☐☐/☐☐

ii. Date performed ☐☐/☐☐/☐☐

2.4.2 Was a CT Scan of the abdomen performed? Yes ☐ No ☐

i. Date requested ☐☐/☐☐/☐☐

ii. Date performed ☐☐/☐☐/☐☐

2.4.3 Was an MRI performed? Yes ☐ No ☐

i. Date requested ☐☐/☐☐/☐☐

ii. Date performed ☐☐/☐☐/☐☐

2.4.4 Was an abscess found during imaging? Yes ☐ No ☐

i. Which type of drainage was undertaken: a) Surgical ☐ b) Radiological ☐ c) Not drained ☐

2.5 Weight Assessment and Dietetic Support

2.5.1 Was the patient's weight measured during admission? Yes ☐ No ☐

i. Was BMI measured? Yes ☐ No ☐

2.5.2 Did a dietitian visit the patient? Yes ☐ No ☐

2.5.3 Was dietary treatment initiated? Yes ☐ No ☐

i. Was exclusive liquid enteral nutrition therapy prescribed? Yes ☐ No ☐

2.5.4 Was parenteral nutrition given? Yes ☐ No ☐

Section 3: Medical Interventions

3.1 Use of anti-thrombotic therapy

3.1.1 Was the patient given prophylactic heparin? Yes ☐ No ☐

3.2 Steroid Therapy

3.2.1 Were IV corticosteroids administered during this admission?

i. Yes ☐

ii. No, but oral corticosteroids steroids were administered ☐

iii. No, neither IV or oral corticosteroids were administered ☐

3.2.2 Which of the following steroids were prescribed?

a) Prednisolone ☐

b) Budesonide ☐

c) Hydrocortisone ☐

i. Initial Dose ☐☐☐ Mg/day

3.2.3 Date therapy initiated or increased: ☐☐/☐☐/☐☐

3.3 Treatment with anti-TNF- α therapy during admission

3.3.1 Was anti-TNF-α therapy given during this admission? Yes ☐ No ☐

i. If yes, what date was the anti-TNF-α therapy started during this admission? ☐☐/☐☐/☐☐

3.3.2 Is there evidence of a chest x-ray performed in the three months prior to the initiation of anti-TNF-α therapy? Yes ☐ No ☐

i. If yes, what was the date of the chest x-ray? ☐☐/☐☐/☐☐

3.4 Clinical Trials

3.4.1 Was the patient entered into a Clinical Trial on this admission? Yes ☐ No ☐

i. if yes, please give further details of the trial here:

ii. Clinical Trial Start Date ☐☐/☐☐/☐☐

Section 4: Surgical Interventions

4.1 Surgical Therapy

4.1.1 Did the patient have surgery on this admission? Yes ☐ No ☐

4.1.2 What date was the decision to operate made? ☐☐/☐☐/☐☐ Not known ☐

4.1.3 Which Surgeon made the decision to operate?

a) Consultant Colorectal Surgeon ☐
b) Consultant GI Surgeon (non-colorectal) ☐
c) Consultant General Surgeon ☐
d) Other Consultant Surgeon ☐
e) Specialist Registrar ☐
f) Other (please specify) ☐

4.1.4 Was the patient seen by a stoma nurse during this admission? Yes ☐ No ☐

i If yes, what date was the patient first seen by a stoma nurse? ☐☐/☐☐/☐☐

4.1.5 What was the date of surgery? ☐☐/☐☐/☐☐

4.1.6 What was the grade of the operating surgeon?

a) Consultant Colorectal Surgeon ☐
b) Consultant GI Surgeon (non-colorectal) ☐
c) Consultant General Surgeon ☐
d) Other Consultant Surgeon ☐
e) Specialist Registrar ☐
f) Associate Specialist ☐
g) Other (please specify) ☐

4.1.7 What was the grade of the assisting surgeon?

a) Consultant Colorectal Surgeon ☐
b) Consultant GI Surgeon (non-colorectal) ☐
c) Consultant General Surgeon ☐
d) Other Consultant Surgeon ☐
e) Specialist Registrar ☐
f) Associate Specialist ☐
g) Other (please specify) ☐

4.1.8 What were the indications for surgery? (please select all that apply)

a) Failure of Medical Therapy ☐	e) Stoma complications ☐	i) Dysplasia ☐
b) Obstruction ☐	f) Perineal disease ☐	j) Cancer ☐
c) Intra-abdominal Abscess ☐	g) Toxic megacolon ☐	k) Perforation ☐
d) Intra-abdominal fistula ☐	h) Bleeding ☐	l) Other (please specify below) ☐

4.1.9 Type of intervention: (please select all that apply)

a) Segmental/Extended Colectomy ☐	f) Resection of Intra-abdominal Fistula ☐	k) Formation of ileostomy or colostomy ☐
b) Subtotal Colectomy ☐	g) Proctectomy ☐	l) Revision of Stoma ☐
c) Protocolectomy ☐	h) Completion Proctectomy ☐	m) Perineal procedure ☐
d) Stricturoplasty ☐	i) Ileocolonic Resection ☐	n) Other intervention (please specify below) ☐
e) Ileal/Jejunal Resection ☐	j) Drainage of abscess ☐	

i. Was the surgery done laparoscopically/ laparoscopically-assisted? Yes ☐ No ☐

4.1.10 Was the ASA status recorded pre-operatively? Yes ☐ No ☐

If yes, what was the status? 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A ☐

4.2 Surgical Complications

4.2.1 Did the patient suffer from any of these complications following their surgery? (select all that apply)

a) Wound Infection ☐	f) Stoma complications ☐	k) Respiratory ☐
b) Rectal stump complications ☐	g) Deep vein thrombosis (DVT) ☐	l) Clostridium difficile-associated diarrhoea (CDAD) ☐
c) Intra-abdominal bleeding ☐	h) Pulmonary embolus (PE) ☐	m) Other (please specify below) ☐
d) Intra-abdominal sepsis ☐	i) Ileus requiring TPN ☐	
e) Anastomotic leakage ☐	j) Cardiac ☐	n) No complications ☐

4.3 Post-Operative Prophylactic Therapy

4.3.1

Was the patient prescribed any of the following drugs on discharge? (please select all that apply)

a) Azathioprine ☐	b) Mercaptopurine ☐	c) Metronidazole ☐
d) 5-ASA ☐	e) Methotrexate ☐	f) None ☐
g) Other (please specify) ☐		

Section 5: Discharge Arrangements

5.1 Discharge Arrangements

5.1.1 Was the patient taking oral steroids on discharge? Yes ☐ No ☐ N/A ☐

5.1.2 Was a steroid reduction programme stated on discharge? Yes ☐ No ☐ N/A ☐

5.1.3 Were bone protection agents prescribed? Yes ☐ No ☐

Section 6: Outpatient Visits

***For this section we are interested in data recorded at the last documented OPD visit for Crohn's Disease prior to admission.**

If the last visit initiated the admission being audited in the previous sections, ignore that visit. Instead, use the details from the most recent OPD visit for review of Crohn's Disease that did not directly result in an admission.

If the patient only had one outpatient visit in the last 12 months for review of their Crohn's Disease and that visit initiated admission, ignore that visit and do not answer the questions in relation to Outpatient Visit Details (Q's 6.2.1 to 6.6.7)

6.1 Patient History

6.1.1 Has the patient had previous outpatient visits for Crohn's Disease at this hospital in the last 12 months? Yes ☐ No ☐

If no you do not need to answer any further questions in this section

6.1.2 How many times was the patient reviewed for their Crohn's Disease in an outpatient's clinic in the 12 months prior to the start date of this admission? ☐☐

6.1.3 Approximately how many times was the patient seen by the following staff in the 12 months prior to the start date of this admission? (If the patient was seen by more than one of the following staff in a single clinic visit please count each staff member individually)

i. Consultant ☐☐ **ii.** IBD Nurse Specialist ☐☐ **iii.** Specialist Registrar ☐☐

iv. F2 **(**SHO) ☐☐

6.1.4 What was the date of the last visit at the Outpatient Department prior to admission? ☐☐/☐☐/☐☐

(If the last visit was the one which initiated the inpatient admission being audited in sections 1 to 5 ignore it and use the previous one)

i. If this was the only Outpatient Department visit for review of Crohn's Disease during the past 12 months did it directly initiate the admission being audited in the previous sections 1 to 5? Yes ☐ No ☐

*** If the answer to 6.1.4i is Yes then you do not need to answer any of the remaining questions from 6.2.1 onwards**

Outpatient Visit Details

6.2 Assessment of Crohn's Activity

6.2.1 Number of liquid stools per day: ☐☐ Not documented ☐

6.2.2 General well being:

- Well ☐
- Mild symptoms ☐
- Moderate symptoms ☐
- Severe symptoms ☐
- Not documented ☐

6.2.3 Abdominal Pain:

- None ☐
- Present ☐
- Not documented ☐

6.2.4 Abdominal Mass

- None ☐
- Present ☐
- Not documented ☐

6.2.5 Did the patient report any of the following complications at this clinical visit?

Mouth ulcers	Yes ☐	No ☐	Not Documented ☐
Arthralgia	Yes ☐	No ☐	Not Documented ☐
Pyoderma Gangrenosum	Yes ☐	No ☐	Not Documented ☐
Anal fissure	Yes ☐	No ☐	Not Documented ☐
Fistula	Yes ☐	No ☐	Not Documented ☐
Erythaema Nodosum	Yes ☐	No ☐	Not Documented ☐
Abscess	Yes ☐	No ☐	Not Documented ☐
Iritis	Yes ☐	No ☐	Not Documented ☐
Other ☐	Please specify:		

6.2.6 What were the results for the following tests?

i. CRP ☐☐☐ Mg/L Less than 5 ☐ Not documented ☐

ii. Albumin ☐☐☐ g/L Not documented ☐

iii. Hb ☐☐.☐ g/dL Not documented ☐

6.2.7 Was the patient weighed during this clinic visit? Yes ☐ No ☐

i. Was there evidence of unintentional weight loss of more than 3kgs prior to this clinic visit? Yes ☐ No ☐ Not documented ☐

6.3 Smoking Status

6.3.1 What was the smoking status of the patient during this clinic visit?

a) Current smoker ☐ c) Not documented ☐

b) Lifelong non-smoker/ex-smoker ☐

6.4 Monitoring of immunosuppressive therapy

6.4.1 Was the patient taking any of these drugs in the 12 months prior to the start date of this admission? (please select all that apply)

Azathioprine ☐ Mercaptopurine ☐ Methotrexate ☐ None of these ☐

6.4.2 Was the patient's white blood cell (WBC) count routinely measured? Yes ☐ No ☐

6.4.3 How often was WBC monitoring performed?

At least once a month ☐ Every 2-3 months ☐ Not documented ☐ Other ☐

6.4.4 Did the patient's WBC fall below $3x10^9$ at any time during the 12 months prior to the start date of this admission?

Yes ☐ No ☐ Not known ☐

6.4.5 If the white blood cell count was less than $3.0x10^9$ what action was taken?

Reduced dose ☐ Stopped drug ☐ No action taken ☐

6.4.6 What was the outcome of the reduced white blood cell count?

No sequelae (resolved) ☐ Treatment required (e.g. prophylactic antibiotics) ☐ Admission ☐

6.5 Use of Corticosteroids

6.5.1 Was the patient taking oral corticosteroids for their Crohn's Disease in the 12 months prior to the start date of this admission? Yes ☐ No ☐

If yes

6.5.2 Was there any point at which the patient was taking oral corticosteroids continuously for more than three months? Yes ☐ No ☐

6.5.3 Were bone protection agents prescribed alongside corticosteroids? Yes ☐ No ☐

6.5.4 Was bone densitometry measured within 12 months of initiation of the corticosteroid therapy? Yes ☐ No ☐

6.6 Use of anti-TNF-α therapy

6.6.1 Did the patient receive anti-TNF-α therapy in the 12 months prior to admission? Yes ☐ No ☐

If yes

6.6.2 Was the anti-TNF-α therapy initiated (given for the very first time) at any point in the 12 months prior to the start date of this admission? Yes ☐ No ☐

6.6.3 Did the patient have severely active Crohn's Disease at the time anti-TNF-α therapy was initiated? Yes ☐ No ☐

6.6.4 **What was the CRP prior to the first anti-TNF-α infusion on record?** ☐☐☐ mg/L

Not documented ☐

6.6.5 **Was the patient on immunosuppressive therapy at this time?** Yes ☐ No ☐

i If no, is there any evidence that the patient was intolerant of these immunosuppressive therapies? Yes ☐ No ☐

6.6.6 **Was fistulating disease the primary reason for the decision to initiate anti-TNF-α therapy?** Yes ☐ No ☐

6.6.7 **Did the patient have a chest X-ray to exclude TB in the three months prior to initiation of anti-TNF-α therapy?** Yes ☐ No ☐

Appendix 3

UK IBD Audit 2nd Round (2008) National Report – List of IBD Standards

The following standards used when developing the datasets for the 2nd round of the UK IBD Audit were either based upon the British Society of Gastroenterology document: Guidelines for the management of inflammatory bowel disease in adults[1] or agreed through consensus by the UK IBD Audit Steering Group for areas not covered by that document.

The numbers next to each standard relate to the corresponding question from the UK IBD Audit 2nd round 2008 datasets (Organisation & Structure, Ulcerative Colitis inpatient, Crohn's Disease inpatient & outpatient) as presented in sections 4 to 7 of the full report and shown in full as appendix 2.

The UK IBD Audit Steering Group strongly endorses the National Service Standards for the healthcare of people who have Inflammatory Bowel Disease (IBD) that were published in February 2009 (http://www.ibdstandards.org.uk). Whilst the UK IBD Audit 2nd round did not directly measure against these new standards the list below does agree directly with them in every area other than for:

- 3.4 & 3.5 where our standard states that there should be at least 1 IBD specialist nurse with at least 5 sessions dedicated to IBD. The new IBD National Service Standards state that: *the IBD team should have a minimum of 1.5 WTE Clinical Nurse Specialists with an identified role and competency in IBD.*
- 4.3 & 4.4 where our standard states that there should be at least 1 stoma-care nurse specialist with at least 5 sessions dedicated to stoma care. The new IBD National Service Standards state that: *the IBD team should have a minimum of 1.5 WTE Clinical Nurse Specialists with an identified role and competency in stoma therapy and ileo-anal pouch surgery.*

Organisation & Structure of IBD services

General Hospital Demographics

Standard: Hospitals where surgery is performed for IBD should have ITU beds with 24 hr care by anaesthetists/intensivists on-site (UK IBD Audit Steering Group).

Inpatient Activity

Standard:
2.3 Patients undergoing surgery for ulcerative colitis should have the opportunity to have ileo-anal pouch surgery ([1]BSG guidelines) either locally, if available, or at a regional centre.

UK IBD Audit Report 2nd Round (2008) List of IBD Standards

Gastroenterology Services

Standards:
3.1 Specialty triage of emergency admitted IBD patients to appropriate medical or surgical gastroenterology (UK IBD Audit Steering Group).
3.1 No more than 3 patients per lavatory (UK IBD Audit Steering Group).
3.2 At least 2 WTE Medical Gastroenterologists (UK IBD Audit Steering Group).
3.4 & 3.5 At least 1 IBD specialist nurse with at least 5 sessions dedicated to IBD (UK IBD Audit Steering Group).

Colorectal Services

Standards:
4.1 At least 2 WTE Colorectal surgeons (UK IBD Audit Steering Group).
4.3 & 4.4 At least 1 stoma-care nurse specialist with at least 5 sessions dedicated to stoma care (UK IBD Audit Steering Group).

Multi-Disciplinary Working

Standards:
5.1 Sites should have a searchable data-base to allow adequate audit (UK IBD Audit Steering Group).
5.2 A weekly multi-disciplinary meeting should take place between gastroenterologists, colorectal surgeons and radiologists (UK IBD Audit Steering Group). There should be regular histopathology conferences (at least 1 per month) (UK IBD Audit Steering Group).
5.3 & 5.4 Each hospital should have a radiologist and pathologist with a special interest in gastroenterology (UK IBD Audit Steering Group).

Dietetics and Nutritional Services

Standards:
6.1-6.2 Each site should have a multidisciplinary nutrition team (UK IBD Audit Steering Group). This team should conduct ward rounds at least twice a week (UK IBD Audit Steering Group).
6.3 At least 5 dietetic sessions per week should be dedicated to gastroenterological diseases (includes inpatients and outpatients) (UK IBD Audit Steering Group).

Outpatient Services

Standards:
7.1 – 7.3 A clear process for telephone access for ill patients should be established that allows review within one week. Written information for patients with IBD should be readily available in clinic areas (BSG guidelines).
7.4 Joint or parallel clinics should exist to discuss and refer patients between medical and surgical teams (UK IBD Audit Steering Group).

Patient Information

Standard:
8.1 Written information on IBD should be provided to each patient with IBD (BSG Guidelines).

Monitoring of established immunosuppresive therapy

Standard:
9.1 Should be a written policy for the mechanism of monitoring immunosuppressive therapy ([2]National Patient Safety Agency)

IBD Support Services

Standard:
10.1 There should be regular (usually 1 or 2 per year) transition clinics involving paediatricians and adult gastroenterologists for hand over of patients to adult services (UK IBD Audit Steering Group). These can be done on a regional basis (UK IBD Audit Steering Group).

Management of Ulcerative Colitis

Standard:
11.1 Written Trust guidelines should exist for the management of acute or severe colitis (UK IBD Audit Steering Group).

Interactions between your hospital and it's IBD patients.

Standard:
12.1 There should be regular meetings (at least once a year and usually on a regional basis) between groups of patients with IBD (and their relatives or carers) and hospital staff, this should involve medical, surgical and nursing staff (UK IBD Audit Steering Group).

Ulcerative Colitis (inpatient)

Admission

Standards:
1.1.5 Patients should be transferred to the care of a medical gastroenterologist or colorectal surgeon within 24 hours of admission (UK IBD Audit Steering Group).
1.1.6 Patients should be seen by a consultant gastroenterologist or colorectal surgeon within 3 days of admission (UK IBD Audit Steering Group).
1.1.8 Patients should be seen by an IBD specialist nurse during admission (UK IBD Audit Steering Group).

1.1.9 Patients should be transferred to a specialist gastroenterology ward (UK IBD Audit Steering Group).

Assessment: Severity of Disease

Standards:
2.2.1 Patients should have stool frequency documented in first 24 hours of admission (BSG guidelines).
2.2.2 & 2.2.3 Pulse rate and temperature to be taken at least 4 times in first 24 hours of admission. (BSG guidelines)
2.2.4 Patients should have haemoglobin, albumin and CRP (or ESR) performed (BSG guidelines).
2.2.5 & 2.2.6 Patients with diarrhoea should have a standard stool culture and CDT performed (BSG guidelines) within 48 hours of admission (UK IBD Audit Steering Group).

Assessment: Endoscopic Assessment

Standards:
2.3.1 New cases of suspected ulcerative colitis admitted to hospital should have endoscopic sigmoidoscopy confirmation within 3 days of admission (UK IBD Audit Steering Group).
2.3.2 New cases of ulcerative colitis admitted to hospital should have biopsies taken for histology and these should be reported within 5 days (UK IBD Audit Steering Group).

Monitoring of Colitis – Post-Admission: General information

Standards:
3.1.1 & 3.1.2 Pulse rate and temperature monitored at least 4 times a day (BSG guidelines).
3.1.3 Stool frequency should be monitored daily (BSG guidelines).
3.1.4 ESR, or CRP should be monitored every 24–48 hours in severely active ulcerative colitis (BSG guidelines).

Monitoring of Colitis – Post-Admission: Radiology

Standards:
3.2.1 Patients should have a plain abdominal X-ray (BSG guidelines) with 24 hours of admission (UK IBD Audit Steering Group).
3.2.2 If toxic megacolon is present the abdominal X-ray should be repeated the next day if emergency surgery is not undertaken (BSG guidelines).

Medical Intervention: Steroid therapy

Standards:
4.2.1 – 4.2.3 Appropriate intravenous steroid therapy (400 mg hydrocortisone or 60mg methylprednisolone) (BSG guidelines) should be initiated within 24 hours of admission (UK IBD Audit Steering Group) in a suspected severe attack of ulcerative colitis.
4.1.4 (together with 3.1.9) If the attack of colitis is not settling within 72 hours of appropriate steroid therapy the risk of colectomy is high. If there is no response to appropriate corticosteroids within 3 days, rescue therapeutic options need to be discussed with the patient (BSG guidelines)(either surgery, ciclosporin or anti-TNFα therapy). A consultant colorectal surgeon should discuss the surgical options with the patient (BSG guidelines).

Medical Intervention: Initiating Ciclosporin Therapy

Standards:
4.4.1 Creatinine should be measured (BSG guidelines) within the 48 hours (UK IBD Audit Steering Group) prior to initiation of ciclosporin .
4.4.2 and 4.4.3 Magnesium and cholesterol should be measured (BSG guidelines) within the 48 hours (UK IBD Audit Steering Group) prior to initiation of intravenous ciclosporin.

Medical Intervention: Monitoring Ciclosporin Therapy

Standards:
4.5.1 Ciclosporin levels should be checked daily after 3 days of IV therapy (UK IBD Audit Steering Group).

Surgical Interventions

Standards:
5.1.2 Consultant colorectal surgeons should be involved with the discussion with the patient regarding the decision to operate (BSG guidelines).
5.1.4 Patients having resectional surgery for Ulcerative Colitis should see a stoma nurse prior to the operation (BSG guidelines)
5.1.5 and 5.1.6 Operations should be performed or assisted by a consultant colorectal surgeon (UK IBD Audit Steering Group).
5.1.9 ASA status should be recorded pre-operatively (UK IBD Audit Steering Group).
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Discharge Arrangements

Standards:
6.1.2 Patients discharged on oral steroids should have a steroid reduction programme stated on discharge (UK IBD Audit Steering Group.
6.1.3 Patients on oral steroids should be co-prescribed bone protection agents (such as calcium and vitamin D or bisphosphonates (BSG guidelines).

Crohn's Disease (inpatient)

Admitting Speciality

Standards:
1.2.1 Patients admitted with Crohn's Disease should be under the care of medical gastroenterologists or colorectal surgeon within 24 hours of admission (UK IBD Audit Steering Group).
1.2.2 Patients should be transferred to a specialist gastroenterology ward (UK IBD Audit Steering Group).
1.2.3 and 1.2.4. All patients should be seen by a consultant gastroenterologist or colorectal surgeon within 3 days of admission (UK IBD Audit Steering Group).
1.2.5 All patients should be seen by an IBD specialist nurse during admission (UK IBD Audit Steering Group).

Smoking Status

Standard:
1.6.1 Smoking status should be documented (BSG guidelines) and smoking cessation support should be offered.

Assessment: Severity of Disease

Standards:
2.1.1 Patients should have stool frequency documented in the first 24 hours following admission (UK IBD Audit Steering Group).
2.1.5 Patients should have haemoglobin, albumin and CRP (or ESR) performed in the first 24 hours following admission (UK IBD Audit Steering Group).

Assessment: Exclusion of Infection

Standards:
2.2.1 & 2.2.2 Patients with diarrhoea should have a standard stool culture and CDT performed within 48 hours of admission (UK IBD Audit Steering Group).

Assessment: Documentation of Sepsis

Standards:
2.3.2 Patients with fever (>37.5° C on two occasions) should have blood cultures performed (UK IBD Audit Steering Group).

Assessment: Imaging

Standards:
2.4 For suspected abdominal sepsis, imaging should be performed within 48 hours of request and reported within 24 hours of being done (UK IBD Audit Steering Group).

Assessment: Weight Assessment and Dietetic Support

Standards:
2.5.1 Patients should be weighed (BSG guidelines) and BMI calculated (UK IBD Audit Steering Group).
2.5.2 Non-elective admissions should be seen by a dietician (UK IBD Audit Steering Group).
2.5.3 & 2.5.4 Nutritional support should be provided for malnourished patients (BSG guidelines)

Assessment: Use of anti-thrombotic therapies

Standard:
3.1.1 Patients should have prophylactic heparin (BSG guidelines).

Medical Intervention: Initiation of Treatment with anti-TNF-α during admission

Standard:
3.3.2 All patients given anti-TNF-α for the first time should have a chest X-ray within the previous 3 months ([3]Joint Tuberculosis Committee of the BTS in conjunction with the BSG and British Society of Rheumatology).

Surgical Interventions

Standards:
4.1.3 Consultant colorectal surgeons should be involved with the discussion with the patient regarding the decision to operate (BSG guidelines).
4.1.4 Patients having resectional surgery for Crohn's Disease should see a stoma nurse prior to operation (BSG guidelines).
4.1.6 & 4.1.7 Operation should be performed or assisted by a consultant colorectal surgeon (UK IBD Audit Steering Group).
4.1.10 Patients should have ASA status documented prior to surgery (UK IBD Audit Steering Group).

Post-Operative Prophylactic Therapy

Standard:
4.3.1 Prophylactic therapy to try to reduce recurrence should be discussed with Crohn's Disease patients having resectional surgery with anastomosis (BSG guidelines).

Discharge Arrangements

Standards:
5.1.2 Patients discharged on oral steroids should have a steroid reduction programme stated on discharge (UK IBD Audit Steering Group).
5.1.3 Patients on oral steroids should be co-prescribed bone protection agents (such as calcium and vitamin D or bisphosphonates (BSG guidelines).

Crohn's Disease (outpatient)

Patient History

Standard:
6.1.3 Continuity of care in hospital outpatient visits matters to patients - patients dislike seeing different individuals at each visit (BSG guidelines). Patients should be offered the opportunity to see an IBD specialist (nurse or doctor) at last once a year.

Assessment of Crohn's Activity

Standard:
6.2.1 – 6.2.7i Patients should have general well being, stool frequency, presence and severity of abdominal pain documented (UK IBD Audit Steering Group).
Weight should be documented (BSG guidelines).
CRP (ESR) and albumin should be checked (UK IBD Audit Steering Group).

Smoking Status

Standard:
6.3.1 Smoking status should be documented (BSG guidelines) and smoking cessation support should be offered (UK IBD Audit Steering Group).

Monitoring of immunosuppressive therapy

Standard:
6.4.2 – 6.4.3 Full blood count should be monitored at least 3 monthly for patients on established immunosuppressive therapy (BSG guidelines)

Use of Corticosteroids

Standards:
6.5.2 Prolonged use of steroid therapy is of no benefit in maintaining remission in Crohn's Disease, increases the risk of septic complications and is associated with an increased mortality. Prolonged use of steroids (> 3 months oral prednisolone or budesonide) should be avoided.
6.5.3 Patients on oral steroids should be co-prescribed bone protection agents (BSG guidelines)

Use of anti-TNF-α therapy

Standards:
6.6.1 Patients initiated on infliximab should have severely active Crohn's Disease ([4]NICE guidance).
6.6.5 All patients receiving infliximab therapy should be on concomitant immunosuppressive therapy if tolerated (BSG guidelines).
6.6.7 Infliximab treated patients should have a documented chest X-ray within 3 months prior to first treatment (Joint Tuberculosis Committee of the BTS in conjunction with the BSG and British Societies of Rheumatology).

References

[1]Carter MJ, Lobo AJ, Travis SP; IBD Section, British Society of Gastroenterology. Guidelines for the management of inflammatory bowel disease in adults. Gut. 2004;53 Suppl 5:V1-16

[2]National Patient Safety Agency

[3]Ormerod LP ,Milburn HJ,Gillespie S,et al.BTS recommendations for assessing risk and for managing M tuberculosis infection and disease in patients due to start anti-TNF alpha treatment. Thorax Published Online First:29 July 2005.doi: 10.1136/thx.2005.046797.

[4]NICE

Appendix 4

Hospitals that submitted data to the audit

England

East Midlands

Chesterfield & North Derbyshire Royal Hospital
Derby Hospitals NHS Foundation Trust (Derby City General Hospital & Derbyshire Royal Infirmary combined)
Kettering General Hospital
King's Mill Hospital
Leicester General Hospital
Leicester Royal Infirmary
Lincoln County Hospital
Louth County Hospital
Newark Hospital
Northampton General Hospital
Nottingham University Hospital NHS Trust- (Queen's Medical Centre & Nottingham City Hospital combined)
Pilgrim Hospital

East of England

Addenbrooke's Hospital
Basildon Hospital
Bedford Hospital
Broomfield Hospital
Colchester General Hospital
East & North Hertfordshire NHS Trust (Lister Hospital & Queen Elizabeth II combined)
Hemel Hempstead General Hospital
Hinchingbrooke Hospital
Ipswich Hospital
James Paget Hospital
Luton & Dunstable Hospital
Norfolk & Norwich University Hospital
Peterborough District Hospital
Princess Alexandra Hospital, Harlow
Watford General Hospital
West Suffolk Hospital

London

Barnet General Hospital
Central Middlesex Hospital
Chase Farm Hospital
Chelsea & Westminster Hospital
Ealing Hospital
Epsom General Hospital
Guy's & St Thomas' NHS Foundation Trust (Guy's & St Thomas' Hospitals combined)
Hillingdon Hospital
Homerton University Hospital
Imperial College Healthcare NHS Trust (Charing Cross, Hammersmith & St Mary's Hospitals combined)
King George Hospital
King's College Hospital
Kingston Hospital
Mayday Hospital
North West London Hospitals NHS Trust (St Mark's & Northwick Park Hospitals combined)
Queen Mary's Hospital
Queen's Hospital
Royal Free Hospital
Royal London Hospital
St George's Hospital
St Helier Hospital
University College Hospital
University Hospital, Lewisham
West Middlesex Hospital
Whipps Cross University Hospital
Whittington Hospital

North East

Bishop Auckland General Hospital
Darlington Memorial Hospital
Freeman Hospital
Friarage Hospital
James Cook University Hospital
North Tyneside General Hospital
Queen Elizabeth Hospital, Gateshead
Royal Victoria Infirmary
South Tyneside District Hospital
Sunderland Royal Hospital
University Hospital of Hartlepool
University Hospital of North Durham
University Hospital of North Tees
Wansbeck General Hospital

North West

Arrowe Park Hospital
Blackpool Victoria Hospital
Countess of Chester Hospital
Cumberland Infirmary
Fairfield General Hospital
Furness General Hospital

UK IBD Audit Report 2nd Round (2008) Hospitals that Submitted Data

Lancashire Teaching Hospital NHS Foundation Trust - (Chorley & South Ribble Hospital and Royal Preston Hospital combined)
Macclesfield District General Hospital
Manchester Royal Infirmary
North Manchester General Hospital
Rochdale Infirmary
Royal Albert Edward Infirmary
Royal Blackburn Hospital
Royal Bolton Hospital
Royal Liverpool University Hospital
Royal Oldham Hospital
Salford Royal Hospital
Southport and Formby District General Hospital
Stepping Hill Hospital
Tameside General Hospital
Trafford General Hospital
University Hospital, Aintree
University Hospitals of Morecambe Bay NHS Trust (Royal Lancaster Infirmary & Westmorland General Hospital Combined)
Warrington District General Hospital
West Cumberland Hospital
Whiston Hospital
Wythenshawe Hospital

South Central

Horton General Hospital
John Radcliffe Hospital
Milton Keynes General Hospital
North Hampshire Hospital
Queen Alexandra Hospital
Royal Berkshire Hospital
Royal Hampshire County Hospital
Southampton University Hospitals NHS Trust - (Royal South Hants Hospital & Southampton General Hospital combined)
St Mary's Hospital
Stoke Mandeville Hospital
Wycombe Hospital

South East Coast

Conquest Hospital
Darent Valley Hospital
East Surrey Hospital
Eastbourne District General Hospital
Frimley Park Hospital
Kent & Canterbury Hospital
Maidstone and Tunbridge Wells NHS Trust (Kent & Sussex Hospital and Maidstone Hospital combined)
Medway Maritime Hospital
Queen Elizabeth The Queen Mother Hospital
Royal Surrey County Hospital
St Peter's Hospital
St Richard's Hospital
William Harvey Hospital
Worthing Hospital

South West

Bristol Royal Infirmary
Derriford Hospital
Dorset County Hospital
Gloucestershire Hospitals NHS Foundation Trust (Gloucestershire Royal & Cheltenham General combined)
Great Western Hospital
Musgrove Park Hospital
North Bristol NHS Trust (Frenchay & Southmead Hospitals combined)
North Devon District Hospital
Poole General Hospital
Royal Bournemouth Hospital
Royal Cornwall Hospital
Royal Devon & Exeter Hospital
Royal United Hospital
Salisbury District General Hospital
Torbay Hospital
Yeovil District Hospital

West Midlands

Alexandra Hospital
City Hospital, Birmingham
George Eliot Hospital
Good Hope Hospital
Heart of England NHS Foundation Trust (Birmingham Heartlands Hospital & Solihull Hospital combined)
Hereford County Hospital
Mid Staffordshire NHS Foundation Trust (Staffordshire General Hospital & Cannock Chase Hospital combined)
New Cross Hospital
Queen's Hospital, Burton
Russells Hall Hospital
Sandwell General Hospital
Shrewsbury & Telford Hospital NHS Trust - (Princess Royal Hospital, Telford & Royal Shrewsbury Hospital Combined)
University Hospital Birmingham NHS Foundation Trust (Queen Elizabeth Hospital, Birmingham & Selly Oak Hospital Combined)
University Hospital of North Staffordshire
University Hospitals Coventry & Warwickshire NHS Trust (University Hospital & Hospital of St Cross)
Warwick Hospital
Worcestershire Royal Hospital

UK IBD Audit Report 2nd Round (2008) Hospitals that Submitted Data

Yorkshire and The Humber

Bradford Royal Infirmary
Castle Hill Hospital
Diana, Princess of Wales
Doncaster and Bassetlaw Hospitals (Doncaster Royal Infirmary & Bassetlaw District General Hospital combined)
Harrogate District Hospital
Leeds General Infirmary
Mid Yorkshire Hospitals NHS Trust (Pinderfields General Hospital & Pontefract General Infirmary combined)
Rotherham District General Hospital
Sheffield Teaching Hospitals NHS Foundation Trust - (Northern General Hospital & Royal Hallamshire Hospital Combined)
York Hospital

Islands

Jersey General Hospital

Northern Ireland

Eastern Health and Social Services Board

Belfast City Hospital
Lagan Valley Hospital
Mater Hospital
Ulster Hospital

Northern Health and Social Services Board

Causeway Hospital
United Hospitals Trust (Antrim Hospital & Whiteabbey Hospital Combined)

Southern Health and Social Services Board
Craigavon Area Hospital
Daisy Hill Hospital

Western Health and Social Services Board

Altnagelvin Area Hospital
Erne & Tyrone County Hospitals

Scotland

NHS Ayreshire & Arran
Crosshouse Hospital

NHS Borders

Borders General Hospital

NHS Dumfries & Galloway

Dumfries & Galloway Royal Infirmary

NHS Fife

NHS Fife (Queen Margaret Hospital & Victoria Hospital combined)

NHS Forth Valley

Stirling Royal Infirmary

NHS Grampian
Aberdeen Royal Infirmary

NHS Greater Glasgow & Clyde

Glasgow Royal Infirmary
Inverclyde Royal Hospital
Royal Alexandra Hospital
Stobhill General Hospital
West Glasgow University Hospitals (Gartnavel General & Western Infirmary combined)

NHS Highland

Raigmore Hospital

NHS Lanarkshire

Hairmyres Hospital
Monklands District General Hospital
Wishaw General Hospital

NHS Lothian

St John's Hospital at Howden
Western General Hospital

NHS Tayside

Ninewells Hospital

UK IBD Audit Report 2nd Round (2008) Hospitals that Submitted Data

Wales

Mid & West Wales

Bronglais General Hospital
Morriston Hospital
Neath Port Talbot Hospital
Prince Phillip Hospital
Princess of Wales Hospital

North Wales

Llandudno General Hospital
Wrexham Maelor Hospital
Ysbyty Gwynedd Hospital

South East Wales

Caerphilly & District Miner's Hospital
Llandough Hospital
Nevill Hall Hospital
Prince Charles Hospital
Royal Glamorgan Hospital
Royal Gwent Hospital
University Hospital of Wales, Cardiff

Appendix 5

The UK IBD Audit 2nd Round and the Healthcare Commission 2008/9 Annual Health Check/Core Standards

Key elements of the data collected will be used by the Healthcare Commission in England as part of their screening process to cross check Hospital Trusts' declarations against Core Standards to identify risk as part of the Annual Health Check. The following are the service and clinical criteria that the UK IBD Audit Steering Group recommended that were accepted by the Healthcare Commission.

To be asked in the Audit Section:

- Did your hospital participate in the UK IBD Audit 2008?

Questions for screening data:

Organisation of services

- Do timetabled IBD Team meetings take place and who attends?
- Is there an IBD Clinical Nurse Specialist on site?
- Is there a dedicated gastroenterology ward and do they have a maximum of three beds per toilet in the ward?
- Is there a searchable database of IBD patients on site?
- Is there a hospital nutrition team?
- Is there written information for patients with IBD on whom to contact in the event of a relapse?
- In general, how soon could a relapsed patient expect to be seen in clinic?
- Do patients have access to an IBD specialist by drop-in-clinic, telephone or e-mail?
- Are there any joint or parallel clinics run between Gastroenterologists and Surgeons?
- Are patients provided with written information about IBD?
- Is there a paediatric to adult handover clinic for young patients with IBD?
- Is a registered counsellor available to patients as part of your IBD Service?
- Are there any psychologists attached to the Gastroenterology service?
- Do pathways exist for direct access to psychological support?
- Is there an acute pain management team on site?
- Does the hospital offer open forums or meetings for patients with IBD?
- Are any of the following activities or systems in place to involve patients in giving their views on the development of your IBD services: regular patient surveys, individual patient representatives, patient panel meetings?

Ulcerative Colitis Inpatient care:

- Taking of Stool Samples for Standard Stool Cultures and CDT
- Prophylactic heparin given

Crohn's Disease Inpatient care:

- Patient is weighed on admission and the weight recorded in the notes.
- Prophylactic heparin given
- Taking of Stool Samples for Standard Stool Cultures and CDT

Crohn's Disease Outpatient care

- Established immunosuppressive therapy was monitored by full blood count at least 3 monthly.
- No patients receiving systemic corticosteroid therapy for more than 3 months.