

A. GASTROINTESTINAL THERAPEUTIC ENDOSCOPY STUDY

1. Date of admission		
Date of admission		1,817

2. Admission method		
A. Elective day-case		33
B. Other elective		122
If elective (A or B) then date of decision		99
C. Emergency		1,619
Not answered		44

4. Co-existing medical diagnosis (Answers may be multiple)			
A. None			79
B. Respiratory	COPD		274
	Acute chest infection		456
	Asthma		65
C. Cardiac	Ischaemic heart disease/previous MI/angina		472
	MI within three months of the endoscopy		44
	Valvular heart disease		69
	CCF (at present or in the past)		253
D. Neurological	CVA/TIAs		548
	Dementia		197
	Acute confusion state		127
	Psychiatric disease		61
	Parkinson's disease		58
E. Hepatic/pancreatic			411
F. Alimentary			217
G. Renal failure	Acute		179
	Chronic		122
H. Endocrine	Non-insulin dependent diabetes mellitus		167
	Insulin dependent diabetes mellitus		51
	Hypothyroidism		53
Musculoskeletal			181
Haematological	Bleeding disorder		73
	Immunosuppression		25
Sepsis			163
Other			534
Not answered			42

5. Liver cirrhosis	
Yes	1,509
No	224
Not answered	85
If yes, Childs-Pugh Score	
A	25
B	38
C	152
Not answered	1,603

6. ASA status	
1	29
2	222
3	619
4	661
5	178
Not answered	109

7. Anticipated risk of death within 30 days of the proposed endoscopic procedure	
A. Not expected	134
B. Small but significant risk	316
C. Definite risk	1,056
D. Expected	247
Not answered	65

8. Patient's weight	
Patient's weight	429

9. Patient's blood pressure at the start of the procedure	
Patient's blood pressure at the start of the procedure	1,328

10. Patient's heart rate at the start of the procedure	
Patient's heart rate at the start of the procedure	1,401

11. Pre-procedural investigations		
Pre-procedural investigations		1,752
A. None		6
B. Haemoglobin		1,615
C. White cell count		1,614
D. Platelets		1,600
E. INR		946
F. Serum Na		1,605
G. Serum K		1,594
H. Blood urea		1,587
I. Serum creatinine		1,587
J. Serum albumin		1,397
K. Blood glucose		781
L. Serum amylase		204
M. Total bilirubin		1,276
N. Blood gas analysis	Inspired oxygen	230
	pH	216
	PaCO 2	228
	PaO2	230
O. Chest X-ray		700
P. ECG		694
Q. ECHO cardiography		88
R. Other		303

Procedure

12. Date of procedure		
Date of procedure		1,789

13. Time of start of procedure		
Time of start of procedure		1,235

14. Time of finish of procedure		
Time of finish of procedure		1,071

Upper digestive tract (excluding PEGs)

16. a Oesophagus – Fibreoptic oesophagoscope	
Snare resection of lesion	0
Laser destruction of lesion	10
Cauterisation of lesion (Argon beam)	23
Sclerotherapy of varices	99
Other destruction of lesion	13
Removal of foreign body	5
Balloon dilatation	27
Bougie dilatation	60
Insertion of tubal prosthesis	111
Other	73

16. a Oesophagus – Rigid oesophagoscope	
Snare resection of lesion	0
Laser destruction of lesion	0
Cauterisation of lesion (Argon beam)	0
Sclerotherapy of varices	0
Other destruction of lesion	0
Removal of foreign body	0
Balloon dilatation	0
Bougie dilatation	5
Insertion of tubal prosthesis	1
Other	0

16. b Upper GI tract, stomach to the proximal duodenum, using fibreoptic scope	
Snare resection of lesion	3
Laser destruction of lesion	4
Cauterisation of lesion	40
Sclerotherapy to lesion	113
Other destruction of lesion	8
Insertion of prosthesis	40
Removal of foreign body	0
Endoscopic dilatation of the pylorus	7
Other	69

16.c Remainder of the upper digestive tract - Duodenum	
Removal of lesion	1
Dilatation of lumen	0
Insertion of prosthesis	10
Other	15

16.c Remainder of the upper digestive tract – Jejunum	
Removal of lesion	0
Dilatation of lumen	0
Insertion of prosthesis	8
Other	5

16.c Remainder of the upper digestive tract – Ileum	
Removal of lesion	0
Dilatation of lumen	0
Insertion of prosthesis	0
Other	0

17. PEGs	
Creation of new (first) gastrostomy	675
Creation of a second (subsequent) gastrostomy	14
Replacement of gastrostomy feeding tube	13
Removal of gastrostomy feeding tube	3
Attention to a gastrostomy tube (not requiring removal)	1
Other	4

18. Lower digestive tract - Colonoscope	
Snare resection of lesion	14
Cauterisation of lesion	2
Laser destruction of lesion	0
Cryotherapy	0
Other destruction of lesion	0
Dilatation of lumen	0
Coagulation of blood vessel	0
Removal of foreign body	0
Insertion of tubal prosthesis	6
Other	5

18. Lower digestive tract – Fibre optic sigmoidoscope	
Snare resection of lesion	5
Cauterisation of lesion	2
Laser destruction of lesion	0
Cryotherapy	0
Other destruction of lesion	0
Dilatation of lumen	1
Coagulation of blood vessel	1
Removal of foreign body	0
Insertion of tubal prosthesis	3
Other	2

18.Lower digestive tract – Rigid sigmoidoscope	
Snare resection of lesion	0
Cauterisation of lesion	0
Laser destruction of lesion	0
Cryotherapy	0
Other destruction of lesion	0
Dilatation of lumen	1
Coagulation of blood vessel	1
Removal of foreign body	0
Insertion of tubal prosthesis	3
Other	2

19. ERCP	
Sphincterotomy sphincter of Oddi and insertion of calculus	4
Sphincterotomy sphincter of Oddi and insertion of tubal prosthesis	51
Sphincterotomy of accessory ampulla of Vater	4
Insertion of tubal prosthesis into both hepatic ducts	7
Insertion of tubal prosthesis into bile duct	119
Renewal of tubal prosthesis in bile duct	16
Removal of tubal prosthesis from bile duct	15
Dilatation of bile duct	8
Insertion of prosthesis into pancreatic duct	1
Renewal of prosthesis in pancreatic duct	0
Removal of calculus from pancreatic duct	1
Drainage of lesion of pancreas	0
Dilatation of pancreatic duct	0
Other	7

20. Urgency of the procedure	
A. Elective	250
B. Scheduled	822
C. Urgent	437
D. Emergency	197
Not answered	112

21. Previous endoscopic procedures within the last 2 years	
Previous endoscopic procedures within the last 2 years	1,103

Upper digestive tract endoscopy

22. Conditions diagnosed before endoscopy	
A. Pharyngeal pouch	2
B. Malignant oesophageal stricture	155
C. Benign oesophageal stricture	30
D. Achalasia	3
E. Oesophageal diverticulum	0
F. Gastric ulcer	26
G. Gastric cancer	29
H. Duodenal ulcer	59
I. Pyloric stenosis	8
J. Other	102

22. Conditions diagnosed during endoscopy	
A. Pharyngeal pouch	3
B. Malignant oesophageal stricture	54
C. Benign oesophageal stricture	27
D. Achalasia	1
E. Oesophageal diverticulum	0
F. Gastric ulcer	6
G. Gastric cancer	10
H. Duodenal ulcer	171
I. Pyloric stenosis	8
J. Other	80

PEGs

23. Conditions at the time of the endoscopy		
A. Nutritional failure due to non-malignant disease		300
B. Motor neurone/other degenerative disease		65
C. Neurological disease	Acute	421
	Chronic	100
D. Dementia		138
E. Malignancy	Oropharyngeal cancer	31
	Oesophageal cancer	29
	Gastric cancer	10
	Other	56

Lower digestive tract endoscopy

24.a Previous history of pelvic surgery		
Yes		3
No		57

24.b Patient known to suffer from diverticular disease		
Yes		7
No		53

24.c Previously "difficult" colonoscopy		
Yes		2
No		56

24.d Prior contrast examination		
Yes		13
No		53

24.e Conditions diagnosed before endoscopy		
A. Diverticular disease		7
B. Malignant stricture		14
C. Benign stricture		2
D. Pedunculated polyp(s)		1
E. Flat polyp(s)		0
F. Non-stricturing carcinoma		0
G. Angiodysplasia		0
H. Ulcerative colitis		0
I. Crohn's disease		1
J. Other		8

24.e Conditions diagnosed during endoscopy	
A. Diverticular disease	5
B. Malignant stricture	8
C. Benign stricture	2
D. Pedunculated polyp(s)	14
E. Flat polyp(s)	0
F. Non-stricturing carcinoma	2
G. Angiodysplasia	2
H. Ulcerative colitis	0
I. Crohn's disease	0
J. Other	4

ERCP

25. Conditions diagnosed before endoscopy	
A. Bile duct stone (possible/definite)	59
B. Bacterial cholangitis	40
C. Benign biliary stricture	4
D. Malignant biliary stricture	85
E. Carcinoma of the pancreas	56
F. Acute pancreatitis	6
G. Chronic pancreatitis	2
H. Sclerosing cholangitis	1
I. Choledochal cyst	0
J. Other	5

25. Conditions diagnosed during endoscopy	
A. Bile duct stone (possible/definite)	29
B. Bacterial cholangitis	11
C. Benign biliary stricture	4
D. Malignant biliary stricture	67
E. Carcinoma of the pancreas	36
F. Acute pancreatitis	1
G. Chronic pancreatitis	1
H. Sclerosing cholangitis	0
I. Choledochal cyst	1
J. Other	6

26. Written consent obtained for the procedure	
Yes	979
No	254
Not answered	585

27. Antibiotic prophylaxis for the procedure	
Yes	561
No	636
Not answered	621

Movement of patient through the hospital/endoscopy unit
(Answers may be multiple)

28. Pathway for this referral	
A. Admission following an outpatient consultation	96
B. Direct referral from a general practitioner (open access)	101
C. Admission via A&E	665
D. Tertiary referral from within own hospital	729
E. Transfer from another hospital or general practitioner endoscopy unit	83
F. Self-referral by patient	12
G. Other	100
Not answered	73

29. Tertiary referral speciality	
A. Care of the elderly	329
B. Other medical	349
C. Surgical	132
D. Other	104
Not answered	904

30. Department of hospital immediately before the procedure	
A. A&E department	46
B. Emergency admissions unit	73
C. Medical ward	1,095
D. Surgical ward	286
E. Day case ward	17
F. Out-patient department	3
G. High dependency unit	53
H. Intensive care unit	87
I. Other	112
Not answered	46

31. Location of procedure	
A. Dedicated endoscopy unit/room	1,349
B. Day-case surgery unit	15
C. Operating theatres	161
D. X-ray department	171
E. ICU/HDU	78
F. A&E	3
G. Admission unit or A&E ward	3
H. Other ward	5
I. Other	1
Not answered	32

32. Post procedure location	
A. A dedicated recovery area within the endoscopy unit	1,247
B. A dedicated recovery area within the operating theatres department	144
C. ICU	115
D. HDU	36
E. General ward	163
F. Died during the procedure	5
G. Other	54
Not answered	54

33. If patient went directly to recovery, post recovery location	
A. ICU	30
B. HDU	55
C. Directly to the operating theatre for an operation	7
D. General ward	1,237
E. Died in the recovery area	11
F. Home	13
Not answered	38

Operating endoscopists

34. Specialty of the most senior operating endoscopists	
A. Specialised GI physician	1,279
B. Other physician	86
C. Specialised GI surgeon	278
D. Thoracic surgeon	12
E. Other surgeon	44
F. Radiologist	34
G. General practitioner	7
H. Nurse practitioner	8
G. Other	4
Not answered	66

35. Grade of the most senior operating endoscopist career grades	
A. Consultant	1,312
B. Associate specialist	80
C. Staff grade	70
D. General practitioner	7
E. Nurse practitioner	9
Trainee grades and year of training	
F. Specialist registrar – post CCST	37
G. Specialist registrar – year 3/4	203
H. Specialist registrar – year 1/2	45
I. Senior house officer	2
J. Other trainee	8
Not answered	45

36. Higher diplomas of most senior operating endoscopist (Answers may be multiple)	
A. None	13
B. Full Fellowship/Membership of a Royal Medical College	1,093
C. Part Fellowship/Membership of Royal Medical College	23
D. ENB course A87	1
E. Other	7
Not answered	122

37. Upper digestive tract therapeutic endoscopic procedures performed by senior operator in the last 12 months

<5	8
6-10	13
11-20	65
21-50	159
51-100	177
>100	665

38. PEG procedures performed by senior operator performed in the last 12 months

<5	33
6-10	82
11-20	192
21-50	283
51-100	98
>100	26

39. Lower digestive tract therapeutic endoscopic procedures performed by senior operator in last 12 months

<5	11
6-10	8
11-20	17
21-50	43
51-100	51
>100	104

40. ERCP procedure performed by senior operator in the last 12 months

<5	47
6-10	9
11-20	6
21-50	43
51-100	91
>100	177

41. Senior operating endoscopist attended a formal sedation techniques course

Yes	645
No	723
Not answered	450

42. Availability of consultant supervising operator	
A. In, or came to the operating/endoscopy room during the procedure	92
B. In the operating/endoscopy unit but not directly involved with the case	84
C. Available in the hospital, not present in the operating/endoscopy unit	186
D. Not in the hospital but was available by phone	40
E. Other	4
Not answered	100

Sedation and monitoring

43. Forms of sedation and analgesia used during the procedure (may be multiple)	
A. None	68
B. Local anaesthesia	426
C. Intravenous opiate sedation	314
Drug used	315
Total dose	302
D. Intravenous benzodiazepine sedation	1,237
Drug used	1,406
Total dose	1,372
E. Other intravenous sedation	83
Drug used	55
Total dose	27
Not answered	311

44. Naloxone or Flumazenil	
A. Naloxone	7
B. Flumazenil	158
C. Naloxone and Flumazenil	18
Not answered	1,635

45. Patient monitors used (Answers may be multiple)	
A. Pulse oximetry	1,668
B. ECG	384
C. Automatic non-invasive blood pressure	729
D. Manual non-invasive blood pressure	120
E. Invasive blood pressure	76
F. CVP	147
G. None of the above	16

46. Oxygen administered during the procedure	
Yes	1,584
No	88
Not answered	146

47. Patient monitoring responsibility (Answers may be multiple)	
A. A qualified nurse	1,439
B. The operator	166
C. An anaesthetist	193
D. Another doctor	33
E. A radiographer	0
F. An operating department assistant	10
G. A support worker/health care worker	3
H. Not known	12
Not answered	111

48. Monitoring chart for the procedure in the patient's notes	
Yes	807
No	761
Not answered	250

49. Critical incidents during the procedure (Answers may be multiple)	
A. None	1,439
B. Cardiac arrest	8
C. Respiratory arrest	5
D. Hypoxaemia (SpO2 90% or less)	72
E. Pulmonary aspiration	1
F. Hypotension (systolic less than 100mm Hg)	63
G. Tachycardia (more than 100 beats per minute)	86
H. Local haemorrhage	41
I. Viscus perforation	5
J. Other	24
Not answered	130

Post-endoscopy complications

50. Complications/events in the 30 days after the procedure (Answers may be multiple)	
A. None	340
B. Viscus perforation	41
C. Upper or lower bowel haemorrhage	206
D. Subsequent related operation	67
E. Cardiac problems	241
F. Respiratory problems	603
G. Hepatic failure	127
H. Renal failure	177
I. Sepsis	317
J. Progress of medical condition	521
K. Stroke	57
L. Electrolyte imbalance	64
M. Haematological problems	45
N. Other	105
Not answered	162

51. Date of death	
Date of death	1,818

52. Death reported to the coroner	
Yes	442
No	1,212
Not answered	164

52a. If yes, coroner's post-mortem examination performed	
Yes	131
No	285
Not answered	26

52b. If no, hospital post-mortem performed	
Yes	13
No	901
Not answered	298

53. System(s) implicated in the patient's death (Answers may be multiple)	
A. Cardiovascular	586
B. Respiratory	935
C. Renal	266
D. Hepatic	329
E. Central nervous system	436
F. Not answered	279

54. Cause of death (according to the death certificate)	
1(a)	1,269
1(b)	771
1(c)	201
2	441
Cause of death - no certificate	436

55. Department of the endoscopist hold audit/morbidity/mortality meetings	
Yes	1,063
No	527
Not answered	228

55a. Case considered at an audit/mortality/morbidity meeting	
Yes	359
No	1,001
Not answered	458

55b. If no, case will be considered	
Yes	197
No	791
Not answered	13

56. Problems obtaining the patient notes	
Yes	231
No	1,453
Not answered	134

56a. If yes, number of weeks to get notes	
1- 10	165
11 -20	22
21-30	8
31-40	1
<40	3
Not answered	32

57. Position of person completing questionnaire where not the senior operating endoscopist (multiple answers)	
A. Chair of the department/lead clinician for endoscopy	731
B. Duty consultant	134
C. Non-consultant career grade	55
D. Trainee	36
E. Other	58