9 INDEX CASES

INTRODUCTION

Index cases were chosen with the help of the advisors. The index cases included in the report have been chosen to highlight how emergency work is managed in different specialties. Columns and rows that contain no data have been excluded; for example, if an index procedure was never performed at night, the night column has not been included.

Not all returns to NCEPOD were filled in fully. Where this is the case, it has been necessary to exclude these operations from the analysis. Consequently when comparing tables of index operations it will be seen that the totals sometimes differ. Minor differences can also be seen between tables in this chapter and those in the preceding chapter. In some cases this is due to the procedure being able to be performed by more than one specialty.

There is an apparent anomaly of emergency operations being scheduled or performed electively. Some instances may be due to poor reporting but others may be explained by emergencies arising in patients who have been admitted to hospital for other scheduled or elective reasons. An example would be the development of gastrointestinal haemorrhage arising postoperatively in a patient admitted for elective hip joint replacement.

Cardiothoracic surgery

Mitral valve disease

Table 9.1 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend	Total (%) n=52
	Day (%) n=44	Evening (%) n=1	Night (%) n=4	Day (%) n=3	
Consultant	40 (91)	1 (100)	4 (100)	2 (67)	**47 (90)**
SAS	1 (2)	0 (0)	0 (0)	0 (0)	**1 (2)**
SpR 3 and above	0 (0)	0 (0)	0 (0)	1 (33)	**1 (2)**
Blank	3 (7)	0 (0)	0 (0)	0 (0)	**3 (6)**

Table 9.2 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend	Total (%) n=52
	Day (%) n=44	Evening (%) n=1	Night (%) n=4	Day (%) n=3	
Consultant	36 (82)	1 (100)	4 (100)	3 (100)	**44 (85)**
SAS	2 (5)	0 (0)	0 (0)	0 (0)	**2 (4)**
Other	2 (5)	0 (0)	0 (0)	0 (0)	**2 (4)**
Blank	4 (9)	0 (0)	0 (0)	0 (0)	**4 (8)**

Table 9.3 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend	Total (%) n=52
	Day (%) n=44	Evening (%) n=1	Night (%) n=4	Day (%) n=3	
Emergency	1 (2)	0 (0)	0 (0)	1 (33)	**2 (4)**
Urgent	1 (2)	0 (0)	0 (0)	2 (67)	**3 (6)**
Scheduled	16 (36)	0 (0)	0 (0)	0 (0)	**16 (31)**
Elective	25 (57)	1 (100)	3 (75)	0 (0)	**29 (56)**
Blank	1 (2)	0 (0)	1 (25)	0 (0)	**2 (4)**

In this specialty most work is elective or scheduled. Night surgery is now uncommon. Nevertheless, there will always be a need for cardiothoracic surgeons of sufficient seniority and expertise to be available to deal with postoperative complications and trauma to the thoracic viscera. The returns for this specialty demonstrate that consultant surgeons and anaesthetists are present at the majority of operations.

General surgery

Gastrointestinal haemorrhage

Table 9.4 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=67
	Day (%) n=29	Evening (%) n=16	Night (%) n=5	Day (%) n=10	Evening % n=6	Night (%) n=1	
Consultant	21 (72)	10 (63)	4 (80)	4 (40)	1 (17)	1 (100)	41 (61)
SAS	2 (7)	2 (13)	0 (0)	0 (0)	1 (17)	0 (0)	5 (7)
SpR 1/2	0 (0)	1 (6)	0 (0)	1 (10)	0 (0)	0 (0)	2 (3)
SpR 3 and above	4 (14)	2 (13)	1 (20)	2 (20)	3 (50)	0 (0)	12 (18)
Other	2 (7)	0 (0)	0 (0)	1 (10)	1 (17)	0 (0)	4 (6)
Blank	0 (0)	1 (6)	0 (0)	2 (20)	0 (0)	0 (0)	3 (4)

Table 9.5 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=67
	Day (%) n=29	Evening (%) n=16	Night (%) n=5	Day (%) n=10	Evening (%) n=6	Night (%) n=1	
Consultant	20 (69)	11 (69)	2 (40)	4 (40)	0 (0)	0 (0)	37 (55)
SAS	2 (7)	0 (0)	0 (0)	0 (0)	1 (17)	0 (0)	3 (4)
SpR 3 and above	2 (7)	1 (6)	1 (20)	2 (20)	1 (17)	1 (100)	8 (12)
SpR 1/2	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	1 (1)
SHO	1 (3)	3 (19)	0 (0)	2 (20)	2 (33)	0 (0)	8 (12)
Other	0 (0)	0 (0)	0 (0)	0 (0)	1 (17)	0 (0)	1 (1)
No anaesthetist present	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (3)
Blank	2 (7)	1 (6)	2 (40)	1 (10)	1 (17)	0 (0)	7 (10)

Table 9.6 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=67
	Day (%) n=29	Evening (%) n=16	Night (%) n=5	Day (%) n=10	Evening (%) n=6	Night (%) n=1	
Emergency	9 (31)	10 (63)	3 (60)	6 (60)	3 (50)	1 (100)	32 (48)
Urgent	3 (10)	6 (38)	0 (0)	4 (40)	2 (33)	0 (0)	15 (22)
Scheduled	6 (21)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (9)
Elective	11 (38)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	11 (16)
Blank	0 (0)	0 (0)	2 (40)	0 (0)	1 (17)	0 (0)	3 (4)

A consultant surgeon was present for the majority of these operations, especially during the week, but at the weekend patients were more likely to be operated on by unsupervised junior staff. The trend can also be seen in the grade of anaesthetist present.

Discussion about the management of GI bleeding at the advisors' meetings highlighted the concerns, shared in many specialties, that centralisation of cancer services was leaving increasingly deskilled surgeons in less specialised units to deal with sick and complex cases who may be unfit for transfer.

Continued overleaf

Consultant surgeon:

"The problem with GI bleeding now, from the coal face, is that we are, as surgeons, just getting the residuum of patients that are either not dealt with by the radiologists or the GI physicians with adrenalin injections. So we are getting a very, very high risk group, and they are real crook (sic) patients, and a lot of them die.

*Secondly, if you look at regions that have had a very aggressive policy about centralisation of upper GI cancer services you are starting to see deaths during transfer of unstable patients. There have certainly been two in the ******** region recently, and I think we have to be a little bit careful regarding recommendations about transferring unstable haemorrhaging patients from one place to another."*

Gynaecology

Ectopic pregnancy

Table 9.7 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=128
	Day (%) n=57	Evening (%) n=44	Night (%) n=8	Day (%) n=13	Evening (%) n=4	Night (%) n=2	
Consultant	35 (61)	19 (43)	4 (50)	8 (62)	2 (50)	1 (50)	**69 (54)**
SAS	6 (11)	2 (5)	2 (25)	1 (8)	1 (25)	1 (50)	**13 (10)**
SpR 3 and above	2 (4)	6 (14)	0 (0)	2 (15)	1 (25)	0 (0)	**11 (9)**
SpR 1/2	4 (7)	3 (7)	0 (0)	1 (8)	0 (0)	0 (0)	**8 (6)**
SHO	0 (0)	2 (5)	1 (13)	0 (0)	0 (0)	0 (0)	**3 (2)**
Other	4 (7)	9 (20)	1 (13)	1 (8)	0 (0)	0 (0)	**15 (12)**
Blank	6 (11)	3 (7)	0 (0)	0 (0)	0 (0)	0 (0)	**9 (7)**

Table 9.8 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=128
	Day (%) n=57	Evening (%) n=44	Night (%) n=8	Day (%) n=13	Evening (%) n=4	Night (%) n=2	
Consultant	24 (42)	8 (18)	0 (0)	3 (23)	0 (0)	0 (0)	**35 (27)**
SAS	9 (16)	6 (14)	0 (0)	1 (8)	2 (50)	0 (0)	**18 (14)**
SpR 3 and above	6 (11)	1 (2)	0 (0)	3 (23)	0 (0)	0 (0)	**10 (8)**
SpR 1/2	3 (5)	4 (9)	1 (13)	0 (0)	0 (0)	0 (0)	**8 (6)**
SHO	11 (19)	21 (48)	4 (50)	6 (46)	0 (0)	2 (100)	**44 (34)**
Other	3 (5)	3 (7)	3 (38)	0 (0)	2 (50)	0 (0)	**11 (9)**
Blank	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	**2 (2)**

Table 9.9 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=128
	Day (%) n=57	Evening (%) n=44	Night (%) n=8	Day (%) n=13	Evening (%) n=4	Night (%) n=2	
Emergency	26 (46)	21 (48)	6 (75)	9 (69)	1 (25)	1 (50)	**64 (50)**
Urgent	20 (35)	17 (39)	2 (25)	4 (31)	0 (0)	1 (50)	**44 (34)**
Scheduled	5 (9)	1 (2)	0 (0)	0 (0)	1 (25)	0 (0)	**7 (5)**
Elective	3 (5)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	**5 (4)**
Blank	3 (5)	3 (7)	0 (0)	0 (0)	2 (50)	0 (0)	**8 (6)**

During the day and evening most women with an ectopic pregnancy will have an operation performed or supervised by a consultant. During the night it is more likely that the operation will be performed by a more junior grade of surgeon. At all times it is likely that the anaesthetist will be a junior.

Surgery for an ectopic pregnancy is only required at night if there is evidence that the patient is bleeding. If patients operated on at night are genuinely more acute than those operated on during the day it might be expected that the surgical and anaesthetist staff would be of senior grades.

Incomplete miscarriage

Table 9.10 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=66
	Day (%) n=37	Evening (%) n=18	Night (%) n=1	Day (%) n=4	Evening (%) n=4	Night (%) n=2	
Consultant	11 (30)	1 (6)	0 (0)	0 (0)	2 (50)	0 (0)	**14 (21)**
SAS	3 (8)	1 (6)	0 (0)	0 (0)	0 (0)	1 (50)	**5 (8)**
SpR 3 and above	6 (16)	5 (28)	1 (100)	1 (25)	0 (0)	1 (50)	**14 (21)**
SpR 1/2	10 (27)	2 (11)	0 (0)	1 (25)	1 (25)	0 (0)	**14 (21)**
SHO	3 (8)	2 (11)	0 (0)	2 (50)	1 (25)	0 (0)	**8 (12)**
Other	4 (11)	6 (33)	0 (0)	0 (0)	0 (0)	0 (0)	**10 (15)**
Blank	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (2)**

Table 9.11 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=66
	Day (%) n=37	Evening (%) n=18	Night (%) n=1	Day (%) n=4	Evening (%) n=4	Night (%) n=2	
Consultant	13 (35)	1 (6)	0 (0)	0 (0)	2 (50)	0 (0)	**16 (24)**
SAS	7 (19)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)	**8 (12)**
SpR 3 and above	0 (0)	1 (6)	0 (0)	1 (25)	1 (25)	0 (0)	**3 (5)**
SpR 1/2	0 (0)	2 (11)	0 (0)	1 (25)	0 (0)	0 (0)	**3 (5)**
SHO	11 (30)	13 (72)	1 (100)	1 (25)	1 (25)	1 (50)	**28 (42)**
Other	5 (14)	0 (0)	0 (0)	1 (25)	0 (0)	0 (0)	**6 (9)**
Blank	1 (3)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	**2 (3)**

Table 9.12 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=66
	Day (%) n=37	Evening (%) n=18	Night (%) n=1	Day (%) n=4	Evening (%) n=4	Night (%) n=2	
Emergency	13 (35)	9 (50)	1 (100)	2 (50)	1 (25)	2 (100)	**28 (42)**
Urgent	16 (43)	7 (39)	0 (0)	1 (25)	3 (75)	0 (0)	**27 (41)**
Scheduled	4 (11)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**4 (6)**
Elective	3 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**3 (5)**
Blank	1 (3)	2 (11)	0 (0)	1 (25)	0 (0)	0 (0)	**4 (6)**

Compared to ectopic pregnancy, consultant surgeons are less likely to be present when patients undergo surgery for incomplete miscarriage. Most of these patients are however operated on during the day or evening when senior help is most likely to be available.

Maxillofacial surgery

Facial lacerations

Table 9.13 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday		Weekend		Total (%) n=37
	Day (%) n=16	Evening (%) n=8	Day (%) n= 9	Evening (%) n=4	
Consultant	3 (19)	1 (13)	2 (22)	2 (50)	8 (22)
SAS	3 (19)	0 (0)	2 (22)	2 (50)	7 (19)
SpR 3 and above	0 (0)	1 (13)	0 (0)	0 (0)	1 (3)
SpR 1/2	2 (13)	2 (25)	2 (22)	0 (0)	6 (16)
SHO	6 (38)	4 (50)	3 (33)	0 (0)	13 (35)
Other	2 (13)	0 (0)	0 (0)	0 (0)	2 (5)
Blank	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Table 9.14 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday		Weekend		Total (%) n=37
	Day (%) n=16	Evening (%) n=8	Day (%) n=9	Evening (%) n=4	
Consultant	9 (56)	2 (25)	3 (33)	2 (50)	16 (43)
SAS	1 (6)	1 (13)	0 (0)	0 (0)	2 (5)
SpR 3 and above	1 (6)	1 (13)	3 (33)	2 (50)	7 (19)
SpR1/2	2 (13)	0 (0)	0 (0)	0 (0)	2 (5)
SHO	1 (6)	2 (25)	3 (33)	0 (0)	6 (16)
Other	1 (6)	1 (13)	0 (0)	0 (0)	2 (5)
Blank	1 (6)	1 (13)	0 (0)	0 (0)	2 (5)

Table 9.15 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday		Weekend		Total (%) n=37
	Day (%) n=16	Evening (%) n=8	Day (%) n=9	Evening (%) n=4	
Emergency	4 (25)	8 (100)	6 (67)	3 (75)	21 (57)
Urgent	7 (44)	0 (0)	1 (11)	1 (25)	9 (24)
Scheduled	3 (19)	0 (0)	1 (11)	0 (0)	4 (11)
Elective	1 (6)	0 (0)	0 (0)	0 (0)	1 (3)
Blank	1 (6)	0 (0)	1 (11)	0 (0)	2 (5)

Facial lacerations present as emergencies and unless there is life threatening bleeding, do not require immediate surgery. Our advisors suggest that to reduce the risk of infection they should be operated on within 24 hours. It would appear that this condition is being treated appropriately.

Neurosurgery

Spinal compression

Table 9.16 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend		Total (%) n=51
	Day (%) n=38	Evening (%) n=3	Night (%) n=2	Day (%) n=7	Evening (%) n=1	
Consultant	35 (92)	2 (67)	2 (100)	7 (100)	0 (0)	46 (90)
SpR 3 and above	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)
SpR 1/2	0 (0)	1 (33)	0 (0)	0 (0)	1 (100)	2 (4)
Blank	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)

Table 9.17 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend		Total (%) n=51
	Day (%) n=38	Evening (%) n=3	Night (%) n=2	Day (%) n=7	Evening (%) n=1	
Consultant	30 (79)	2 (67)	2 (100)	5 (71)	0 (0)	39 (76)
SAS	4 (11)	0 (0)	0 (0)	2 (29)	0 (0)	6 (12)
SpR 3 and above	2 (5)	1 (33)	0 (0)	0 (0)	0 (0)	3 (6)
SpR 1/2	1 (3)	0 (0)	0 (0)	0 (0)	1 (100)	2 (4)
SHO	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)
Blank	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Table 9.18 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend		Total (%) n=51
	Day (%) n=38	Evening (%) n=3	Night (%) n=2	Day (%) n=7	Evening (%) n=1	
Emergency	0 (0)	2 (67)	0 (0)	1 (14)	0 (0)	3 (6)
Urgent	1 (3)	0 (0)	0 (0)	0 (0)	1 (100)	2 (4)
Scheduled	6 (16)	0 (0)	0 (0)	3 (43)	0 (0)	9 (18)
Elective	29 (76)	1 (33)	2 (100)	3 (43)	0 (0)	35 (69)
Blank	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)

Almost all patients with spinal compression were operated on by consultant surgeons and anaesthetised by consultant or SAS anaesthetists. It is seldom necessary to operate at night. The two cases shown in the table as being performed at night are probably early start elective cases.

Advisors were concerned about the availability of support services.

Consultant surgeon:

"…….management of acute spinal cord compression, particularly in those centres that do not offer a 24 hour MRI service, and that is quite a big issue because I think it is an issue of patient compromise. It has been recognised that patients with central disc prolapses perhaps do not do so well if they do not get decompressed early. Certainly in our unit, which has two spinal surgeons and is regarded as a sort of regional centre, we do not have 24 hour MRI availability, and that is due to apparently staffing shortages and the costs of actually providing the service. I think CEPOD (sic) could make a comment on that because I think that does prejudice patient care, and I would be interested to know what people think."

Consultant surgeon:

"All right, well as far as morbidity is concerned it is entirely true that if someone has significant spinal cord compression with involvement of bladder function they need surgical decompression as soon as it can be arranged, but you have to investigate them first, and that is why most people would agree that MRI scans should be carried out at night. If you do not have the facility for an MRI scan, and you do not have access to it, you can do a myelogram. I think almost every neurosurgical unit that I am aware of does have facilities for myelography and I think that the staffing implications are a little bit different from MRI, though MRI is quicker, it is a more sensible, less invasive procedure and if one were to make recommendations about this I think 24 hour availability of MRI scan is absolutely essential. Do you disagree?"

Consultant radiologist:

"Through most departments in the country, emergency MRI is not available, but I agree with what you said that it should be. That would be a really good way to go forward. What would happen then is that there would be more reasons to do an emergency MRI scan developing in all the other specialties, but most units will run an emergency MRI centre if they are any good."

This issue has been highlighted in the Facilities chapter. Not only should patients have access to timely surgery but they should also have access to appropriate imaging and other investigations.

Paediatric surgery

Torsion of testis

Table 9.19 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of Surgeon	Weekday			Weekend		Total (%) n=17
	Day (%) n=4	Evening (%) n=7	Night (%) n=3	Day (%) n=1	Night (%) n=2	
Consultant	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	1 (6)
SAS	2 (50)	2 (29)	0 (0)	0 (0)	1 (50)	5 (29)
SpR 3 and above	0 (0)	0 (0)	3 (100)	0 (0)	0 (0)	3 (18)
SpR 1/2	0 (0)	3 (43)	0 (0)	0 (0)	0 (0)	3 (18)
SHO	0 (0)	0 (0)	0 (0)	1 (100)	1 (50)	2 (12)
Other	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)
Blank	1 (25)	1 (14)	0 (0)	0 (0)	0 (0)	2 (12)

Table 9.20 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend		Total (%) n=17
	Day (%) n=4	Evening (%) n=7	Night (%) n=3	Day (%) n=1	Night (%) n=2	
Consultant	1 (25)	0 (0)	0 (0)	0 (0)	1 (50)	2 (12)
SAS	2 (50)	0 (0)	0 (0)	1 (100)	0 (0)	3 (18)
SpR 3 and above	0 (0)	1 (14)	2 (67)	0 (0)	0 (0)	3 (18)
SpR 1/2	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	1 (6)
SHO	1 (25)	5 (71)	1 (33)	0 (0)	1 (50)	8 (47)
Blank	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Table 9.21 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend		Total (%) n=17
	Day (%) n=4	Evening (%) n=7	Night (%) n=3	Day (%) n=1	Night (%) n=2	
Emergency	4 (100)	5 (71)	2 (67)	1 (100)	1 (50)	13 (76)
Urgent	0 (0)	2 (29)	1 (33)	0 (0)	1 (50)	4 (24)
Blank	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

While torsion of the testis is not life threatening it is generally accepted that urgent surgery is required if a potentially viable testis is to be saved. This highlights one of the deficiencies of the NCEPOD classification of cases which we have earlier recommended should be reviewed. This is not a life threatening condition. However, it would be negligent to wait up to 24 hours for an operation on torsion of the testis.

Consultant surgeon:

"Then there is torsion of testis which, of course, does not lead to the death of a child but to the loss of a testis, and we would crash lists for that, routinely, if we were operating. We would stop the next available list and do a torsion when we do not have a CEPOD (sic) list."

Plastic surgery

Tendon damage

Table 9.22 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday		Weekend		Total (%) n=137
	Day (%) n=79	Evening (%) n=23	Day (%) n=29	Evening (%) n=6	
Consultant	26 (33)	2 (9)	2 (7)	0 (0)	**30 (22)**
SAS	6 (8)	0 (0)	4 (14)	0 (0)	**10 (7)**
SpR 3 and above	17 (22)	9 (39)	8 (28)	2 (33)	**36 (26)**
SpR 1/2	15 (19)	7 (30)	6 (21)	2 (33)	**30 (22)**
SHO	4 (5)	1 (4)	1 (3)	0 (0)	**6 (4)**
Other	11 (14)	4 (17)	8 (28)	2 (33)	**25 (18)**
Blank	0 (0)	0 (0)	0 (0)	0 (0)	**0 (0)**

Table 9.23 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday		Weekend		Total (%) n=137
	Day (%) n=79	Evening (%) n=23	Day (%) n=29	Evening (%) n=6	
Consultant	26 (33)	5 (22)	2 (7)	1 (17)	**34 (25)**
SAS	4 (5)	0 (0)	3 (10)	0 (0)	**7 (5)**
SpR 3 and above	4 (5)	3 (13)	6 (21)	1 (17)	**14 (10)**
SpR 1/2	8 (10)	2 (9)	1 (3)	0 (0)	**11 (8)**
SHO	4 (5)	5 (22)	7 (24)	2 (33)	**18 (13)**
Other	4 (5)	4 (17)	3 (10)	1 (17)	**12 (9)**
No anaesthetist present	16 (20)	1 (4)	5 (17)	0 (0)	**22 (16)**
Blank	13 (16)	3 (13)	2 (7)	1 (17)	**19 (14)**

Table 9.24 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday		Weekend		Total (%) n=137
	Day n=79	Evening (%) n=23	Day (%) n=29	Evening (%) n=6	
Emergency	27 (34)	9 (39)	16 (55)	1 (17)	**53 (39)**
Urgent	19 (24)	12 (52)	10 (34)	2 (33)	**43 (31)**
Scheduled	7 (9)	0 (0)	1 (3)	1 (17)	**9 (7)**
Elective	20 (25)	0 (0)	1 (3)	1 (17)	**22 (16)**
Blank	6 (8)	2 (9)	1 (3)	1 (17)	**10 (7)**

Primary tendon repair is an urgent procedure performed primarily by plastic and orthopaedic surgeons. There is no need for the procedure to be performed at night.

Continued overleaf

Consultant surgeon:

"Interestingly, primary tendon repair is not a true emergency in the way it is classified in the questionnaire, but quite a lot of them have been classified as emergencies. Only a few were done in the evening, which is probably about right, so I think they are getting done at the right time, they are not being done in the middle of the night, so that is correct. None at all, I think, from this were done at night."

NCEPOD clinical co-ordinator:

"Would you say extensor tendons were as urgent as flexors?"

Consultant surgeon:

"I would say it is the same, really, I would effectively count them as the same."

Trauma/Orthopaedic surgery

Fractured neck of femur

Table 9.25 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=725
	Day (%) n=485	Evening (%) n=32	Night (%) n=3	Day (%) n=187	Evening (%) n=16	Night (%) n=2	
Consultant	181 (37)	5 (16)	2 (67)	38 (20)	4 (25)	0 (0)	**230 (32)**
SAS	113 (23)	5 (16)	0 (0)	43 (23)	3 (19)	0 (0)	**164 (23)**
SpR 3 and above	70 (14)	8 (25)	0 (0)	43 (23)	6 (38)	0 (0)	**127 (18)**
SpR 1/2	47 (10)	5 (16)	1 (33)	36 (19)	2 (13)	2 (100)	**93 (13)**
SHO	9 (2)	3 (9)	0 (0)	3 (2)	0 (0)	0 (0)	**15 (2)**
Other	37 (8)	5 (16)	0 (0)	15 (8)	0 (0)	0 (0)	**57 (8)**
Blank	28 (6)	1 (3)	0 (0)	9 (5)	1 (6)	0 (0)	**39 (5)**

Table 9.26 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=725
	Day (%) n=485	Evening (%) n=32	Night (%) n=3	Day (%) n=187	Evening (%) n=16	Night (%) n=2	
Consultant	266 (55)	8 (25)	2 (67)	45 (24)	0 (0)	0 (0)	**321 (44)**
SAS	92 (19)	9 (28)	0 (0)	37 (20)	1 (6)	0 (0)	**139 (19)**
SpR 3 and above	23 (5)	1 (3)	0 (0)	21 (11)	3 (19)	0 (0)	**48 (7)**
SpR 1/2	15 (3)	1 (3)	0 (0)	7 (4)	1 (6)	0 (0)	**24 (3)**
SHO	37 (8)	9 (28)	1 (33)	57 (30)	10 (63)	2 (100)	**116 (16)**
Other	35 (7)	3 (9)	0 (0)	15 (8)	1 (6)	0 (0)	**54 (7)**
No anaesthetist present	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (0)**
Blank	16 (3)	1 (3)	0 (0)	5 (3)	0 (0)	0 (0)	**22 (3)**

Table 9.27 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=725
	Day (%) n=485	Evening (%) n=32	Night (%) n=3	Day (%) n=187	Evening (%) n=16	Night (%) n=2	
Emergency	97 (20)	9 (28)	1 (33)	60 (32)	3 (19)	1 (50)	**171 (24)**
Urgent	214 (44)	14 (44)	2 (67)	97 (52)	11 (69)	1 (50)	**339 (47)**
Scheduled	84 (17)	3 (9)	0 (0)	19 (10)	1 (6)	0 (0)	**107 (15)**
Elective	38 (8)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	**39 (5)**
Blank	52 (11)	5 (16)	0 (0)	11 (6)	1 (6)	0 (0)	**69 (10)**

Again, we see a pattern of consultant surgeons and anaesthetists being involved more often when patients are operated on during the week especially between 08:00 and 18:00. Is there any evidence that patients operated on by more junior staff are any less complex? Or do the working patterns reflect the fact that there are only enough consultants to staff lists during the day? There are guidelines suggesting that surgery for fractured neck of femur should be carried out within 24 hours and during standard daytime working hours (including weekends) if the patient's condition permits. [22,23]

Continued overleaf

Forearm fracture

Table 9.28 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday		Weekend		Total (%) n=293
	Day (%) n=149	Evening (%) n=58	Day (%) n=57	Evening (%) n=29	
Consultant	56 (38)	7 (12)	17 (30)	2 (7)	**82 (28)**
SAS	39 (26)	13 (22)	14 (25)	4 (14)	**70 (24)**
SpR 3 and above	17 (11)	11 (19)	10 (18)	10 (34)	**48 (16)**
SpR 1/2	18 (12)	9 (16)	9 (16)	8 (28)	**44 (15)**
SHO	6 (4)	2 (3)	1 (2)	1 (3)	**10 (3)**
Other	10 (7)	13 (22)	5 (9)	3 (10)	**31 (11)**
Blank	3 (2)	3 (5)	1 (2)	1 (3)	**8 (3)**

Table 9.29 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday		Weekend		Total (%) n=293
	Day (%) n=149	Evening (%) n=58	Day (%) n=57	Evening (%) n=29	
Consultant	72 (48)	9 (16)	11 (19)	1 (3)	**93 (32)**
SAS	25 (17)	9 (16)	12 (21)	1 (3)	**47 (16)**
SpR 3 and above	9 (6)	7 (12)	5 (9)	3 (10)	**24 (8)**
SpR 1/2	9 (6)	1 (2)	7 (12)	7 (24)	**24 (8)**
SHO	18 (12)	22 (38)	18 (32)	14 (48)	**72 (25)**
Other	12 (8)	8 (14)	1 (2)	3 (10)	**24 (8)**
Blank	4 (3)	2 (3)	3 (5)	0 (0)	**9 (3)**

Table 9.30 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday		Weekend		Total (%) n=293
	Day (%) n=149	Evening (%) n=58	Day (%) n=57	Evening (%) n=29	
Emergency	28 (19)	26 (45)	26 (46)	14 (48)	**94 (32)**
Urgent	74 (50)	25 (43)	26 (46)	13 (45)	**138 (47)**
Scheduled	29 (19)	2 (3)	4 (7)	1 (3)	**36 (12)**
Elective	2 (1)	0 (0)	0 (0)	0 (0)	**2 (1)**
Blank	16 (11)	5 (9)	1 (2)	1 (3)	**23 (8)**

This procedure is commonly performed during the day or evening. A consultant performs or supervises the procedure in about a third of cases and there is a similar level of involvement of consultant anaesthetists. Children's fractures are often manipulated out of hours. There is no good evidence that it is necessary for these to be done at night unless there is neurovascular compromise. In fact, in the present study no case was performed at night.

Consultant surgeon:

"The forearm fracture analysis, the manipulation of fracture of the forearm in a child is a procedure that rarely needs to be done at night. It is interesting, when we look down the list, how many of these were done as emergencies or out of hours. There might be an argument that those should not really be done out of hours."

NCEPOD clinical co-ordinator:

"Maybe they need better pain management not a trip to theatre. Would that be correct?"

Consultant surgeon:

"Absolutely. There is quite a lot of literature now which suggests, for example, things like supracondylar fractures of the humerus very, very rarely need to be done as emergencies."

SpR surgeon:

"There are certainly a number of papers that have been produced to that effect. You can certainly wait until the following morning, and it is probably best to do them in the morning with the appropriate staff."

Again this raises the problem of case classification. An open fracture needs to be treated more urgently than a closed fracture.

Vascular surgery

Leaking / ruptured abdominal aortic aneurysm

Table 9.31 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend		Total (%) n=65
	Day (%) n=56	Evening (%) n=4	Night (%) n=1	Day (%) n=3	Night (%) n=1	
Consultant	54 (96)	4 (100)	1 (100)	3 (100)	1 (100)	**63 (97)**
Other	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (2)**
Blank	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (2)**

Table 9.32 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend		Total (%) n=65
	Day (%) n=56	Evening (%) n=4	Night (%) n=1	Day (%) n=3	Night (%) n=1	
Consultant	51 (91)	4 (100)	0 (0)	2 (67)	1 (100)	**58 (89)**
SpR 3 and above	1 (2)	0 (0)	1 (100)	1 (33)	0 (0)	**3 (5)**
SHO	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	**2 (3)**
Blank	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	**2 (3)**

Table 9.33 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend		Total (%) n=65
	Day (%) n=56	Evening (%) n=4	Night (%) n=1	Day (%) n=3	Night (%) n=1	
Emergency	11 (20)	4 (100)	1 (100)	3 (100)	1 (100)	**20 (31)**
Urgent	3 (5)	0 (0)	0 (0)	0 (0)	0 (0)	**3 (5)**
Scheduled	9 (16)	0 (0)	0 (0)	0 (0)	0 (0)	**9 (14)**
Elective	26 (46)	0 (0)	0 (0)	0 (0)	0 (0)	**26 (40)**
Blank	7 (13)	0 (0)	0 (0)	0 (0)	0 (0)	**7 (11)**

In contrast to many other procedures, patients who present as emergencies with abdominal aortic aneurysms are almost exclusively operated on or under the guidance of a consultant surgeon and anaesthetist. This reflects the life threatening nature of this condition. There can be little argument that surgery should be performed as soon as possible. There were some concerns among the advisors that patients might be disadvantaged if a specialist consultant vascular surgeon was not available especially in the smaller hospitals.

Consultant surgeon:

"I think there is a difference according to whether these are managed in more general units or specialist vascular units, because a lot of the cases managed in specialist vascular units are people who actually have tender aneurysms and they are fit and stable for transfer. Of course, the outcome for those patients is quite different compared to those who are unstable and need emergency procedure, often by a non-vascular surgeon in the middle of the night."

NCEPOD clinical co-ordinator:

"There is almost a triage going on where the worst cases are dealt with in the most inappropriate place."

Consultant surgeon:

"Indeed, by the least experienced surgeons, yes. They may be consultants, but you know, they may be someone like me who does not do any elective vascular surgery at all."

NCEPOD clinical co-ordinator:

"They are not doing elective aneurysms routinely during the week, but they are being expected to deal with the worst of the ruptured aneurysms in an emergency setting."

Consultant surgeon:

"Usually with an entirely predictable outcome!"

Organ failure requiring transplant

Table 9.34 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=22
	Day (%) n=12	Evening (%) n=2	Night (%) n=4	Day (%) n=2	Evening (%) n=1	Night (%) n=1	
Consultant	10 (83)	2 (100)	3 (75)	2 (100)	0 (0)	1 (100)	**18 (82)**
Other	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (5)**
Blank	1 (8)	0 (0)	1 (25)	0 (0)	1 (100)	0 (0)	**3 (14)**

Table 9.35 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=22
	Day (%) n=12	Evening (%) n=2	Night (%) n=4	Day (%) n=2	Evening (%) n=1	Night (%) n=1	
Consultant	6 (50)	1 (50)	2 (50)	2 (100)	0 (0)	0 (0)	**11 (50)**
SpR 3 and above	4 (33)	0 (0)	1 (25)	0 (0)	0 (0)	1 (100)	**6 (27)**
SHO	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**1 (5)**
Other	1 (8)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	**2 (9)**
Blank	0 (0)	0 (0)	1 (25)	0 (0)	1 (100)	0 (0)	**2 (9)**

Table 9.36 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=22
	Day (%) n=12	Evening (%) n=2	Night (%) n=4	Day (%) n=2	Evening (%) n=1	Night (%) n=1	
Emergency	1 (8)	1 (50)	2 (50)	1 (50)	1 (100)	1 (100)	**7 (32)**
Urgent	2 (17)	1 (50)	1 (25)	0 (0)	0 (0)	0 (0)	**4 (18)**
Scheduled	2 (17)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**2 (9)**
Elective	7 (58)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**7 (32)**
Blank	0 (0)	0 (0)	1 (25)	1 (50)	0 (0)	0 (0)	**2 (9)**

The timing of retrieval and transplantation of organs must often be managed around access to theatre and staff at two sites. With time constraints on the viability of explanted organs and the possibility that there may be more than one recipient from one donor, it is clear that these operations may need to take place at any time day or night. Procedures involving live related donors can however be scheduled.

Transplantation is funded separately from other surgery and Trusts should ensure that the service is adequately provided for, to reduce the impact that emergency transplant procedures can have on timely surgery for other patients admitted as emergencies.

Acute appendicitis

Because appendicectomy is such a frequently performed emergency operation it is presented in more detail here than the other index procedures.

Table 9.37 Appendicectomy analysis by procedure

	Age				Total
	>=16	5 – 15	0 - 4	Blank	
Conventional	478	200	4	14	**696**
Laparoscopy	49	10	1	0	**60**
Laparotomy	43	1	1	1	**46**
Total	**570**	**211**	**6**	**15**	**802**

Acute appendicitis (All)

Table 9.38 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=802
	Day (%) n=322	Evening (%) n=254	Night (%) n=33	Day (%) n=104	Evening (%) n=72	Night (%) n=17	
Consultant	117 (36)	36 (14)	3 (9)	21 (20)	5 (7)	2 (12)	**184 (23)**
SAS	35 (11)	50 (20)	4 (12)	14 (13)	14 (19)	2 (12)	**119 (15)**
SpR 3 and above	46 (14)	49 (19)	8 (24)	17 (16)	15 (21)	3 (18)	**138 (17)**
SpR 1/2	51 (16)	38 (15)	6 (18)	20 (19)	11 (15)	6 (35)	**132 (16)**
SHO	18 (6)	28 (11)	1 (3)	14 (13)	10 (14)	2 (12)	**73 (9)**
Other	38 (12)	40 (16)	6 (18)	14 (13)	14 (19)	1 (6)	**113 (14)**
Blank	17 (5)	13 (5)	5 (15)	4 (4)	3 (4)	1 (6)	**43 (5)**

Table 9.39 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=802
	Day (%) n=322	Evening (%) n=254	Night (%) n=33	Day (%) n=104	Evening (%) n=72	Night (%) n=17	
Consultant	151 (47)	36 (14)	3 (9)	20 (19)	5 (7)	1 (6)	**216 (27)**
SAS	36 (11)	23 (9)	0 (0)	17 (16)	4 (6)	0 (0)	**80 (10)**
SpR 3 and above	15 (5)	19 (7)	2 (6)	7 (7)	13 (18)	1 (6)	**57 (7)**
SpR1/2	14 (4)	15 (6)	4 (12)	6 (6)	5 (7)	2 (12)	**46 (6)**
SHO	79 (25)	128 (50)	19 (58)	40 (38)	36 (50)	13 (76)	**315 (39)**
Other	19 (6)	19 (7)	4 (12)	8 (8)	4 (6)	0 (0)	**54 (7)**
Blank	8 (2)	14 (6)	1 (3)	6 (6)	5 (7)	0 (0)	**34 (4)**

Continued overleaf

Table 9.40 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=802
	Day (%) n=322	Evening (%) n=254	Night (%) n=33	Day (%) n=104	Evening (%) n=72	Night (%) n=17	
Emergency	124 (39)	134 (53)	19 (58)	51 (49)	39 (54)	10 (59)	**377 (47)**
Urgent	114 (35)	101 (40)	9 (27)	43 (41)	25 (35)	5 (29)	**297 (37)**
Scheduled	28 (9)	6 (2)	0 (0)	3 (3)	1 (1)	1 (6)	**39 (5)**
Elective	36 (11)	2 (1)	1 (3)	3 (3)	0 (0)	0 (0)	**42 (5)**
Blank	20 (6)	11 (4)	4 (12)	4 (4)	7 (10)	1 (6)	**47 (6)**

We received information on more than 800 patients who underwent appendicectomy. Of note is how often a consultant surgeon was present and how infrequently the procedure is left to an SHO to perform. This represents a change since our previous report. There are probably a number of factors driving this change but it does not appear to be related to an increase in the number of procedures performed laparoscopically which amount to only 10% of all appendicectomies.

SHOs in anaesthetics are however very much involved in the management of these patients. The majority of patients with appendicitis are relatively young and fit and can be safely anaesthetised by a proficient SHO. It would seem that the operation itself is now thought to be beyond the training of most surgical SHOs. This is probably related to restructuring of surgical training. Surgical SHOs are spending less time in theatre than previously.

NCEPOD clinical co-ordinator:

"We have taken on board the difference by what we mean by "registrar" these days because we no longer have senior registrars, so SpRs are what used to be registrars. The trouble is that some registrars are what used to be SHOs, because the registrars that we are appointing now, certainly in log book terms, are often very less experienced than people who were SHOs in a previous time.

I think that is very important because the anaesthetic SHOs at least think they run the hospital at night and usually give as a reason for not doing an appendicectomy is that CEPOD (sic) said you do not do appendicectomies at night. It is not what we said at all, but obviously the impression is that an appendicectomy and appendicitis is a relatively benign condition so there is never any need to do it in the middle of the night - there rarely is, but there is sometimes."

Acute appendicitis (>=16 years of age)

Table 9.41 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=570
	Day (%) n=250	Evening (%) n=165	Night (%) n=22	Day (%) n=69	Evening (%) n=51	Night (%) n=13	
Consultant	92 (37)	23 (14)	2 (9)	15 (22)	4 (8)	1 (8)	**137 (24)**
SAS	29 (12)	35 (21)	3 (14)	8 (12)	9 (18)	1 (8)	**85 (15)**
SpR 3 and above	40 (16)	31 (19)	6 (27)	13 (19)	11 (22)	2 (15)	**103 (18)**
SpR 1/2	36 (14)	23 (14)	3 (14)	14 (20)	10 (20)	5 (38)	**91 (16)**
SHO	11 (4)	20 (12)	1 (5)	10 (14)	5 (10)	2 (15)	**49 (9)**
Other	27 (11)	26 (16)	5 (23)	7 (10)	10 (20)	1 (8)	**76 (13)**
Blank	15 (6)	7 (4)	2 (9)	2 (3)	2 (4)	1 (8)	**29 (5)**

Table 9.42 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of Anaesthetist	Weekday			Weekend			Total (%) n=570
	Day (%) n=250	Evening (%) n=165	Night (%) n=22	Day (%) n=69	Evening (%) n=51	Night (%) n=13	
Consultant	117 (47)	23 (14)	1 (5)	12 (17)	5 (10)	0 (0)	**158 (28)**
SAS	29 (12)	15 (9)	0 (0)	9 (13)	3 (6)	0 (0)	**56 (10)**
SpR 3 and above	10 (4)	7 (4)	1 (5)	5 (7)	9 (18)	1 (8)	**33 (6)**
SpR 1/2	8 (3)	10 (6)	2 (9)	4 (6)	3 (6)	2 (15)	**29 (5)**
SHO	63 (25)	88 (53)	13 (59)	31 (45)	26 (51)	10 (77)	**231 (41)**
Other	16 (6)	12 (7)	4 (18)	4 (6)	1 (2)	0 (0)	**37 (6)**
Blank	7 (3)	10 (6)	1 (5)	4 (6)	4 (8)	0 (0)	**26 (5)**

Table 9.43 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=570
	Day (%) n=250	Evening (%) n=165	Night (%) n=22	Day (%) n=69	Evening (%) n=51	Night (%) n=13	
Emergency	92 (37)	89 (54)	9 (41)	34 (49)	27 (53)	6 (46)	**257 (45)**
Urgent	88 (35)	63 (38)	8 (36)	26 (38)	19 (37)	5 (38)	**209 (37)**
Scheduled	23 (9)	6 (4)	0 (0)	2 (3)	1 (2)	1 (8)	**33 (6)**
Elective	33 (13)	1 (1)	1 (5)	3 (4)	0 (0)	0 (0)	**38 (7)**
Blank	14 (6)	6 (4)	4 (18)	4 (6)	4 (8)	1 (8)	**33 (6)**

Continued overleaf

Acute appendicitis (Between 5 and 15 years of age)

Table 9.44 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend			Total (%) n=211
	Day (%) n=66	Evening (%) n=82	Night (%) n=10	Day (%) n=30	Evening (%) n=20	Night (%) n=3	
Consultant (paediatric)	9 (14)	1 (1)	0 (0)	1 (3)	0 (0)	0 (0)	**11 (5)**
Consultant (other)	14 (21)	10 (12)	1 (10)	2 (7)	1 (5)	0 (0)	**28 (13)**
SAS	6 (9)	14 (17)	1 (10)	6 (20)	5 (25)	1 (33)	**33 (16)**
SpR 3 and above	6 (9)	18 (22)	2 (20)	4 (13)	3 (15)	1 (33)	**34 (16)**
SpR 1/2	14 (21)	14 (17)	2 (20)	6 (20)	1 (5)	1 (33)	**38 (18)**
SHO	6 (9)	8 (10)	0 (0)	4 (13)	5 (25)	0 (0)	**23 (11)**
Other	9 (14)	13 (16)	1 (10)	6 (20)	4 (20)	0 (0)	**33 (16)**
Blank	2 (3)	4 (5)	3 (30)	1 (3)	1 (5)	0 (0)	**11 (5)**

Table 9.45 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend			Total (%) n=211
	Day (%) n=66	Evening (%) n=82	Night (%) n=10	Day (%) n=30	Evening (%) n=20	Night (%) n=3	
Consultant	32 (48)	12 (15)	2 (20)	5 (17)	0 (0)	0 (0)	**51 (24)**
SAS	7 (11)	7 (9)	0 (0)	7 (23)	1 (5)	0 (0)	**22 (10)**
SpR 3 and above	5 (8)	11 (13)	1 (10)	2 (7)	4 (20)	0 (0)	**23 (11)**
SpR 1/2	4 (6)	5 (6)	1 (10)	1 (3)	2 (10)	0 (0)	**13 (6)**
SHO	15 (23)	36 (44)	6 (60)	9 (30)	9 (45)	3 (100)	**78 (37)**
Other	3 (5)	7 (9)	0 (0)	4 (13)	3 (15)	0 (0)	**17 (8)**
Blank	0 (0)	4 (5)	0 (0)	2 (7)	1 (5)	0 (0)	**7 (3)**

Table 9.46 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend			Total (%) n=211
	Day (%) n=66	Evening (%) n=82	Night (%) n=10	Day (%) n=30	Evening (%) n=20	Night (%) n=3	
Emergency	30 (45)	43 (52)	9 (90)	13 (43)	11 (55)	3 (100)	**109 (52)**
Urgent	26 (39)	33 (40)	1 (10)	17 (57)	6 (30)	0 (0)	**83 (39)**
Scheduled	4 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	**4 (2)**
Elective	2 (3)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	**3 (1)**
Blank	4 (6)	5 (6)	0 (0)	0 (0)	3 (15)	0 (0)	**12 (6)**

Acute appendicitis (<5 years of age)

Table 9.47 Count of grade of senior surgeon by time of operation performed during weekdays and weekends

Grade of surgeon	Weekday			Weekend	Total (%) n=6
	Day (%) n=3	Evening (%) n=1	Night (%) n=1	Day (%) n=1	
Consultant (paediatric)	2 (67)	1 (100)	0 (0)	0 (0)	**3 (50)**
Consultant (other)	0 (0)	0 (0)	0 (0)	1 (100)	**1 (17)**
SpR 1/2	1 (33)	0 (0)	1 (100)	0 (0)	**2 (33)**
Blank	0 (0)	0 (0)	0 (0)	0 (0)	**0 (0)**

Table 9.48 Count of grade of senior anaesthetist by time of operation performed during weekdays and weekends

Grade of anaesthetist	Weekday			Weekend	Total (%) n=6
	Day (%) n=3	Evening (%) n=1	Night (%) n=1	Day (%) n=1	
Consultant	2 (67)	1 (100)	0 (0)	1 (100)	**4 (67)**
SpR 1/2	1 (33)	0 (0)	1 (100)	0 (0)	**2 (33)**
Blank	0 (0)	0 (0)	0 (0)	0 (0)	**0 (0)**

Table 9.49 Count of classification of theatre case by time during weekdays and weekends

Classification	Weekday			Weekend	Total (%) n=6
	Day (%) n=3	Evening (%) n=1	Night (%) n=1	Day (%) n=1	
Emergency	1 (33)	1 (100)	1 (100)	1 (100)	**4 (67)**
Elective	1 (33)	0 (0)	0 (0)	0 (0)	**1 (17)**
Blank	1 (33)	0 (0)	0 (0)	0 (0)	**1 (17)**

Children Age 5-15 operated on by paediatric surgeon: 11/211.

Children Age 0-4 operated on by paediatric surgeon: 3/6.

Under the age of 16 years, only a small proportion (5%) of appendicectomies are performed by paediatric surgeons. One should remember that there are many fewer paediatric surgeons than general surgeons and there is a perception among the advisors that there is an increasing trend to refer children to specialist units. This may put a burden on these units that is difficult to cope with. The need to "stem the flow of the general surgery of childhood out of district general hospitals into specialist paediatric surgical units that are having difficulty coping" has been recognised by the SAC in general surgery. [24]