5 DECISION-MAKING

Children and young people requiring emergency surgery are a mixed group, appearing on emergency, elective, adult and paediatric theatre lists due to a range of medical, neurological and trauma factors. They do, however, share a commonality in the need for prompt assessment, diagnosis and immediate, urgent or expedited access to treatment.[12] The last NHS Long Term Plan committed healthcare organisations to provide timely interventions and accurate delivery of emergency interventional care to mitigate lifelong complications. The new '10 Year Health Plan' builds on this by improving emergency care pathways, increasing the availability of same day emergency care services, and improving triage systems and patient flow.[13]

Pre-operative senior review

Most patients (617/641; 96.3%) were seen by a senior decision-maker (ST3+ or equivalent) (T5.1) but there was a delay in assessment in 64/570 (11.2%) patients (T5.2). Reviewers were unable to identify the grade of clinician conducting the review in 212/853 (24.9%) patients due to inadequate documentation.

Table 5.1 There was an ST3+ or equivalent review	Number of patients	%
Yes	617	96.3
No	24	3.7
Subtotal	**641**	
Unable to answer	212	
Total	**853**	

Reviewer assessment form data

Table 5.2 There was a delay in ST3+ or equivalent assessment	Number of patients	%
Yes	64	11.2
No	506	88.8
Subtotal	**570**	
Unable to answer	47	
Total	**617**	

Reviewer assessment form data

Most patients were seen by a consultant (427/597; 71.5%) although poor documentation meant that reviewers could not identify this in many patients (256/853; 30.0%). Where it could be assessed, the reviewers identified a delay in consultant assessment in 34/427 (8.0%) patients. Ideally all patients should be seen by a consultant within 14 hours of admission.[14] This was the case for 139/187 (74.3%) patients in our study (F5.1). Patients who were reviewed promptly by a consultant were more likely to receive good care (F5.2).

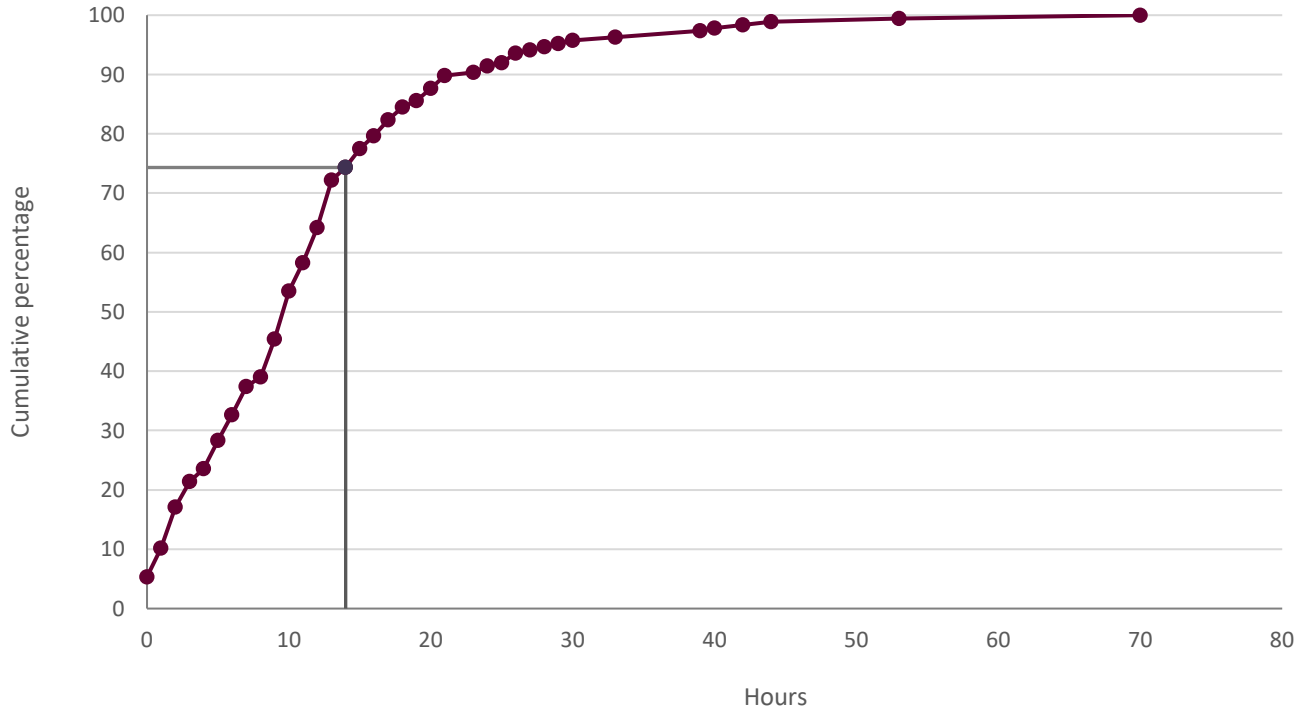

Figure 5.1 Time from admission to first consultant review (n=187)
Reviewer assessment form data (vertical line at 14 hours)

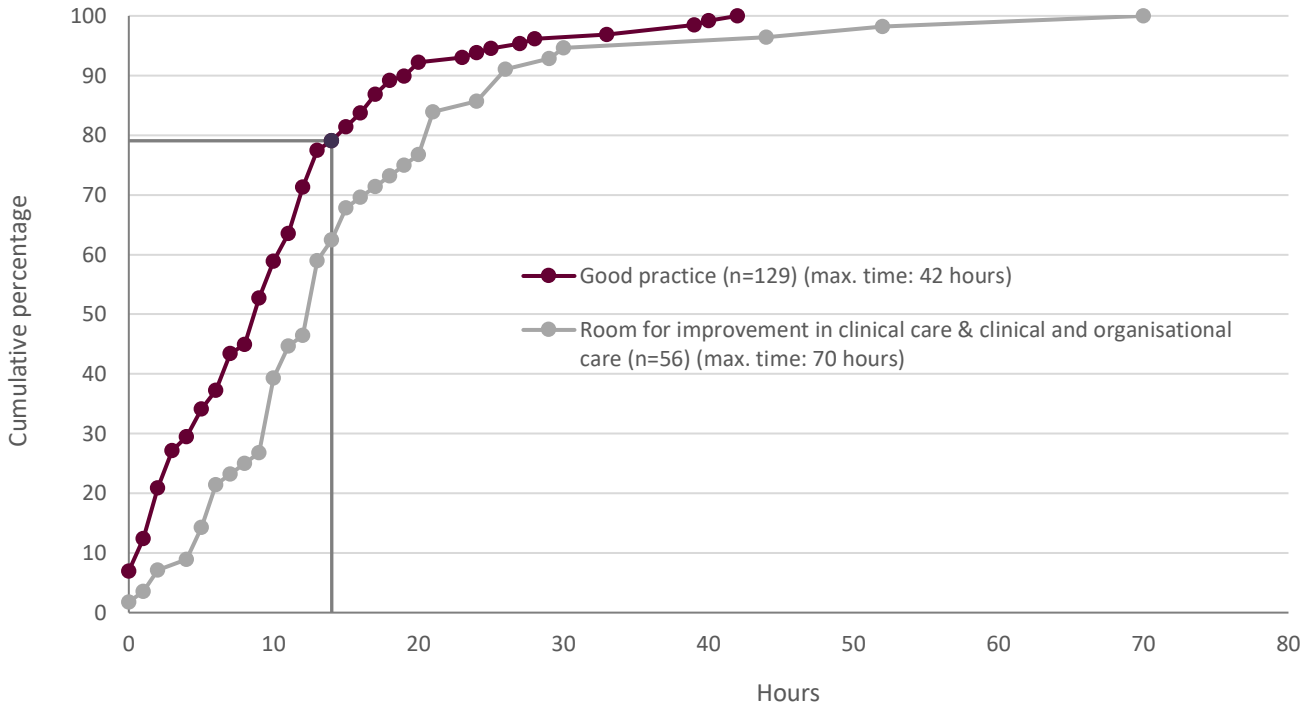

Figure 5.2 Time to the first consultant review by overall quality of care
Reviewer assessment form data (vertical line at 14 hours)

Delays in decision-making

A senior clinician made the decision to perform the procedure for 399/575 (69.4%) patients (unknown for 278) (T5.3). Reviewers noted there was a delay in decision-making in 64/853 (7.5%) patients and this had a negative impact on patient care in 32/60 patients due to the delayed surgery.

Table 5.3 The grade of the clinician who made the decision to perform the procedure	Number of patients	%
Consultant	270	47.0
Doctor at ST5+ or equivalent	129	22.4
Doctor ST1/2 or core trainee equivalent	71	12.3
Doctor at ST3/4 or equivalent	65	11.3
Specialty and associate specialist (SAS) doctor	30	5.2
Advanced nurse practitioner	3	<1
Resident doctor with a certificate of completion of training (CCT)	2	<1
Specialist nurse	2	<1
Other	2	<1
Physician associate	1	<1
Advanced clinical practitioner	0	<1
Senior staff nurse	0	0
Subtotal	**575**	
Unable to answer	278	
Total	**853**	

Reviewer assessment form data

Delays in the decision to perform the procedure appeared to be more likely if the decision was made by more senior staff (F5.3), but this likely reflects the fact that more complex procedures will require consultant input and additional investigations, and that more consultants were the decision-makers. There was no apparent delay in consultant decision-making reported out-of-hours (F5.4).

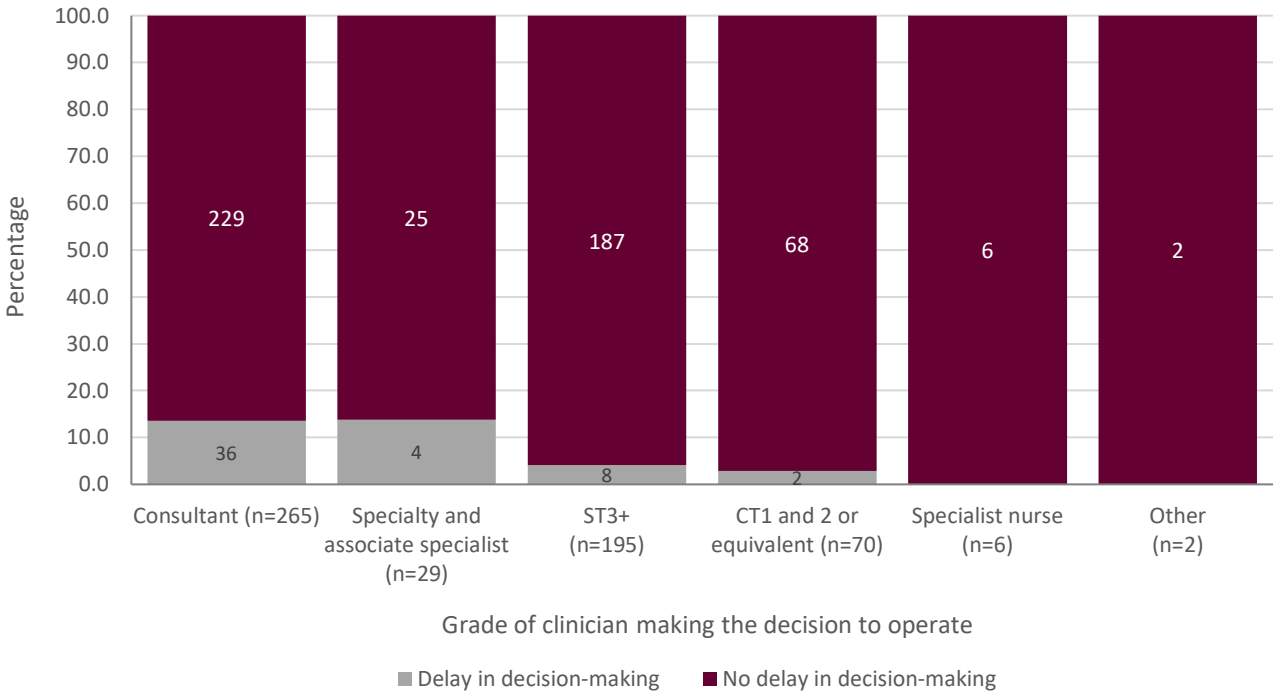

Figure 5.3 The grade of clinician who made the decision to perform the procedure by presence of a delay

Reviewer assessment form data

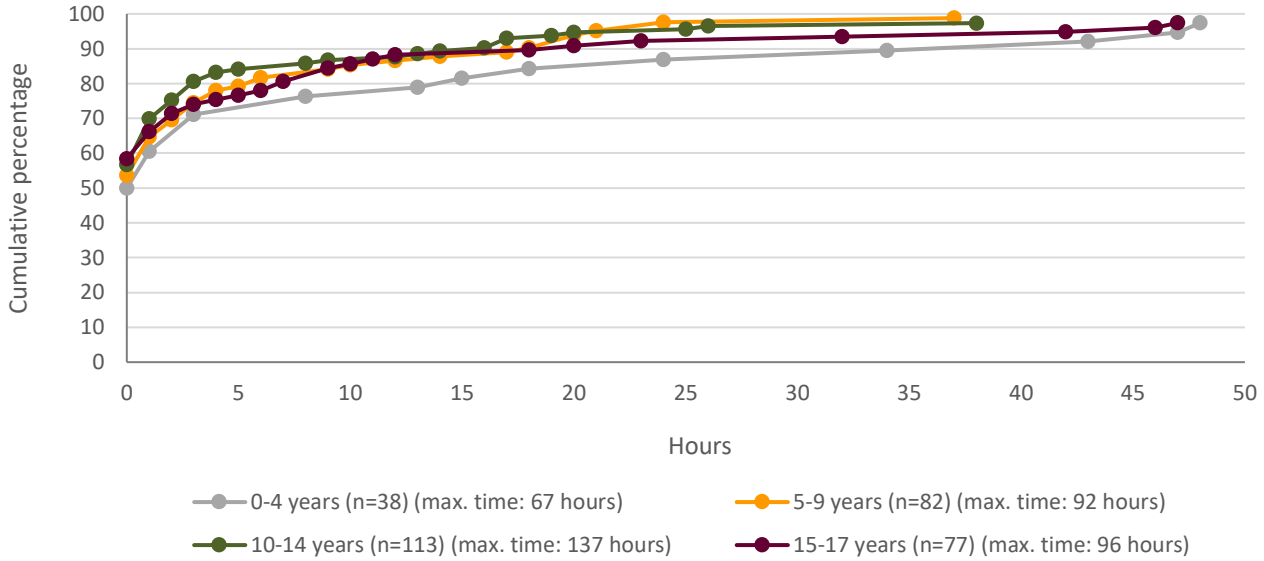

Figure 5.4 Time from first ST3+ or equivalent review to decision to operate
Reviewer assessment form data (data not shown for 7 patients)

Reviewers noted that there was an inappropriate delay in treatment for (77/853; 9.0%) patients and this impacted negatively on the care of 43/68 patients.

Theatre access and urgency

Reviewers reported that while the majority of patients had their procedures booked without delays, 131 out of 853 patients (15.4%) experienced delays due to delays with/in the surgical team. Where grade could be determined the fact that some patients were booked by less experienced staff did not appear to affect delays in booking procedures (T5.4). However, patients undergoing less urgent procedures were more likely to wait longer from the decision to operate to the time of theatre booking (F5.5), suggesting that these patients could be treated more effectively on non-urgent lists.

Table 5.4 There was a delay from booking the case to the start of the procedure	ST3 or equivalent and above		CT2 or equivalent and below		Subtotal
	Number of patients	%	Number of patients	%	Number of patients
Yes	48	12.0	12	10.7	**60**
No	351	88.0	100	89.3	451
Subtotal	**399**		**112**		**511**
Unable to answer	17		2		19
Total	**416**		**114**		**530**

Reviewer assessment form data

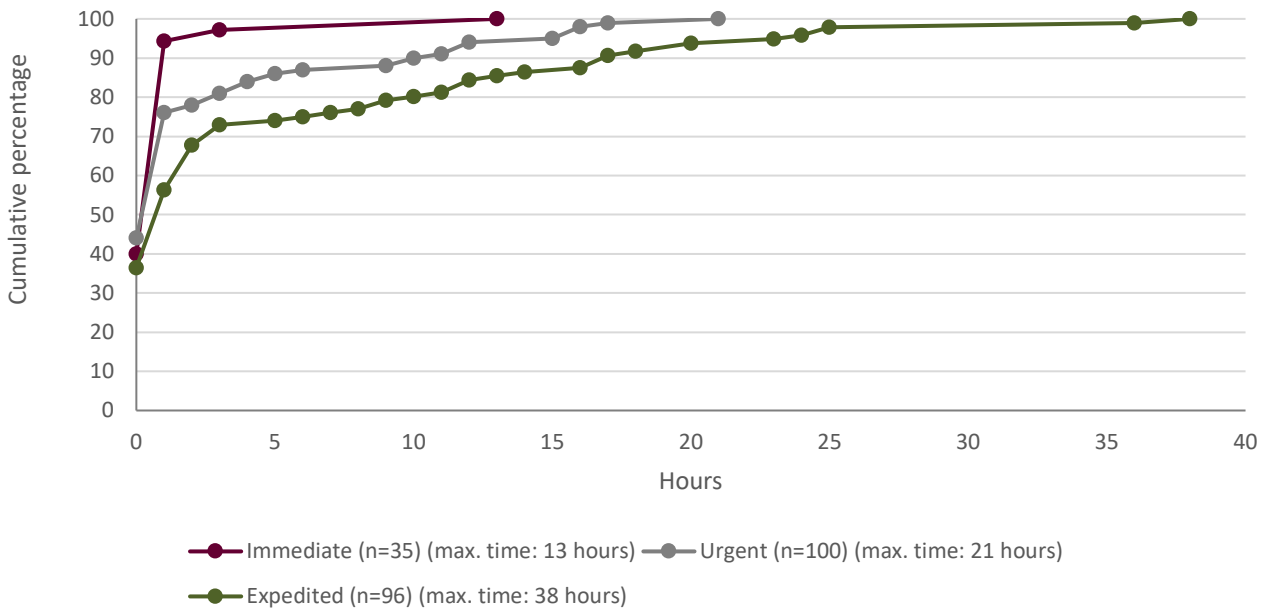

Figure 5.5 Time between the decision to operate and the theatre booking
Reviewer assessment form data

Pre-procedure preparation was adequate for most patients (798/853; 93.6%). However, fasting (10/55) was the most common response to the question about what should have been optimised.

Following anaesthetic review, most patients (369/407; 90.7%) had their anaesthetic commenced within six hours (F5.6). Reviewers reported that many patients in the less urgent categories could have had scheduled surgery rather than being placed on a CEPOD list (F5.7).

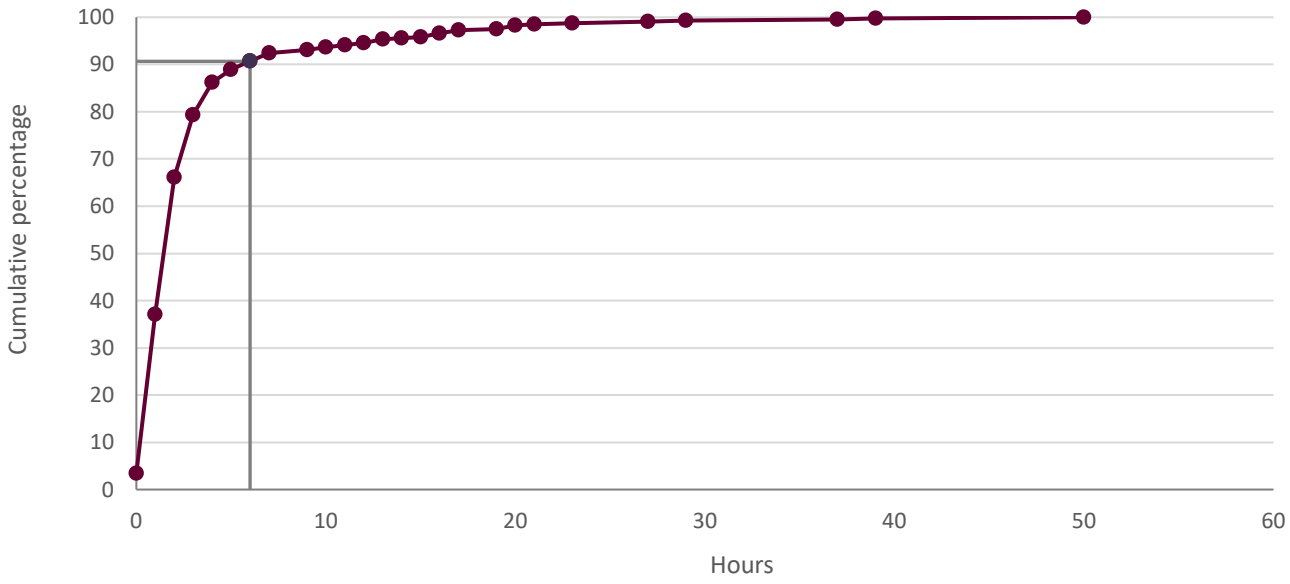

Figure 5.6 Time from first anaesthetic review to commencement of anaesthetic (n=407)
Reviewer assessment form data (vertical line at 6 hours)

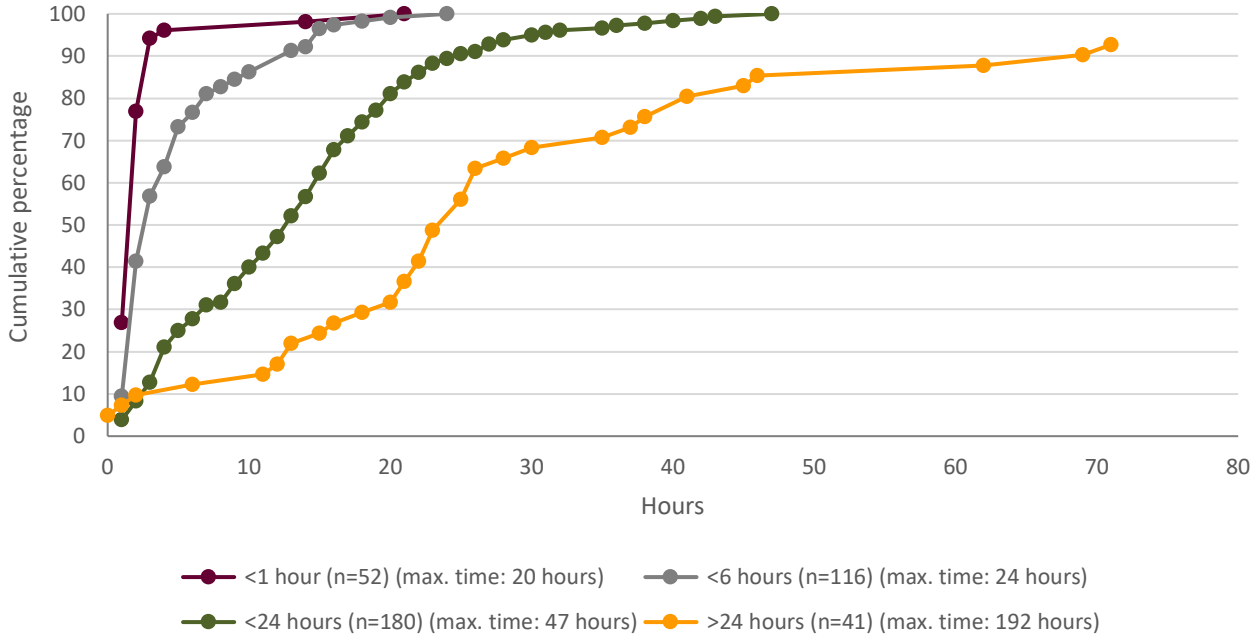

Figure 5.7 Time from decision to operate to commencement of anaesthetic by urgency of surgery
Reviewer assessment form data (data not shown for 3 patients)

Reviewers noted that consultants and senior resident doctors were involved in anaesthetising most patients (F5.8). They considered the grade of the operator to be appropriate for 719/722 (99.6%) patients, and the grade of the anaesthetist to be appropriate for 681/690 (98.7%) patients.

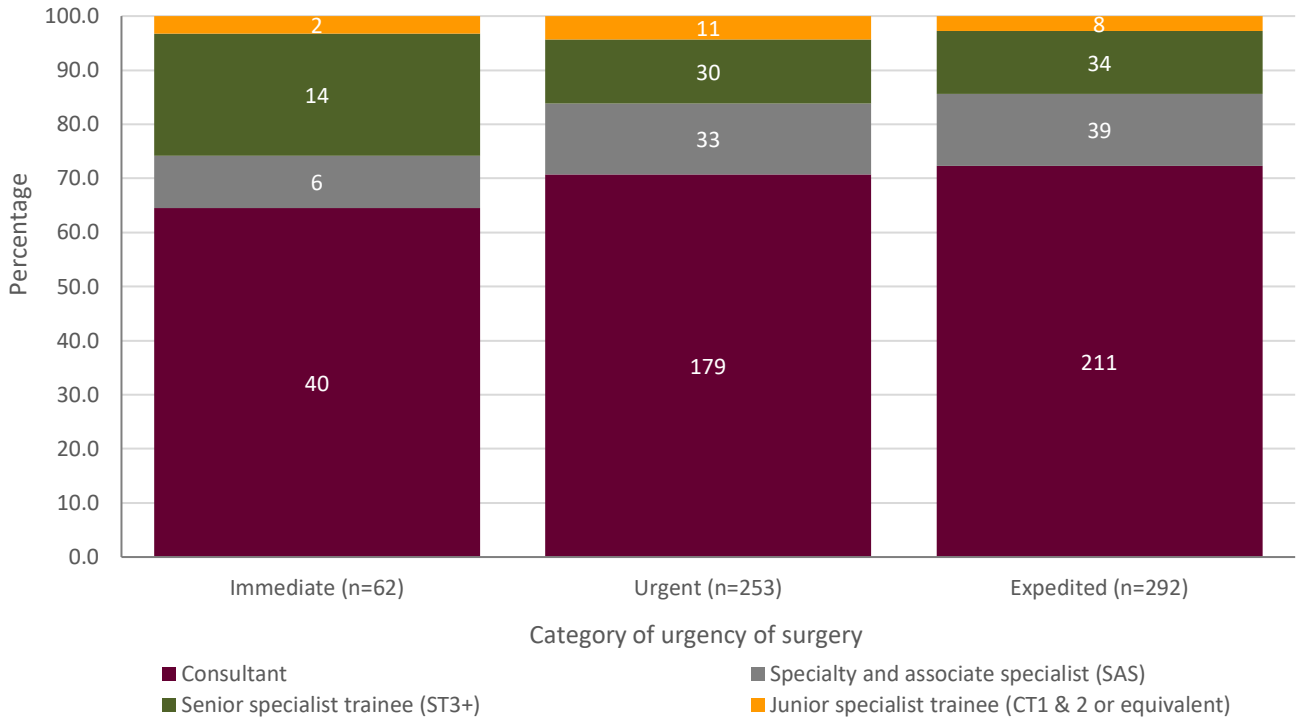

Figure 5.8 Grade of anaesthetist by category of urgency of surgery
Reviewer assessment form data

Younger patients were more likely to be anaesthetised by a consultant (F5.9). However, some patients under four years of age and patients undergoing immediate surgery had anaesthetic performed by a CT1-2 doctor or equivalent.

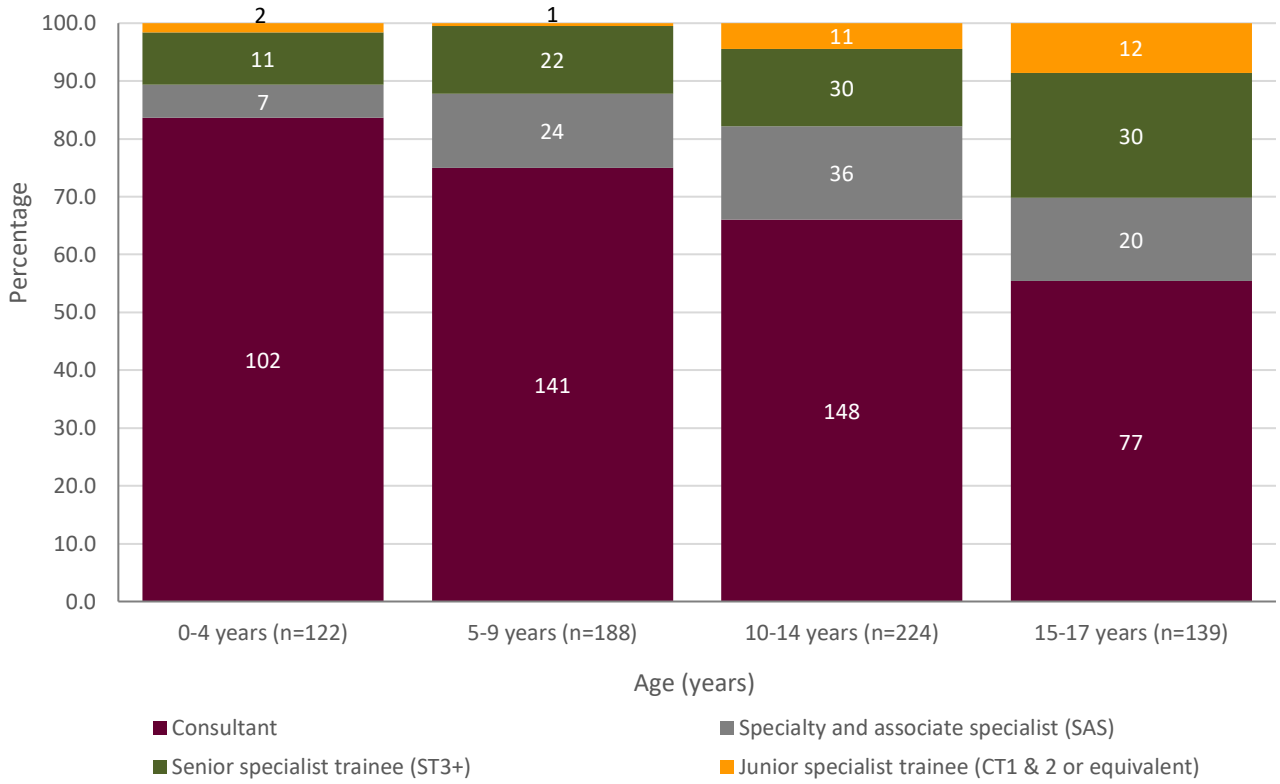

Figure 5.9 Grade of anaesthetist by age of patient at the time of procedure

Reviewer assessment form data

Pathways

Reviewers noted that only 287/629 (45.6%) patients were commenced on a dedicated pathway for emergency surgery in children and young people (T5.5) and that many of those who were not (83/255; 32.5%) should have been (T5.6). Reviewers also noted that the pathways for treating patients as a planned urgent procedure demonstrated good practice. These included abscess pathways, fracture pathways and plastic surgery pathways. Another example of this would be 'hot lists' for urgent procedures separate to emergency (CEPOD) lists.

Table 5.5 The patient was commenced on a dedicated pathway for emergency surgery in children and young people	Number of patients	%
Yes	287	45.6
No	342	54.4
Subtotal	**629**	
Unable to answer	224	
Total	**853**	

Reviewer assessment form data

Table 5.6 The patient was not commenced on a dedicated surgical pathway but should have been	Number of patients	%
Yes	83	32.5
No	172	67.5
Subtotal	**255**	
Unable to answer	87	
Total	**342**	

Reviewer assessment form data

It was reported that 92/143 (64.3%) hospitals had a specific protocol for the children and young people who may require emergency procedures under anaesthetic, but with variability in the content (F5.10). Notably, many protocols did not include fasting requirements for surgery and importantly, arrangements around theatre access and escalation were often not included.

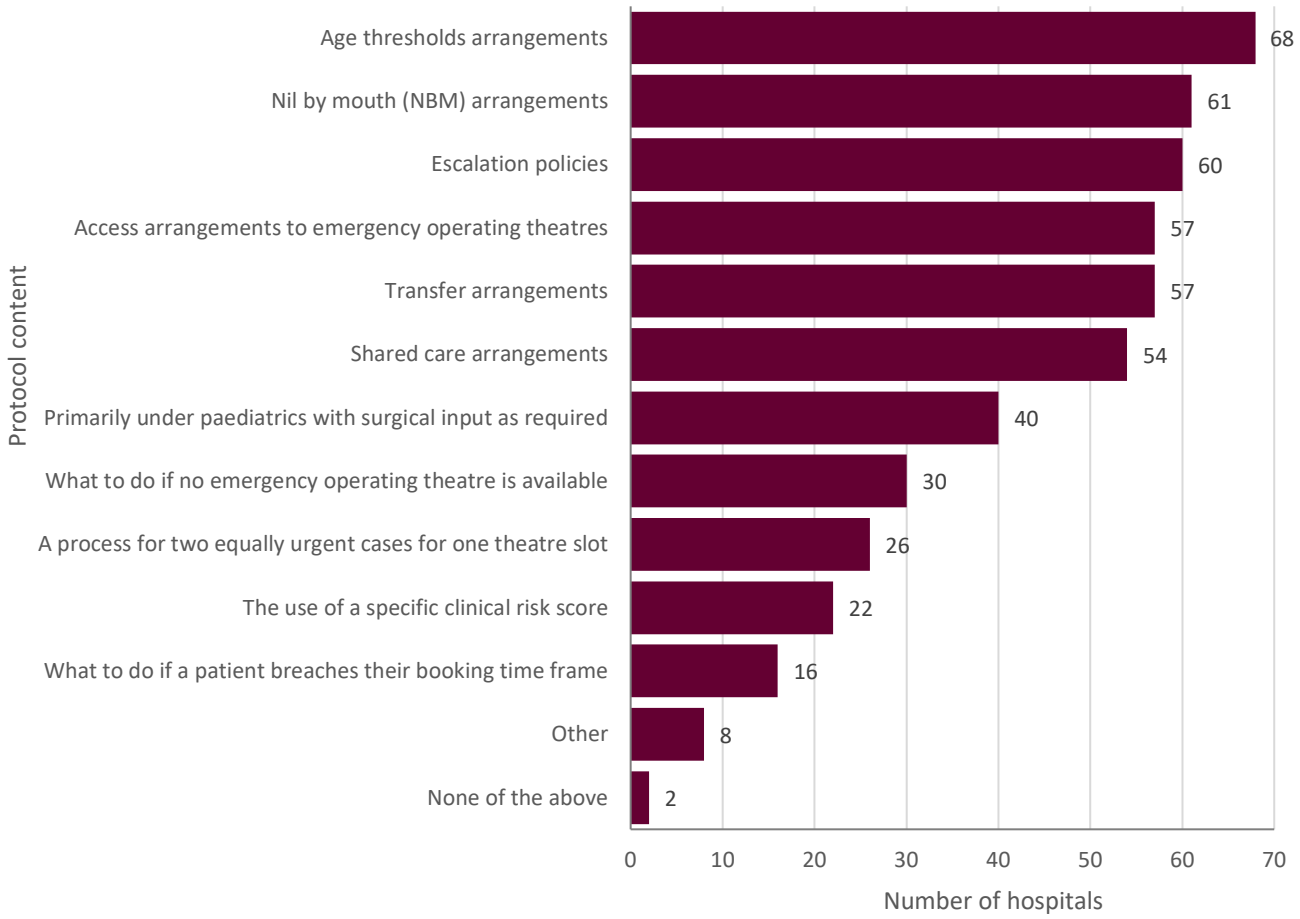

Figure 5.10 Elements of the protocol for children and young people needing emergency procedures

Organisational questionnaire data. Answers may be multiple; n=84 (unknown for 8)