

JCST Trainee Survey Annual Report – 2018/19 and 2019/20

Introduction

JCST's Quality Assurance Group, in conjunction with the Schools of Surgery and Specialty Advisory Committees (SACs), has developed a trainee survey to establish the quality of surgical training across the UK. The survey, introduced in 2011, aims to drive improvements in surgical training and monitor the quality of training placements by measuring the achievement of JCST's Quality Indicators (QIs). This survey report is for two training/survey years, 2018-19 and 2019-20.

The QIs and survey questions are subject to review by the JCST QA Group. QA Group is a sub-committee of the JCST, with a specific focus on matters relating to quality and covers the ten surgical specialties, Core Surgical Training and the Training Interface Groups.

The QIs are available on the JCST website with updates in August each year: https://www.jcst.org/quality-assurance/quality-indicators/. The first 9 QIs are generic and applicable to all surgical training posts, both specialty and uncoupled core posts. QIs that are specific to each specialty follow the generic section.

Survey overview

The trainee survey has 31 generic questions (see Appendix A) and additional questions for each surgical specialty, less than full-time and academic trainees.

Trainees are invited to complete one survey per end of training placement via the Intercollegiate Surgical Curriculum Programme (ISCP) – the surgical online training management system. Access to survey reports is available via the ISCP to Heads of School of Surgery, Training Programme Directors, SAC Chairs, SAC QA Leads and SAC Liaison Members (LMs), to help inform and support the quality assurance of surgical training.

The reporting period for each 'survey year' relates to the start/changeover date (normally August or October) for most surgical trainees.

Inclusion criteria -

Trainees in the UK (uncoupled core and specialty) with a trainee placement registered in ISCP, placement start date (i) 1 August 2018 to 31 July 2019 (survey completed before the end of October 2019); (ii) 1 August 2019 to 31 July 2020 (survey completed before the end of October 2020). This includes Locum Appointments for Training, Fixed-term Specialty Training Appointments. In addition, some out-of-programme trainees (e.g. TIG fellows and some OOPR) and academic trainees, when they register a 'core' or specialty trainee placement on ISCP.

Exclusion criteria -

Trainees completing the survey after the reporting deadline (October each year). Out-of-programme trainees who do not need to register a trainee placement on ISCP (e.g. OOPC, some OOPR). The following individuals do not receive a survey invitation via ISCP - trainees in the Republic of Ireland or Iceland, other post holders (e.g. SAS doctors, Locum Appointments for Service) that may use ISCP.

The uncoupled core trainees' results are shown as 'Core'. The specialty trainees' results, shown by corresponding placement specialty, include run through trainees and academic trainees. A limitation of the data is that some run through trainees do not enrol with JCST at the start of training (ST1) so have their results combined with 'uncoupled core' trainees.

Each SAC considers the annual survey data for their specialty. This report focuses on specialty-wide findings for the generic questions. Each SAC will discuss these findings along with any additional analysis of their specialty-specific questions, undertaken by each SAC Liaison Member and SAC QA lead.

The survey outcome data presented below provides an overview of the outcomes of the generic questions included in the 2018/19 and 2019/20 survey. The focus is the achievement rate of key QIs, with additional areas of good practice and concern also presented. The analysis is divided into four themed sections – Patient safety, Working conditions, Training opportunities and Quality of experience. The reporting of Simulation Training*, Overall Satisfaction, Less Than Full-Time (LTFT) is shown in new sections. The training environment and curriculum delivery are covered by the survey.

*A separate project, Improving Surgical Training, seeks to embed and enhance the role of simulation and will explore the role of simulation in more detail (independent evaluations are due in 2021).

Where the data is presented in table format, the outcomes are presented as follows:



In October 2018, there were changes to the survey questions, as follows:

- 6 questions added to the survey for the 'Improving Surgical Training' pilot (on the topics of induction, teaching, meetings with AES and elective daytime training). The IST pilot is looking at ways of improving surgical training and is being evaluated independently. A final evaluation report is due in 2021.
- A set of questions added to Cardiothoracic Surgery. This included a question on proposed changes to the Cardiothoracic Surgery curriculum and whether trainees feel that training can be completed in a 7-year run through training programme.
- Oral and Maxillofacial Surgery added new questions for ST1+ trainees.
- Otolaryngology (ENT) added a new question on review of emergency admissions by a consultant.
- A set of guestions added to Paediatric Surgery. This included details on the on-call rota.
- A set of questions added to Trauma & Orthopaedic Surgery. This included a question on "winter pressures" and training.

In October 2019, there were changes to the survey questions, as follows:

- A set of questions added to Cardiothoracic Surgery. This included questions on training opportunities in a thoracic surgery placement, access to training events and out of hours care
- Oral and Maxillofacial Surgery added a new question for ST1 trainees about the start of their training and a question on review of emergency admissions by a consultant.
- Trauma & Orthopaedic Surgery added a new question on "winter pressures".

In August 2018, changes to the Quality Indicators included the following:

Oral and Maxillofacial Surgery Theatre QI (Specialty trainees). Minimum number of half-day consultant supervised theatre sessions a trainee should attend per week increased from 3 to 4 sessions.

In August 2019, changes to the Quality Indicators included the following:

- Neurosurgery Theatre QI (Core trainees). Minimum number of half-day consultant supervised theatre sessions a trainee should attend per week increased from 1 to 3 sessions.
- Experience in ITU for Core trainees, with the opportunity to take part in four consultant-led ward rounds each week. Opportunities to gain additional technical and clinical skills in the ITU added to the Core QIs.

During the training/survey year 2019/20, a global coronavirus pandemic had an unprecedented impact on all areas of healthcare, including surgical training. The devastating effects of the pandemic on society cannot be understated and we are reporting at a time of uncertainty. The limitations of reported data, include:

- the survey focuses on monitoring achievement of the QIs. It covers training overall and does not aim to specifically explore the complexities of pandemic disruption.
- an attempt to correlate the impact of a Covid-19 pandemic on reduction in surgical activity is outside of the scope of this report.
- most of the reporting is outside of the pandemic period. Trainees were part way through the 2019/20 training year when the pandemic started. Redeployment first started happening in April 2020.
- re-deployed trainees, e.g. to intensive care, are unlikely to have completed the survey or been unable to answer all the questions.

4 specialties had run through training pilots occurring within the reporting period:

- Otolaryngology (ENT) and General Surgery (pilot started 2018)
- Urology and Vascular Surgery (pilot started 2019).

ST1/2 trainees' placement specialty may not be the same as their parent specialty. For example, 2019/20 results for Urology (ST1/2) are by placement so will include General Surgery run through trainees with a placement in Urology.

Response rate

We plan to develop a methodology to report a response rate. The response rate depends on the number of discreet training placements that trainees undertake during the year and we are unable to confirm this number at present. It is expected that the response rate will be less in 2019/20 due to disruption caused by a pandemic. 'Covid placements' (redeployment) led to interim arrangements for recording a placement in ISCP (JCST 2020). We have a high number of responses (total 2018/19 = 3299 responses; total 2019/20 = 2835 responses). This does not necessarily equate to the number of trainees who have taken part.

Patient safety

There are examples of good practice relating to pre-operative briefings, safe supervision and adequate levels of responsibility.

Figure 1. Survey outcomes that demonstrate good practice in the area of patient safety

Did yo	Did you routinely participate in pre-operative briefings with use of the WHO checklist or equivalent? (YES)									
Core	Cardio (ST1-2)	Cardio (ST3+)	ENT (ST1-2)	ENT (ST3+)	GS (ST1-2)	GS (ST3+)	NS (ST1-2)	NS (ST3+)		
96%	100%	100% 95%	100%	100%	100%	99%	91%	95%		
OMFS (ST1-2)	OMFS (ST3+)	Paeds (ST3+)	Plastic (ST3+)	T&O (ST3+)	Urol (ST1-2)	Urol (ST3+)	Vasc (ST1-2)	Vasc (ST3+)		
	100%	100%	100%	100%	N/A 92%	98%	N/A 100%	97%		

Were yo	Were you only asked to undertake unsupervised procedures in which you had been trained? (YES)									
Core	Cardio	Cardio	ENT	ENT	GS	GS	NS	NS		
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
95%	100%	100%	91%	99%	100%	99%	95%	99%		
95%	100%	100%	100%	98%	98%	99%	100%	100%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
	100%	98%	98%	98%	N/A 100%	99%	N/A 100%	99%		

	Were you given appropriate responsibility for your level of training? (YES)										
Core	Cardio	Cardio	ENT	ENT	GS	GS	NS	NS			
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
96%	100%	97%	100%	99%	98%	99%	96%	95%			
96%	94%	93%	100%	99%	93%	98%	100%	96%			
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc			
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
	100%	95%	99%	99%	N/A	98%	N/A	99%			
	96%	93%	99%	98%	92%	98%	100%	100%			

Area for improvement:

A concern for some specialties is the post-acute take consultant ward round, an indicator of safe continuity of care. There is variation between specialties and the lower values in some specialties suggests it is not a regular occurrence. This was highlighted in earlier surveys as an issue for Otolaryngology (ENT). In 2019, the SAC wrote to TPDs to remind them of a specialty-specific quality indicator (QI 14), introduced to address this. We will continue to monitor this QI to see if an improvement seen in Otolaryngology during 2019-20 is ongoing.

100% 90% 80% 70% 60% 50% 40% 2018/19 30% **2019/20** 20% 10% 0% Urol (ST1-2) Cardio (ST1-2) ENT (ST1-2) 3S (ST1-ST2) GS (ST3+) NS (ST1-2) NS (ST3+) Paeds (ST3+) Plastic (ST3+) T&O (ST3+) Urol (ST3+) /asc (ST1-2) Cardio (ST3+) ENT (ST3+) **OMFS (ST3+)** Vasc (ST3+)

Figure 1: Post-acute take consultant ward round

Working conditions

Areas for improvement:

Most specialties and Core reported that there is enough clinical work in the unit to support the number of trainees working there. It is suggested that a decline in the positive responses, across most specialties in 2019/20, is due to a reduction in training opportunities at the start of a pandemic.



Figure 3: Availability of clinical work to support training

2018/19, 2019/20: OMFS (ST1-2) = <2 responses. Urol and Vasc (ST1-2) run through training pilots began 2019/20.

The survey explores workload (on-call, elective sessions and rota). Around a quarter of Core trainees [23% (2018/19); 29% (2019/20)] reported that routine clinical work prevented the acquisition of new skills. Around a fifth of Core trainees [18% (2018/19); 19% (2019/20)] regularly missed training opportunities to provide cover. The values are also high for run through training (at ST1/2 level). In 2019/20, 46% of trainees in Urology placements (ST1/2) regularly missed training opportunities to provide cover.

Due to a small incidence (0-10%) of reported undermining behaviour it is not possible to identify any trends. We cannot make any correlations relating to specialty or level. Any undermining behaviour is unacceptable (GMC 2015). Some respondents may not report unprofessional behaviour (Clements JM et al 2020).

Figure 4: Survey outcomes that show concerns in the area of working conditions

Are any e	Are any elective sessions combined with on call commitment such that the elective sessions are									
frequently compromised? (YES)										
Core	Cardio	Cardio	ENT	ENT	GS	GS	NS	NS		
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
11%	0%	8%	27%	12%	9%	6%	13%	17%		
12%	6%	7%	15%	9%	14%	5%	6%	15%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		

Were yo	Were you regularly required to undertake routine clinical work that prevented the acquisition									
	of new skills? (YES)									
Core	Cardio	Cardio	ENT	ENT	GS	GS	NS	NS		
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
23%	20%	18%	27%	5%	18%	8%	30%	10%		
29%	22%	14%	20%	5%	17%	11%	25%	/ 8%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
	2%	9%	13%	5%	N/A	12%	N/A	6%		
	4%	7%	17%	12%	31%	9%	0%	7%		

Did you r	Did you regularly miss training opportunities in order to provide cover for absent colleagues or fill rota gaps? (YES)									
Core	Cardio Cardio ENT ENT GS GS NS NS									
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
18%	20%	8%	36%	4%	5%	8%	26%	14%		
19%	28%	7%	10%	3%	10%	5%	13%	19%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
	2%	13%	9% 5%	3%	N/A 46%	13%	N/A 0%	8%		

Did th	Did the clinical work intensity allow sufficient time for consultant teaching and training? (NO)									
Core	Cardio (ST1-2)	Cardio (ST3+)	ENT (ST1-2)	ENT (ST3+)	GS (ST1-2)	GS (ST3+)	NS (ST1-2)	NS (ST3+)		
18%	0%	11%	36%	6%	20%	6% 7%	0%	6%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
	4%	7%	6%	3%	N/A 15%	10%	N/A 0%	3% 4%		

In this po	In this post, were you personally subjected to persistent behaviour by others that undermined										
	your professional confidence or self esteem? (YES)										
Core	Cardio Cardio ENT ENT GS GS NS NS										
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
5%	0%	5%	0%	3%	0%	4%	0%	2%			
4%	6%	2%	10%	4%	8%	7%	0%	2%			
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc			
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
	2%	7%	4%	2%	N/A%	7%	N/A	4%			
	0%	9%	5%	3%	0%	2%	0%	4%			

Training opportunities

Consultant sessions

The QIs for consultant-supervised theatre and clinic sessions are shown in Appendix B. Neurosurgery increased their theatre QI target a year previously (2017/18) - 74% meet the new target [3 sessions] for specialty training (figure 5, 2018/19).

Examples of good practice:

The theatre and outpatient clinic QIs are discussed under areas for improvement but it should be noted that there is variation and some specialties are achieving their targets, particularly for specialty trainees (figure 5 and figure 7).

Areas for improvement:

In 2019/20, all specialties saw a reduction in the achievement of their Theatre QI target compared with the previous year – most notably Paediatric Surgery 39% (2019/20) met the Theatre QI of 3 sessions [59% 2018/19].

Achievement for the theatre and outpatient clinic QIs is generally lower for Core (figures 6 and 8), compared with specialty trainees (figure 5 and 7) – with an exception for core trainees in OMFS placements, 99% (2018/19) [70% (2019/20)].

In 2018/19, for OMFS, the minimum number of half-day consultant supervised theatre sessions a trainee should attend per week increased from 3 to 4 sessions. There was a reduction in achieving the OMFS target (2017/18 - 86% [3 sessions]; 2018/19 - 64%, 2019/20 - 57% [4 sessions, figure 5]).

In 2019/20, for Neurosurgery (Core training), the minimum number of half-day consultant supervised theatre sessions a trainee should attend per week increased from 1 to 3 sessions. In 2018/19, for Neurosurgery, 54% (Core training) and 100% (ST1/2) achieved a 1 session target. A reduction is seen after the target increased. In 2019/20, for Neurosurgery 11% (Core training) and 12% (ST1/2) achieved the new 3 session target.

Figure 8 shows that only 24% (2018/19) and 18% (2019/20) of Core trainees in Otolaryngology (ENT) placements are meeting the clinic QI target (3 sessions). Overall for Core trainees, 18% (2018/19) and 24% (2019/20) did not attend any clinic sessions per week.

Figure 5: Achievement of Theatre QI 100% 90% 80% 70% 60% 50% 2018/19 40% **2019/20** 30% 20% 10% 0% OMFS Paeds Plastic T&O NS Cardio ENT GS (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+)

100% 90% 80% 70% 60% 50% 2018/19 40% **2019/20** 30% 20% 10% 0% Core - Co Cardio ENT GS NS OMFS Paeds Plastic T&O

Figure 7: Achievement of Clinic QI

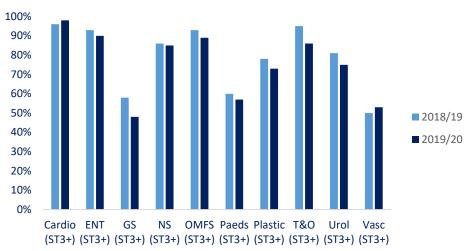


Figure 8: Achievement of Clinic QI

Core training

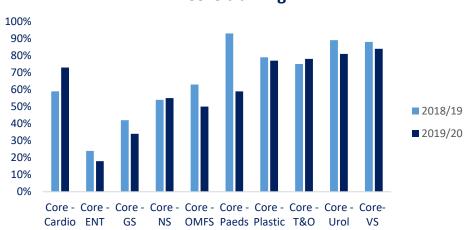


Figure 9 shows the results for regular attendance at emergency theatre sessions. This continues to be an area for improvement in some specialties. In previous surveys, a concern was that Core trainees reported attendance emergency theatre sessions was not regular. There is a specific target to attend one emergency session per week for Core placements in some specialties (QI 10 and QI 12).

Figure 9: Emergency Theatre QI **Core training** 100% 90% 80% 70% 60% 50% 2018/19 40% **2019/20** 30% 20% 10% 0% Core -Core -Core -Core -Core -Core -Core - Core - Core -Core -Core-OMFS Paeds Plastic T&O Total Cardio ENT GS NS Urol

Workplace-based assessments

Example of good practice

QI 6 requires that all surgical trainees should have the opportunity to complete a minimum of 40 workplace-based assessments (WBAs) per year, which equates to approximately one per working week. The target of >=1 per working week was achieved or exceeded by most trainees (figure 10). 91-100% (2018/19) and 83-100% (2019/20) of trainees enter an assessment onto the ISCP within a month. 91-100% (2018/19) and 77-100% (2019/20) of trainees had sufficient support from their supervisors to enable them to complete the workplace-based assessments. In 2019/20, a year of significant pressure due to a pandemic, the results are mostly positive. A possible limitation is that we are unable to show how non-respondents would have responded (or if there is a non-response bias).

Figure 10: Survey outcomes that demonstrate good practice in the area of workplace-based assessments

	On average, how many WBAs did you complete each week? (>=1)									
Core	Cardio	Cardio	ENT	ENT	GS	GS	NS	NS		
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
98%	100%	98%	100%	100%	100%	97%	100%	91%		
97%	100%	100%	100%	98%	97%	97%	88%	94%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
	96%	96%	96%	99%	N/A	98%	N/A	98%		
	100%	97%	95%	97%	100%	95%	100%	97%		

On aver	On average, how long after the event was the assessment undertaken and entered onto the									
	ISCP? (<=1 month)									
Core	Cardio Cardio ENT ENT GS GS NS NS									
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
96%	100%	95%	100%	97%	93%	94%	100%	91%		
94%	100%	100%	100%	95%	94%	95%	83%	93%		
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc		
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)		
	93%	93%	96%	97%	N/A	94%	N/A	95%		
	92%	98%	86%	98%	91%	91%	84%	95%		

Was the	Was there sufficient support from your supervisors to enable you to complete the workplace-										
	based assessments? (YES)										
Core	Cardio Cardio ENT ENT GS GS NS NS										
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
93%	100%	95%	82%	98%	91%	96%	96%	92%			
92%	100%	100%	100%	97%	95%	96%	100%	96%			
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc			
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
	98%	96%	93%	98%	N/A	97%	N/A	99%			
	98%	93%	95%	97%	77%	96%	100%	96%			

Simulation training

Area for improvement

QI 9 requires that trainees in surgery should have the opportunity to receive simulation training where it supports curriculum delivery. Core and trainees at level ST1/2 report more simulation training than the specialties. There is variation between the specialties in availability of technical skills. The value is lower in Neurosurgery when compared with the other specialties. It is evident that human factors simulation training is an area for improvement for most specialties.

Figure 11: Survey outcomes that demonstrate availability of simulation training

	In the past year, have you received technical skills simulation training? (This could include cadaveric and animal tissue, task trainers, laparoscopic boxes and high fidelity simulators).										
				(YES)							
Core	Cardio	Cardio Cardio ENT ENT GS GS NS NS									
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
87%	60%	88%	73%	92%	84%	65%	64%	58%			
83%	83%	65%	95%	78%	88%	56%	65%	50%			
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc			
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)			
	66%	78%	64%	69%	N/A	70%	N/A	81%			
	55%	69%	55%	51%	77%	54%	83%	71%			

In the past year, have you received non-technical skills/human factors simulation training? (This could include ward or theatre-based communication skills training, case-based scenarios, patient case conferences and team training). (YES)								
Core	Cardio (ST1-2)	Cardio (ST3+)	ENT (ST1-2)	ENT (ST3+)	GS (ST1-2)	GS (ST3+)	NS (ST1-2)	NS (ST3+)
70%	80%	65% 54%	55% 75%	51%	73%	49%	35% 67%	48%
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)
	66%	74%	56%	29% 49%	N/A 54%	53%	N/A 83%	58%

Presence of other trainees

Area for improvement

22% (2018/19) and 21% (2019/20) of Core trainees reported a frequent loss of training opportunities due to the presence of another trainee or fellow. Each specialty also reported this issue.

25%
20%
15%
10%
Core Cardio ENT GS NS OMFS Paeds Plastic T&O Urol Vasc (Total) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+)

Figure 12: Other trainees/fellows impact on training ('Yes')

Formal teaching

Area for improvement

QI 2 requires that trainees in surgery should have at least 2 hours of facilitated formal teaching each week (on average) (For example, locally provided teaching, regional meetings, annual specialty meetings, journal clubs and x-ray meetings). A concern is that at least 2 hours of facilitated formal teaching was not achieved across the majority of the specialties (2018/19 and 2019/20). QI 2 will be updated for 2021 to widen the range of examples available for formal teaching. Previous survey reports have suggested that trainees were not considering the full range of training options available to them in their responses. The challenges experienced during a pandemic are likely to have led to new modes of delivery for formal teaching e.g. webinars, virtual learning platforms and we will continue to monitor this QI.

100%
90%
80%
70%
60%
50%
40%
30%
2018/29

2018/29

2019/20

Core Cardio ENT GS NS OMFS Paeds Plastic T&O Urol Vasc (Total) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+)

Figure 13: Achievement of Formal Teaching QI

Quality of experience

Figure 14: Survey outcomes in the area of quality of consultant teaching and training

Examples of good practice

How w	How would you rate the quality of consultant teaching & training in the operating theatre? (GOOD or VERY GOOD)								
Core	Cardio (ST1-2)	Cardio (ST3+)	ENT (ST1-2)	ENT (ST3+)	GS (ST1-2)	GS (ST3+)	NS (ST1-2)	NS (ST3+)	
75% 75%	80%	89%	72% 95%	91%	84%	87% 85%	83%	84% 77%	
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc	
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	
	88%	89%	88%	90%	N/A 91%	82%	N/A 100%	92%	

Areas for improvement

The quality of consultant teaching on ward rounds and in outpatients are mainly areas for improvement but the results vary between specialties.

How would you rate the quality of consultant teaching and training on ward rounds? (GOOD or VERY GOOD)								
Core	Cardio (ST1-2)	Cardio (ST3+)	ENT (ST1-2)	ENT (ST3+)	GS (ST1-2)	GS (ST3+)	NS (ST1-2)	NS (ST3+)
55% 55%	20%	61%	63%	65%	53% 62%	70%	70%	62% 73%
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)
	68% 73%	60%	58%	71%	N/A 77%	58%	N/A 100%	64% 72%

How wo	How would you rate the quality of consultant teaching and training in outpatients? (GOOD or								
VERY GOOD)									
Core	Cardio	Cardio	ENT	ENT	GS	GS	NS	NS	
	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	
69%	60%	71%	72%	76%	75%	69%	77%	80%	
67%	53%	77%	90%	85%	75%	70%	87%	66%	
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc	
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	
	74%	74%	74%	84%	N/A	63%	N/A	74%	
	77%	66%	80%	82%	83%	62%	100%	80%	

There is concern that trainees in their initial training years did not regularly get to see new patients in clinic (outpatients) with values of 83% (2018/19) and 77% (2019/20) for Core. The results are better for specialty trainees.

100% 90% 80% 70% 60% 50% 2018/19 40% **2019/20** 30% 20% 10% 0% NS NS OMFS Paeds Plastic T&O (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+)

Figure 15: New patients in clinic

Overall satisfaction

The survey monitors overall satisfaction in training with a question "Would you recommend this attachment to other trainees at the same level?"

Area for improvement

Satisfaction is less amongst core trainees (figure 16). This has also been seen in other surveys (GMC 2019). There is variation in satisfaction between placement specialties. Satisfaction appears to be higher for ST1/2 trainees compared to uncoupled core but the number of ST1/2 trainees is much smaller. There are currently a number of run through training pilots that will explore trainee satisfaction in more detail.

Figure 16: Survey outcomes that demonstrate the overall level of satisfaction

	Would you recommend this attachment to other trainees at the same level? (YES)								
Core	Cardio (ST1-2)	Cardio (ST3+)	ENT (ST1-2)	ENT (ST3+)	GS (ST1-2)	GS (ST3+)	NS (ST1-2)	NS (ST3+)	
81%	100%	95%	73%	95%	82%	90%	87% 94%	93%	
OMFS	OMFS	Paeds	Plastic	T&O	Urol	Urol	Vasc	Vasc	
(ST1-2)	(ST3+)	(ST3+)	(ST3+)	(ST3+)	(ST1-2)	(ST3+)	(ST1-2)	(ST3+)	
	98%	91%	94%	94%	N/A 83%	90%	N/A% 100%	95%	

Less than fulltime

Following a JCST policy statement on 'Less than fulltime' (JCST 2017) we continue to monitor this area. There is variation amongst the specialties in interest to work less than fulltime (LTFT).

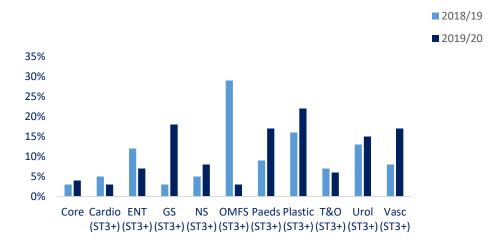
30%
25%
20%
15%
10%
Core Cardio ENT GS NS OMFS Paeds Plastic T&O Urol Vasc (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+) (ST3+)

Figure 17: LTFT training interest

Area for improvement

Small numbers who replied "yes" they had considered LTFT went on to choose less than fulltime training (3-29%).

Figure 18: LTFT Trainees



Recommendations and next steps

Our recommendations are mainly in the areas of training opportunities, curricula and new modes of delivery:

- The annual report looks at the training/survey year overall and the period covered is mainly outside of the pandemic. SAC Liaison Member monitoring and reporting occurs as part of the regular contact with the Local Office/Deanery. It is recommended that the LMs continue to monitor the latest survey results via the ISCP survey reporting tool and report their findings. LMs will use data from mixed sources to look at training. We highlight the important role of LMs at this particularly challenging time.
- A formal teaching QI was not achieved across the majority of the specialties. The impact of a Covid-19 pandemic is leading to innovation and changes to how we work. The SACs have an advisory role and it is recommended that they continue to encourage the development of new technologies e.g. webinars, virtual learning platforms and to raise awareness, including specialty association teaching and education programmes. An aim is to increase understanding of all the methods of learning that are available to trainees.
- In 2019/20, all specialties saw a reduction in the achievement of their Theatre QI target compared with the previous year most notably Paediatric Surgery. The pandemic is impacting on operative numbers (elogbook numbers are being looked at separately by each SAC). It is recommended that surgery pursues the opportunities provided by simulation for training outside of the operating theatre to ensure that simulation is delivered to its full potential. This is an area being explored by the IST project (due to report in 2021 in independent evaluations). The JCST survey will continue to monitor a QI for simulation.
- Human factors training (non-technical surgical skills) has an important role in surgical training but a concern is noted that it is not more widely available for trainees.
- In 2021 new curricula for all surgical specialties will be implemented. The survey shows good engagement in recording WBAs via ISCP and we will continue to monitor this. The new curricula are outcomes based and WBAs will be according to need rather than number. A new Multiple Consultant Report will be the main assessment tool. There are plans to refine the survey questions for 2021/22 so that they align with new curricula and new QIs for 2021.
- QIs that provide quantification targets that are not covered by the new curricula have been removed for 2021. The theatre QI, clinic QI and formal teaching QI will remain as targets for

curricula delivery and their usefulness will be kept under review. The new curricula provides opportunity to explore if there are other methodologies that may be better than a survey for measuring some areas e.g. elogbook and indicative numbers of procedures.

- We are mindful that trainees are under significant pressure. It is recommended that we shorten future surveys but balance the need to retain some questions for a year-on-year analysis.
- As with all research, a survey methodology has some limitations. An example is that there is some inflexibility to explore in depth the many factors that impact on quantification of QIs e.g. theatre QI, clinic QI. These factors include:
 - o LTFT trainees (if a specialty has a higher proportion of LTFT trainees)
 - o placements with less/no surgery e.g. ITU placements.

Figure 18 shows the proportion of LTFT respondents for each survey. It is recommended that this is considered alongside the results for the theatre QI (figures 5 and 6); clinic QI (figures 7 and 8) and formal teaching QI (figure 13) so there is some context for the findings.

- CSTAC introduced a new QI is 2019/20 for ITU experience (to take part in four consultant-led ward rounds each week). It is suggested that a corresponding survey question is introduced to support the monitoring of this QI.
- We report on trainees who are registered as specialty trainees (ST1/ST2) separately from uncoupled core (CT1/CT2). It is suggested that future developments (e.g. new curricula, new training pathway pilots) are used to help us determine the best option for reporting these results (eg. separately or combined ST1/ST2/CT1/CT2 together).

Conclusion

A Covid-19 pandemic during 2019/20 impacted on healthcare. This annual survey has its limitations, including some inflexibility with timing and questions to specifically explore the pandemic. This report looks at training overall and the next annual survey will provide a further year-on-year analysis to look for trends. A need to maximise training opportunities, during and after the pandemic, has been widely highlighted (NHSW, NIMDTA, NES, HEE 2020; JCST, ASiT, BOTA COPSS 2020). Developments relating to new technologies and new modes of training delivery will be of particular relevance at this challenging time — including the use of simulation training.

The new curricula for all surgical specialties will be implemented in 2021. There are plans to refine the survey questions so that they align with the new curricula and QIs for 2021 (JCST 2021).

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Appendix A - JCST trainee survey questions 2018/19 and 2019/20

Question text	Answer options
Was there usually a post-acute take consultant ward round?	Yes/No/N/A
Did you routinely participate in pre-operative briefings with use of the WHO checklist or equivalent?	Yes/No
Were you only asked to undertake unsupervised procedures in which you had been trained?	Yes/No
Were you given appropriate responsibility for your level of training?	Yes/No
Are any elective sessions combined with on call commitment such that the elective sessions are frequently compromised?	Yes/No/N/A
Were you regularly required to undertake routine clinical work that prevented the acquisition of new skills?	Yes/No
Did you regularly miss training opportunities in order to provide cover for absent colleagues or fill rota gaps?	Yes/No
Did the clinical work intensity allow sufficient time for consultant teaching and training?	Yes/No
Was there enough clinical work in the unit to support the number of trainees working there?	Yes/No
In this post, were you personally subjected to persistent behaviour by others that undermined your professional confidence or self esteem?	Yes/No
Have you ever considered training less than fulltime?a) If yes to above, did you decide to train less than fulltime?b) If no to a) above, why did you decide not to train	Yes/No Yes/No Insert text
	Was there usually a post-acute take consultant ward round? Did you routinely participate in pre-operative briefings with use of the WHO checklist or equivalent? Were you only asked to undertake unsupervised procedures in which you had been trained? Were you given appropriate responsibility for your level of training? Are any elective sessions combined with on call commitment such that the elective sessions are frequently compromised? Were you regularly required to undertake routine clinical work that prevented the acquisition of new skills? Did you regularly miss training opportunities in order to provide cover for absent colleagues or fill rota gaps? Did the clinical work intensity allow sufficient time for consultant teaching and training? Was there enough clinical work in the unit to support the number of trainees working there? In this post, were you personally subjected to persistent behaviour by others that undermined your professional confidence or self esteem? Have you ever considered training less than fulltime? a) If yes to above, did you decide to train less than fulltime?

12	Please indicate the number of surgical staff in your team (including yourself).	
	Foundation Trainees:	0, 1, 2-3, 4-5, >5
	Core Surgical Trainees:	0, 1, 2-3, 4-5, >5
	ST3/4:	0, 1, 2-3, 4-5, >5
	ST5/6:	0, 1, 2-3, 4-5, >5
	ST7/8:	0, 1, 2-3, 4-5, >5
	Staff grade/trust doctor/associate specialist or similar:	0, 1, 2-3, 4-5, >5
	Nationally appointed fellow:	0, 1, 2-3, 4-5, >5
	Other type of fellow:	0, 1, 2-3, 4-5, >5
	Consultants	0, 1, 2-3, 4-5, >5
	Other (specify):	Insert text
13	In an average week (excluding leave, on-call,	
	compensatory rest)	
	a) How many consultant supervised theatre	0/1/2/3/4/5/>5
	sessions did you attend (including elective and	
	emergency/CEPOD theatre work)? (½ day list = 1	
	session, all day list = 2 sessions)	
	b) How many consultant supervised outpatients	0/1/2/3/4/5/>5
	sessions did you attend?	
	c) On average, how many workplace-based	0/1/2/3/4/5/>5
	assessments did you complete each week?	
	d) On average, how long after the event was the	At the same time/The same
	assessment undertaken and entered onto the	day/The same week/2-4 weeks
	ISCP?	later/More than 1 month later
	e) Was there sufficient support from your	Yes/No
	supervisors to enable you to complete the	
4.4	workplace-based assessments?	
14	In an average week, did you receive the following types of teaching?	For each option:
	Local departmental teaching:	Yes 0-14 mins/Yes 15-29
	Regional teaching:	mins/Yes 30-59 mins/Yes 1-2
	Journal clubs:	hours/Yes >2 hours/No/N/A
	X-ray meetings with an educational component:	, , ,
	MDTs with an educational component:	
15	During an average week, how many total hours of	0/1/2/3/4/5/>5
	formal teaching did you receive?	
16	Were you able to attend emergency theatre regularly	Yes/No/N/A
	(e.g. CEPOD, trauma lists)?	
17	Did the presence of another fellow or trainee	Yes/No
	frequently compromise/compete for your learning	
	opportunities in this post?	
18	In the past year, have you received technical skills	Yes/No/N/A
	simulation training? (This could include cadaveric and	
	animal tissue, task trainers, laparoscopic boxes and	
	high fidelity simulators).	
19	Was this through (tick all applicable options):	
	a) Your regional teaching programme?	Yes/No
		Yes/No

b) A formal course organised by the training programme? c) Locally organised training, either as formal simulation training or informal case-based scenario training during your working practice, within the hospital? d) Recommended courses? Did you have access to a skills centre, skills room or take-home equipment for practice: a) During normal working hours? b) Outside of normal working hours? If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could include word on the other hospital page 1 and	s]
simulation training or informal case-based scenario training during your working practice, within the hospital? d) Recommended courses? 20 Did you have access to a skills centre, skills room or take-home equipment for practice: a) During normal working hours? b) Outside of normal working hours? Yes/No/N/A 21 If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? 22 In the past year, have you received non-technical skills/human factors simulation training? (This could	s]
practice, within the hospital? d) Recommended courses? Did you have access to a skills centre, skills room or take-home equipment for practice: a) During normal working hours? b) Outside of normal working hours? Yes/No/N/A If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	s]
d) Recommended courses? [Can select multiple option] Did you have access to a skills centre, skills room or take-home equipment for practice: a) During normal working hours? Yes/No/N/A b) Outside of normal working hours? Yes/No/N/A If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	s]
Did you have access to a skills centre, skills room or take-home equipment for practice: a) During normal working hours? b) Outside of normal working hours? Yes/No/N/A If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	<u>s]</u>
take-home equipment for practice: a) During normal working hours? b) Outside of normal working hours? If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	
a) During normal working hours? b) Outside of normal working hours? If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	
b) Outside of normal working hours? If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	
21 If yes to either part of the question above, did you have a mentor to cover induction on equipment and to monitor progress? 22 In the past year, have you received non-technical skills/human factors simulation training? (This could	
have a mentor to cover induction on equipment and to monitor progress? In the past year, have you received non-technical skills/human factors simulation training? (This could	
to monitor progress? 22 In the past year, have you received non-technical skills/human factors simulation training? (This could	
skills/human factors simulation training? (This could	
include ward or theatre-based communication skills	
training, case-based scenarios, patient case conferences and team training).	
23 Was this through (tick all applicable options):	
a) Your regional teaching programme? Yes/No	
b) A formal course organised by the training Yes/No	
programme?	
c) Locally organised training, either as formal Yes/No	
simulation training or informal case-based	
scenario training during your working practice, within the hospital?	
d) Recommended courses? Yes/No	
[Can select multiple option	s]
How would you rate the quality of consultant teaching Very poor / Poor / Satisfact	ory
& training on ward rounds (including pre-op cases)? / Good / Very good	
How would you rate the quality of consultant teaching Very poor / Poor / Satisfact	ory
& training in outpatients? / Good / Very good	
How would you rate the quality of consultant teaching Very poor / Poor / Satisfact	ory
& training in the operating theatre? / Good / Very good	
27 In outpatients did you regularly see new patients? Yes/No	
Did you experience any difficulties relating to the geographical location of this training post?	
29 Did you experience any difficulties with access to Yes/No/N/A	
administrative/secretarial support in this training	
post?	
30 Did you receive the equivalent of half a day per week Yes/No/N/A	
in your timetable to allow for personal study, audit	
and research?	
31 Would you recommend this attachment to other Yes/No	
trainees at the same level?	

Appendix B

Quality Indicator (QI) standards for 2018/19 and 2019/2020

QIs for Specialty Trainees

Theatre QI – the minimum number of half-day consultant supervised theatre sessions a trainee should attend per week.

Clinic QI – the minimum number of outpatient clinics a trainee should attend per week.

Teaching QI – the minimum number of hours of formal teaching a trainee should receive per week.

WBA QI – the minimum number of WBAs a trainee should complete per year.

Specialty	Theatre QI	Clinic QI	Teaching QI	WBA QI
Cardiothoracic Surgery	4	1	2	40
General Surgery	3	2	2	40
Neurosurgery (ST1-2)	-	-	2	40
Neurosurgery (ST3+)	3	1	2	40
Oral & Maxillofacial Surgery	4	2	2	40
Otolaryngology (ENT)	4	3	2	40
Paediatric Surgery	3	2	2	40
Plastic Surgery	3	2	2	40
T&O	3	2	2	40
Urology	3	2	2	40
Vascular Surgery	3	2	2	40

QIs for Core Trainees

Generic Core Surgery QI 10 for trainees in all placements stipulates that trainees should have the opportunity to attend five consultant-supervised sessions of 4 hours each week. There is variation depending on the specialty of placement the trainee is undertaking:

Theatre QI – the recommended number of operating sessions a trainee should attend per week. **Clinic QI** – the recommended number of outpatient clinics a trainee should attend per week. **Teaching QI** – the minimum number of hours of formal teaching a trainee should receive per week. **WBA QI** – the minimum number of WBAs a trainee should complete per year.

Specialty of Core Placement	Theatre QI	Clinic QI	Teaching QI	WBA QI
Cardiothoracic Surgery	3	1	2	40
General Surgery	3	2	2	40
Neurosurgery	1 (2018/19) 3 (2019/20)	1	2	40
Oral & Maxillofacial Surgery	3	3	2	40
Otolaryngology (ENT)	3	3	2	40
Paediatric Surgery	3	1	2	40
Plastic Surgery	3	1	2	40
T&O	3	1	2	40
Urology	3	1	2	40
Vascular Surgery	3	1	2	40