Editorial

Recruitment to anaesthesia training posts during the COVID-19 pandemic and beyond

C. Carey,¹ T. C. E. Gale^{2,3} (b) and C. R. Evans⁴

1 Consultant, Department of Anaesthesia, University Hospitals Sussex NHS Trust, Sussex, UK

2 Consultant, Department of Anaesthesia, University Hospitals Plymouth NHS Trust, Plymouth, UK

3 Professor, Peninsula Medical School, University of Plymouth, Plymouth, UK

4 Consultant, Department of Anaesthesia, Cardiff and Vale University Health Board, Cardiff, UK

Correspondence to: C. Carey Email: chris.carey1@nhs.net Accepted: 21 February 2022 Keywords: curriculum; recruitment; training; well-being This editorial accompanies an article by Subramaniam et al., *Anaesthesia* 2022; **77**: 538-46. Twitter: @chris_carey; evans_caroliner

COVID-19 has brought disruption to medical training across the globe. Anaesthetists in training have experienced redeployment to support other services, in particular critical care, along with a reduction in surgical activity affecting training opportunities. There have been changes necessitated to examinations and recruitment with the move to online platforms for these high-stakes assessments. Across six continents, trainees and trainers have reported reduced learning opportunities, changes to rotations affecting trainee progression and diminished job prospects internationally [1]. In the UK, anaesthetists in training reported a 65% reduction in satisfactory training opportunities in 2020 compared with 2019. While exposure to intensive care medicine increased and patient numbers in obstetric anaesthesia were unaffected, there were low numbers of emergency surgical cases, reduced case mix and limited departmental teaching [2]. The structure of anaesthetic training also changed in the UK with transition to a new curriculum introduced by the Royal College of Anaesthetists (RCoA) in August 2021. This included moving competitive entry to higher specialty training rotations from specialty training year 3 (ST3) to specialty training year 4 (ST4)[3].

In this issue, Subramaniam et al. report on the results of a survey regarding ST3 recruitment for posts commencing in August 2021 [4]. It is clear that this process, and recruitment in general, has caused a significant degree of stress and unhappiness for anaesthetists in training. In this editorial, we look at some of the recent challenges to anaesthetic recruitment and the plans for future campaigns.

In August 2021, there was increased competition during the national recruitment process for ST3 posts for a number of reasons. First, potential applicants no longer had to complete all parts of the Fellow of the Royal College of Anaesthetists (FRCA) Primary examination before ST3 application due to difficulties with the delivery and scheduling of examinations during the COVID-19 pandemic [5]. Second, there was a loss of opportunities to gain experience working overseas between core and higher training due to travel restrictions. Third, potential applicants preferred to obtain a higher specialty training post before the curriculum transition. Finally, there was an increase in the number of applications from international medical graduates following the UK Government placing all medical specialties on the 'shortage occupation list'. Before discussing the recruitment process itself, we will consider the factors that led to the changes that occurred with the curriculum and the response to the pandemic.

The 2021 curriculum

A new anaesthetic curriculum has been developed, in line with all medical specialties, following a mandate from the General Medical Council (GMC). The 2021 curriculum started development in May 2017 following publication of two GMC documents outlining generic professional capabilities in medical training and their introduction into curricula [6-8]. A review of the 2010 curriculum and training programme was undertaken as part of this process. One source of information considered was the morale and welfare survey published by the RCoA, which included feedback from more than 2300 anaesthetists in training [9]. Themes included: excessive assessment burden; pressure to pass examinations; and frequent rotations between different units. The requirement to pass the Primary FRCA examination before recruitment to ST3 was also problematic. General Medical Council data suggested that unsuccessful outcomes in the annual review of competency progression (ARCP) were awarded to an average of around 40% of Core Anaesthetic Trainees at the end of CT2, mostly due to delays in obtaining the Primary FRCA examination [10]. A large proportion of anaesthetists in training were unable to complete the 7-year training programme within the stated timeframe, something that contributed to stress and low morale. A decision was made to change the structure of the training programme to a model that provided 3 years of core anaesthetic training, termed Stage 1. The Acute Care Common Stem (ACCS) programme was extended in the same way. The benefits of this were twofold: first, to allow greater experience of clinical work within the Core Training programme, and second to allow greater opportunity to complete the Primary FRCA examination. There was a consequent reduction in the duration of Higher Specialist Training programmes from 5 to 4 years.

Moving Higher Specialist Training entry from ST3 to ST4 required a gap in recruitment as there was neither training capacity nor funding to immediately introduce additional recruitment at ST4 level when these posts were already occupied by the previous cohort of ST3s. The gap in recruitment was originally due to occur in August 2021 [11]. However, the impact of the pandemic on the 2020 ST3 recruitment campaign led to a 12-month delay. A transition plan was implemented to enable those who had previously completed a 2-year Core Training programme but not obtained an ST3 post to complete Stage 1 of the new curriculum in order to apply in the future at ST4. Guidance has been published for these additional requirements to be completed over a 12-month period, termed 'CT3 top-up training' [12].

Impact of the COVID-19 pandemic

The national lockdown that began in March 2020 meant that ST3 interviews for August 2020, which had been due to be

the final August intake at ST3, could not take place. As such, this process was compromised and represented a significant departure from the usual selection methodology. Face-to-face interviews could not take place and many specialties, including anaesthesia and intensive care medicine, had to resort to using unverified portfolio selfassessment scoring to rank applicants for the national selection process. An additional year of recruitment to anaesthesia ST3 posts for August 2021 was therefore agreed.

The COVID-19 lockdown of spring 2020 also made it impossible to deliver examinations in the usual format. All examinations in anaesthesia, intensive care medicine and pain medicine were suspended between the end of March and mid-August 2020. Processes were quickly established to allow remote online conduct of all parts of the FRCA which began at the end of August 2020. Despite the prompt resolution, the missed examinations created delays in training progression and a backlog of candidates. This factor, coupled with the capacity limitations of online systems, necessitated a process of prioritisation for sittings and resulted in further delays for some candidates.

In the summer of 2020, the GMC introduced a process of derogations to support progression of doctors in all specialties following the disruption that had occurred [5]. Derogations to clinical and academic milestones were introduced for the anaesthetic training programme, including the ability to progress to ST3 with completion of only the Primary FRCA multiple choice question (MCQ) written paper rather than the full examination. This was introduced as a supportive measure to ensure that anaesthetists in training did not have their career progression delayed as a consequence of the cancellations of examinations. However, this also greatly increased the number of eligible candidates for the August 2021 recruitment round. Unpublished data from the Anaesthesia National Recruitment Office indicates that 456 candidates had only completed the Primary FRCA MCQ at the time of interview. This additional cohort accounted for the great majority of the increased number of ST3 applicants.

The recruitment process

There has been no face-to-face selection for postgraduate training posts for medical specialties in the UK since the outbreak of COVID-19, and a range of alternative processes has been put in place. The Medical and Dental Recruitment and Selection Programme Board oversee the practice and quality assurance of national recruitment processes for all medical specialties. They have produced guidelines and protocols that specialties must adhere to, and have agreed

a digital-first policy which remains in place for 2022 recruitment due to the continuing threat of COVID-19 to trainees, assessors and recruitment support staff involved with selection. Other bodies involved with accrediting training in North America have also mandated 'virtual-only' recruitment processes during the pandemic [13]. In the UK, there has been increased reliance on the use of portfolio assessment and the multi-specialty recruitment assessment using online digital platforms as part of national selection processes for many specialties. In 2021, these methods were supplemented with an online single interview, although multi-station online interviews were not possible. There is increasing evidence of the utility of various webbased platforms being used globally for multi-station interviews, with evidence of multiple mini-interviews being successfully implemented in various countries for medical school admissions processes [14, 15].

Subramaniam et al. have highlighted the depth of feeling around recent recruitment and training issues during the COVID-19 pandemic from their trainee survey conducted in collaboration with the Association of Anaesthetists [4]. Questions were drafted and modified from the UK national Foundation Year 2 Career Destinations Reports, and data analysed from 765 respondents of which 536 (70%) had recently applied for ST3 posts through the national UK selection process. This survey raises multiple concerns, including: shortlisting; the online single interview process; risk of stress and burnout of trainees at this stage of training; and doubts concerning their future eligibility to apply for ST4 posts if they were unsuccessful at ST3 entry. The authors included questions on training and career intentions and reported approximately 80% of those respondents who had not secured an ST3 post were intending to work in 'CT3 top-up' posts or non-training fellow posts for the next 12 months, although some were looking at entry to other medical specialties or even leaving the profession altogether.

Similar work during the pandemic in Australia identified the particular concerns of junior doctors with respect to redeployment, examination uncertainty, workforce bottleneck and potential failure of career progression. The authors cited common tensions between local workforce demands and the requirements of training and accreditation bodies [16]. In a longitudinal narrative inquiry using multiple multidimensional transitions theory, which takes account of the dynamic nature of transitions, Gordon et al. explored doctors' well-being during transitions due to the pandemic across the career continuum and multiple specialties in Scotland [17]. Doctors experienced multiple transitions during the pandemic in

various contexts including workplace, role, home-life and education. From their analyses, the authors identified three key aspects which had a marked influence on doctors' social and cultural well-being – 'being heard, being valued and being supported'. It is clearly important that medical educators and training bodies involved with designing and implementing training programmes and supporting trainees during transitions do everything possible to make sure that anaesthetists in training are 'heard, valued and supported'.

The UK Anaesthetics National Recruitment process has been founded on a three-station selection centre model that assesses applicants' aptitude through assessment of relevant attributes and non-technical skills. This model has been shown to have high reliability, face and content validity as well as evidence of good predictive validity in terms of future clinical performance and outcomes at annual appraisal [18, 19]. The RCoA has lobbied the Medical and Dental Recruitment and Selection Programme extensively to return to the three-station faceto-face selection centre model or, as a minimum, increase the number of interview stations utilised at an online digital interview. This would allow more facets of a candidates' ability to be assessed at multiple stations (increasing validity), with more independent judgements of a candidates' ability via an increased number of assessors (increased reliability). The use of multiple digital stations for ST4 recruitment in 2022 has been proposed as a compromise given the continuing inability to run face-toface interviews. Moving to online virtual interviews not only allows opportunities for innovation but also provides challenges due to technical aspects and limited ability to build rapport between assessors and candidates [20, 21].

Anaesthesia is a high-pressure specialty where practitioners are required to work under pressure in often time-pressured and acutely challenging situations [22]. Previous work validating individual stations used in the anaesthesia selection process has shown that certain stations (which involve simulated work-related tasks) perform better than others at assessing how applicants respond to stressful situations [23]. If the Medical and Dental Recruitment and Selection Programme is committed to a digital-first recruitment policy beyond 2022, then more work will be needed to design appropriate stations to assess how applicants work under pressure in these time-pressured or acutely challenging tasks, on a virtual interview platform.

It is clear that a considerable amount of uncertainty and unhappiness remains for those who were unsuccessful in the August 2021 recruitment campaign, which is the subject of the survey by Subramaniam al. The changes to the curriculum are intended to create significant long-term benefits but the transition process has been extremely challenging for many anaesthetists in training, especially those caught between core and higher training programmes. Furthermore, the disruption to training as a result of the COVID-19 pandemic has only served to heighten anxieties, something seen across all medical specialties.

There is also a clear need to increase training numbers in anaesthesia in the UK based on RCoA census data [24]. The RCoA is actively pursuing this through its 'Anaesthesia -Fit for the future' campaign [25]. This campaign is looking at the anaesthesia workforce in its entirety, including data on staffing shortages highlighted by the census. The RCoA has established a dialogue with the UK's Statutory Education Bodies and Department of Health and Social Care emphasising the requirement for additional higher specialty training posts in future recruitment rounds. It will also continue to lobby the Medical and Dental Recruitment and Selection Programme to ensure the highest possible standards of practice in recruitment reflect the concerns expressed by its membership. Additionally, the Recruitment Committee of the RCoA includes representation from anaesthetists in training who are actively engaged with representing trainees' interests and contributing to decisions on future recruitment rounds. It is extremely important that committees involved with training and recruitment for the RCoA work closely with trainee networks and trainers responsible for delivering the new curriculum, and do everything possible to ensure that trainees are 'heard, valued and supported'. For the future, there will be a collective responsibility from the anaesthetic profession to support anaesthetists in training and those currently not in training posts who wish to apply for higher specialty training programmes in the future. The RCoA will also work with those who plan and run national recruitment processes to ensure that selection to anaesthesia training posts is as fair and robust as possible.

Acknowledgements

CC has a secondment to Health Education England as an Associate Postgraduate Dean and is a RCoA Council member and Chair of the RCoA Education, Training and Examinations Board. TG is past Chair of the Recruitment Committee for the RCoA and member of the MDRS Recruitment Group. CE is Chair of the Recruitment Committee and Bernard Johnson Advisor for Less Than Full-Time Training, RCoA and Deputy Director of Secondary Care for Health Education and Improvement Wales. The views expressed in this article are the authors' own. No other competing interests declared.

References

- Sneyd JR, Mathoulin SE, O'Sullivan EP, et al. Impact of the COVID-19 pandemic on anaesthesia trainees and their training. *British Journal of Anaesthesia* 2020; **125**: 450–5.
- 2. Pal S, Winslow L, Perritt B. Mitigating the impact of COVID-19 on training. *Anaesthesia News* 2020; 25. https://anaesthetists.org/ Home/Resources-publications/COVID-19-guidance/Mitigating-the-impact-of-COVID-19-on-training (accessed 21/02/2022).
- 3. Royal College of Anaesthetists 2021 curriculum for a CCT in anaesthetics. 2021. https://www.rcoa.ac.uk/training-careers/ training-anaesthesia/2021-anaesthetics-curriculum (accessed 15/01/2022).
- Subramaniam J, Durrant F, Edwardson S, et al. Recruitment to higher specialty training in anaesthesia in the UK during the COVID-19 pandemic: a national survey. *Anaesthesia* 2022. Epub 21 January. https://doi.org/10.1111/anae.15660
- General Medical Council. Temporary derogations to curriculum requirements to support Annual Review of Competence Progression (ARCP) where training has been disrupted by coronavirus (COVID-19). Updated April 2021. https://www.gmcuk.org/-/media/documents/temporary-approval-of-derogationfor-the-annual-review-of-competence-progression--arcp--apr-8 2838951.pdf(accessed 25/01/2022).
- General Medical Council. Generic professional capabilities framework. 2017. https://www.gmc-uk.org/-/media/documents/ generic-professional-capabilities-framework--2109_pdf-70417127. pdf(accessed 25/01/2022).
- General Medical Council. Excellence by design: standards for postgraduate curricula. 2017. https://www.gmc-uk.org/-/media/ documents/excellence-by-design---standards-for-postgraduatecurricula-2109_pdf-70436125.pdf(accessed 25/01/2022).
- General Medical Council. Designing and maintaining postgraduate assessment programmes. 2019. https://www. gmc-uk.org/-/media/documents/designing-and-maintainingpostgraduate-assessment-programmes-2109_pdf-70434370. pdf (accessed 25/01/2022).
- Royal College of Anaesthetists. A report on the welfare, morale and experiences of anaesthetists in training: the need to listen. 2017. https://www.rcoa.ac.uk/sites/default/files/documents/ 2020-09/Welfare-Morale2017.pdf (accessed 25/01/2022).
- General Medical Council. Progression reports: annual review of competency progression. https://www.gmc-uk.org/education/ reports-and-reviews/progression-reports/annual-review-of-com petency-progression (accessed 24/02/2022).
- 11. Sen S, Carey C. The 2020 Anaesthetic CCT curriculum: overview and transition proposals. *RCoA Bulletin* 2020; **120**: 40–1.
- Royal College of Anaesthetists. CT3 equivalent (stage 1'top up') training guidance. 2021 https://www.rcoa.ac.uk/sites/default/ files/documents/2021-04/CT3%20%28Stage%201%20top% 20up%29%20Training%20Guidance.pdf (accessed 25/01/ 2022).
- Haas MRC, He S, Sternberg K, et al. Reimagining residency selection: part 1- a practical guide to recruitment in the post-COVID-19 era. *Journal of Graduate Medical Education* 2020; 12: 539–44.
- Cleland J, Chu J, Lim S, et al. COVID 19: designing and conducting an online mini-multiple interview (MMI) in a dynamic landscape. *Medical Teacher* 2020; 42: 776–80.
- Kok KY, Chen L, Idris FI, et al. Conducting multiple miniinterviews in the midst of COVID-19 pandemic. *Medical Education Online* 2021; 26: 1891610.

- Johnston K, Tyson C, Danny I, Meyer L. Impact of the COVID-19 pandemic on the career of junior doctors. *Medical Journal of Australia* 2021; **214**: 295–296.e1.
- Gordon L, Scanlan GM, Tooman TR, et al. Heard, valued, supported? Doctors' wellbeing during transitions triggered by COVID-19. *Medical Education* 2021. https://doi.org/10.1111/ medu.14698
- Gale TCE, Roberts MJ, Sice PJ, et al. Predictive validity of a new selection centre testing non-technical skills for recruitment to training in anaesthesia. *British Journal of Anaesthesia* 2010; 105: 603–9.
- Aslet M, Paton LW, Gale T, et al. Evaluating the recruitment process into UKanaesthesia core training: a national data linkage study of doctors' performance at selection and subsequent postgraduate training. *Postgraduate Medical Journal* 2020; **96**: 14–20.
- Bernstein SA, Gu A, Chretien KC, Gold JA. Graduate medical education virtual interviews and recruitment in the era of COVID-19. *Journal of Graduate Medical Education* 2020; 12: 557–60.

- Jordan J, Sternberg K, Haas MRC, et al. Reimagining residency selection: part 3-a practical guide to ranking applicants in the post-COVID-19 era. *Journal of Graduate Medical Education* 2020; **12**: 666–70.
- Larsson J, Rosenqvist U, Holmström I. Enjoying work or burdened by it? How anaesthetists experience and handle difficulties at work: a qualitative study. *British Journal of Anaesthesia* 2007; **99**: 493–9.
- Roberts MJ, Gale TCE, McGrath JS, et al. Rising to the challenge: acute stress appraisals and selection Centre performance in applicants to postgraduate specialty training in anaesthesia. Advances in Health Science Education 2016; 21: 323–39.
- Royal College of Anaesthetists. Medical workforce census 2020. https://www.rcoa.ac.uk/sites/default/files/documents/2020-11/ Medical-Workforce-Census-Report-2020.pdf (accessed 25/01/ 2022).
- 25. Mahajan R. Time to make anaesthesia fit for the future. *RCoA Bulletin* 2021; **126**: 4–7.