MAY 2021

Bulletin

The magazine for members of the Royal College of Anaesthetists

Trainee issue

Trainees are central to the NHS' recovery plans

Page 4

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MAY

Anaesthetic Curriculum Webinar
6 May 2021
Online

Anaesthetists as Educators: An Introduction
10 May 2021
Online
FULLY BOOKED

Anaesthetists as Educators: Anaesthetists' Non-Technical Skills (ANTS)
11 May 2021
Online
FULLY BOOKED

Ethics and Law
13 May 2021
Online

Anaesthesia 2021
18–20 May 2021
Online

Senior Fellows and Members Club Meeting
25 May 2021
Online

Leadership and Management: The Essentials
26 May 2021
Online
FULLY BOOKED

JUNE

Leadership and Management: Personal Effectiveness
14 June 2021
Online
FULLY BOOKED

COVID-19: Lessons for the future of Anaesthesia and Critical Care
15–17 June 2021
Online

GASagain (Giving Anaesthesia Safely Again)
16 June 2021
Bradford

Primary FRCA Revision Course
Start date: 21 June 2021
Online

GASagain (Giving Anaesthesia Safely Again)
23 June 2021
Bournemouth

Anaesthetic Updates
29–30 June 2021
RCoA, London

JULY

Final Revision Course
Start date: 5 July 2021
Online

SEPTEMBER

Leadership and Management: The Essentials
8–9 September 2021
RCoA, London

Developing World Anaesthesia
27 September 2021
Manchester

Anaesthetic Updates
28–30 September 2021
RCoA, London

OCTOBER

Ultrasound Workshop
4 October 2021
RCoA, London

Anaesthetists as Educators: Introduction
5 October 2021
RCoA, London
FULLY BOOKED

Anaesthetists as Educators: Simulation unplugged
6 October 2021
RCoA, London

Anaesthetists as Educators: Anaesthetists' Non-Technical Skills (ANTS)
7 October 2021
RCoA, London

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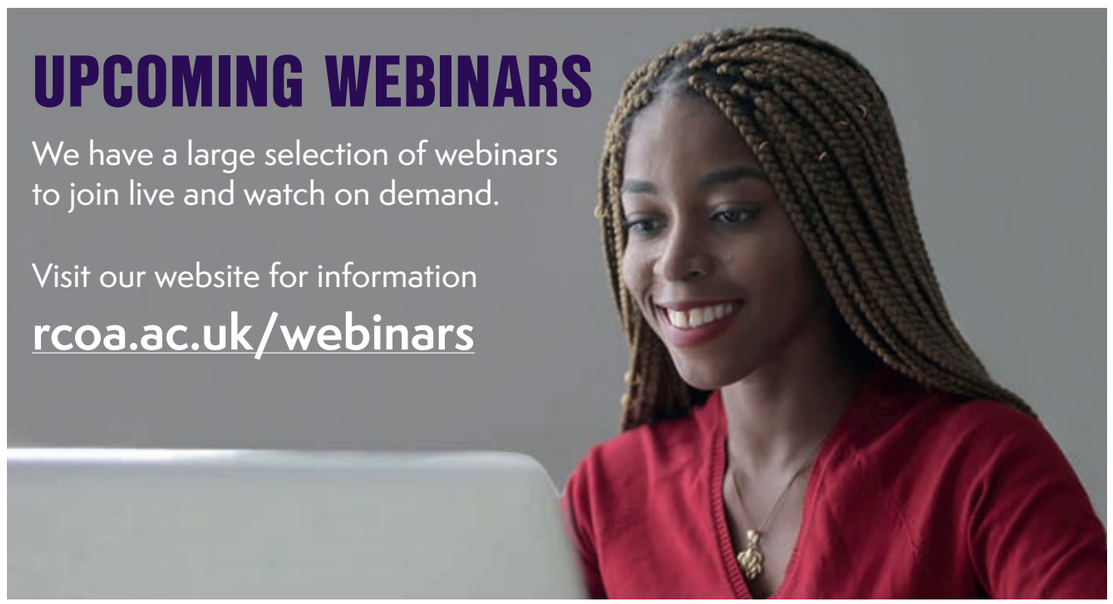
Book your place at rcoa.ac.uk/events

Leadership and Management: Leading and managing change
14 October 2021
RCoA, London

A Career in Anaesthesia
14 October 2021
Online

Anaesthetic Updates
18–20 October 2021
Birmingham



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From the editor

Dr Helgi Johannsson

Welcome to the May *Bulletin*.

Hello and welcome to the May edition of the *Bulletin*. As I write this we have just passed the first (and hopefully only) anniversary of lockdown, and quoting our guest editors, Lucy Emmett and Susie Thoms – what a year it has been! First of all, an enormous thank you to Drs Emmett and Thoms for their expert curation of our trainee edition. The training schedule and our trainees themselves have experienced severe disruption throughout this year, with exam cancellations, redeployment, annual leave cancellation, and general recruitment and career progression uncertainty. These themes are well represented in the *Bulletin* this month, and on behalf of the College I want to emphasise that we are aware of the disruption caused to our future colleagues' careers, and we are doing our utmost; working with other bodies in trying to minimise the disruption caused.

Those of you that know me will agree that my personality traits place me firmly in Generation X (maybe with a little dusting of millennial), and I want to thank Dr Malan (page 54) for agreeing to write her piece on our 'middle child' generation, and I hope it will help our trainees to understand us and our attitudes better. I also want to welcome Pauline Elliott (page 48) as the new chair of our Lay Committee, and Dr Ashwini Keshkamat (page 40) as our new SAS representative council member. I very much look forward to working with them in the future and thank them for their excellent contributions to this edition.

Anaesthetists' ability to educate and train is certainly not limited to our own specialty, we have an enormous influence on the whole theatre team. On one of my bariatric lists, I was discussing this with my surgical trainee colleague, Miss Winter Beatty (page 22) on how we can maximise not only our own tribe's training opportunities, but also those of surgeons, scrub nurses and ODPs. As we (hopefully) enter the COVID-19 recovery phase, where there will be enormous pressure to get as many patients as possible operated on, we mustn't forget to build in teaching and training time, our future health service depends on it.

Necessity is the mother of invention, and the pandemic has accelerated many changes in training and education. I enjoyed reading the various articles on using remote technology not just to maintain, but to enhance the teaching opportunities throughout the UK and beyond. They have not only helped us maintain our knowledge and skills, but also provided a sense of cohesion and camaraderie, particularly for those of our colleagues not able to join us on the 'frontlines'.

I hope with all my heart that by the time you read this our lives are continuing to return to normal, whatever that is. We mustn't go back to how things were though, and I hope one of the good things to come out of this will be a reduction in unnecessary bureaucracy. With the difficulty in recruitment, and lack of official training positions, many of our trainees are likely to choose alternative training pathways, while still gaining all the experience they need to become consultants. Dr Rao's article (page 58) on the CESR process is not only timely but also provides a lot of positive suggestions on how the process can be streamlined and improved. It is clear to me we need to make our training more responsive and flexible, and action now will prevent a staff shortage in the future.

I hope you have a wonderful spring and enjoy this edition.

The President's View

TACKLING THE COVID BACKLOG

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Professor Ravi Mahajan
President
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All being well, by the time you read this the UK will be well on its way through the roadmap out of lockdown. It is with fresh enthusiasm we must now look collectively at how our health and care services can address the backlog of patients and surgeries on our waiting lists.

When I wrote to you last in the *Bulletin*, the government had announced a third, strict nation-wide lockdown to restrict the spread of COVID-19. Healthcare workers were battling gruelling shifts, caring for rising numbers of patients in our intensive care units (ICUs), and working to alleviate the pressures caused by drastic measures such as surgery cancellations. The tragedy, disruption and uncertainty caused by COVID made it extremely difficult to look to the future.

However, your College has remained committed to advocating on behalf of you, our members. I responded to the March Budget by looking to life beyond the pandemic. There were a few obvious omissions; we did not hear any substantial announcement on health service or social care funding. Likewise, the decision not to award a pay rise for NHS staff will be a blow to the many who have worked incredibly hard during the pandemic, often at huge personal cost. It is important for the government to recognise and reward NHS clinical and non-clinical staff who have given so much during this pandemic.

It has been widely reported that the NHS entered the pandemic in a vulnerable position. Pressures usually associated with winter were lasting well into the spring and summer months, ICUs were creeping to maximum capacity and workforce shortages created a perfect storm for our members when the pandemic struck.

Government funding during the pandemic was very welcome. We now call to see the same determination going into the next big challenge – tackling the backlog of elective surgery across England and the devolved nations. In the short-term this will mean investment in wellbeing packages for staff and in the long-term a funded workforce strategy that not only works to fill the gaps now but looks to future-proof the NHS. As I am writing this at the end of March, I am pleased that the NHS has opened free and confidential mental health and wellbeing hubs[1] across England. I strongly urge all members who feel they could benefit from this service, to take advantage of this offer.

Trainees are at the heart of this recovery

More than a year on from the arrival of COVID on our shores, the challenges of working through a pandemic remain a serious threat to the morale and welfare of NHS staff. The skills anaesthetists possess mean we are often the first group of doctors redeployed to provide care to the sickest of patients. The impact on anaesthetists in training is particularly significant given the challenges it caused and continues to cause for meeting the requirements of the training programme.

Anaesthetists have led from the front during the pandemic, training NHS staff, developing innovative solutions to patient care and treatments, and organising equipment and critical care beds. The College has adapted its support to anaesthetists at all grades, working collaboratively with partners such as the Association of Anaesthetists, the Faculty of Intensive Care Medicine and the Intensive Care Society to do so. Importantly, we have also worked proactively and positively with national organisations such as the four nation's statutory educational bodies, ANRO and the GMC who have responsibility for many areas affecting the work of anaesthetists.

The College recognises that challenges do remain, particularly for anaesthetists in training. I'd like to assure you all that we are working on your behalf to address these challenges where we can do so directly, and to influence those who have it in their power to make necessary changes.

Anaesthetists in training are at the heart of the COVID recovery. Many young doctors are finding their personal and professional lives in limbo, with stressful exams still to complete, or a registrar job to obtain, in an uncertain time frame over which they have lost all control.

To better understand how our members feel, we have conducted surveys and polls to find out which issues are affecting you the most. These surveys have provided invaluable insights into life on the frontline, particularly for our trainee members. For example, in January, we found that since March 2020 nearly half of our College members have been redeployed to work in intensive care units across the NHS, including 60 per cent of anaesthetists in training.[2]

Last year, our Policy and Public Affairs team launched the COVID-19 campaign which set out to support our members and advocate for impactful change during the pandemic.[3] At every stage of the project's development and launch, we sought involvement and feedback from our members. Thank you to everyone who took the time to tell us how you are feeling and the issues most important to you. We value your involvement immensely.

What your College is doing

Exams

While exams and ST3 recruitment interviews had to be cancelled during the peak of the 2020 pandemic, your College has gone to great efforts to resurrect these career milestones as online events. We are extremely proud to have delivered seven written, six SOE and two OSCE exams for FRCA and FPM. This is nearly 3,5000 candidates.

Even though we have successfully guided so many of our members through this new world of digital examining, I know there are still many more we are working to examine. While this will take time, I'd like to assure our anaesthetists in training that we are doing all we can, as fast as we can, to help you progress in the most fair and equitable way.

As we move through the 2021 exam programme, we will need to continue to prioritise clinical exam places. We will continue to provide as accurate and as timely communications as possible.

Redeployment guidance

We know many of our trainees are feeling under significant pressure at the moment. Planned training rotations were also lost to repeated redeployment to ICUs and many were left unsure if their work would be recognised as part of their career progression.

Experience during redeployment, particularly ICU, may be counted as part of training.[4] We have published new guidance to aid in minimising the disruption to our trainees. We acknowledge the valuable contributions anaesthetists in training are making to patient care and this experience must enable them to progress in their careers, not hinder them.

Shielding guidance

For our members and trainees who have been shielding or have been identified as belonging to a clinically vulnerable group, we know this has been a very difficult time. There are ways anaesthetists in training in higher risk groups can achieve progression through training.

Various educational activities and QI projects can be conducted remotely and can be evidenced against the non-clinical domains in the curriculum. Project work may be completed that maps to many clinical units of training. Some clinical work can be conducted remotely, such as pre-operative assessment clinics and some outpatient pain clinics. This allows collation of evidence towards the Perioperative Medicine and Pain Medicine modules respectively.

Building back fairer

The solutions to recovering the health service do not only lie within hospitals. If building back better is core to the government's plans, it would be a significant missed opportunity if they did not also build back fairer. The pandemic has shone a light on health inequality across the UK.

With significant disparity in COVID-19 deaths across communities, we have all been reminded of the importance of building a healthier nation. The government must implement a cross departmental health strategy, making sure the implications of all policies take in to account the effect on the most disadvantaged in our society. The healthier the country becomes, the more sustainable the NHS will be.

100,000 COVID deaths: An unthinkable milestone

In January, we reached a milestone so unthinkable at the beginning of the pandemic. The UK recorded 100,000 COVID deaths across the UK. It was another sobering and sombre moment in our nation's history.

Behind each death are family, friends and healthcare teams with a unique story to tell. We must allow ourselves time to grieve the losses we have faced, however, we cannot forget the tasks that lie ahead. The NHS can and will recover from this pandemic. But that isn't enough, we must learn the lessons of the past and build back an NHS that not only heals the damage caused by COVID-19 but addresses the significant issues that were already in the system.

If you get the chance to have a break, I strongly encourage you to do so. Even though a traditional holiday might not be possible, it is important to take meaningful breaks from our jobs. I would also encourage leaders to build staff recuperation time into their strategies for exiting this surge and for catching up with the backlog as we restart normal activity.

If you have any comments or questions about any of the issues discussed in this President's View or would like to express your views on any other subject, I would like to hear from you. Please contact me via presidentnews@rcoa.ac.uk.

References

1 Staff mental health and wellbeing hubs, *NHS England* (bit.ly/3lPAJZ4).

2 One in three anaesthetists suffering with mental health problems caused by the pandemic, *RCoA*.(rcoa.ac.uk/snap-survey-2021).

3 COVID-19 campaign, *RCoA* (rcoa.ac.uk/covid-19-campaign).

4 Anaesthetic Training Update January 2021, *RCoA* (rcoa.ac.uk/training-update-january-2021)

5 Ready or not, it's time to take a break, *RCoA* (rcoa.ac.uk/take-a-break).

Bulletin

of the Royal College of Anaesthetists

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All contributions will receive an acknowledgement and the Editor reserves the right to edit articles for reasons of space or clarity.

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NEWS IN BRIEF

News and information from around the College

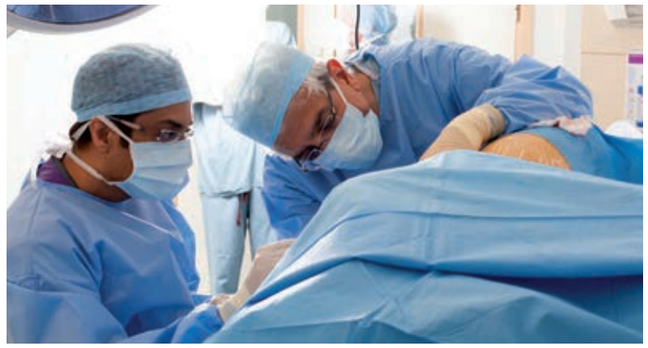
New appointment: Director of the UK Perioperative Medicine Clinical Trials Group

The UK Perioperative Medicine Clinical Trials Network (POMCTN) is delighted to announce that following an interview process Dr Joyce Yeung has been successfully appointed as its new Director. Dr Yeung takes over following the end of the current Director Professor Rupert Pearse term in the role.

Dr Yeung, who has been the POMCTN Deputy Director for the last three years, is also the Associate Clinical Professor at University of Warwick and Honorary Consultant in critical care.

'I'm thrilled and honoured at being appointed as POMCTN Director. I look forward to the exciting challenges ahead and ensuring POMCTN continues to deliver high quality clinical trials to improve quality of perioperative care and patient outcomes.'

COVID-19 and timing of elective surgery summary



A multidisciplinary consensus statement on behalf of the Royal College of Anaesthetists, the Centre for Perioperative Care, the Association of Anaesthetists, the Federation of Surgical Specialty Associations and the Royal College of Surgeons of England has been published on the SARS-CoV-2 infection, COVID-19 and timing of elective surgery.

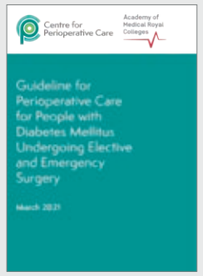
The scale of the COVID-19 pandemic means that a significant number of patients who have previously been infected with SARS-CoV-2 will require surgery. Given the potential for multisystem involvement, timing of surgery needs to be carefully considered through shared decision making to plan for safe surgery taking into account the patient's potential increased risk of post-operative complications due to COVID-19.
The time before surgery should be used for functional assessment, rehabilitation from severe illness, prehabilitation and multidisciplinary optimisation.

Information for patients about the new consensus statement can be found here: bit.ly/30VZB7R

Safe sedation practice for healthcare procedures: an update

The College has worked with the AoMRC and the Care Quality Commission to produce the *Safe sedation practice for healthcare procedures: an update*. This does not replace the 2013 Safe Sedation guidance, but instead provides regulators with a set of standards against which to inspect facilities providing sedation and to ensure that safety standards are being met.
Take a look at it in full here: bit.ly/3dXvNPB

Guideline for the Perioperative Care of People with Diabetes Undergoing Surgery



The Centre for Perioperative Care has launched the *Guideline for Perioperative Care for People with Diabetes Mellitus Undergoing Elective and Emergency Surgery*. Commissioned by the Academy of Medical Royal Colleges, this is the first full pathway guideline for the perioperative management of people with diabetes undergoing surgery.

The guideline is the first of many that CPOC will lead on and publish to advance the development of perioperative care transforming surgical pathways to the benefit of patients and clinicians alike, boosting service efficiency and reducing the burden of post-surgical complications. Read the full guideline here: bit.ly/3s4sqL0

ANAESTHESIA 2021

Don't forget to book for our flagship conference, Anaesthesia 2021, taking place this month, on the 18–20 May 2021.

We have a packed programme, including the introduction to the International Academy of the Colleges of Anaesthesiology (IACA), breaking news from the PRISM trial, launch of NAP7 as well as a selection of workshops to suit different interests.

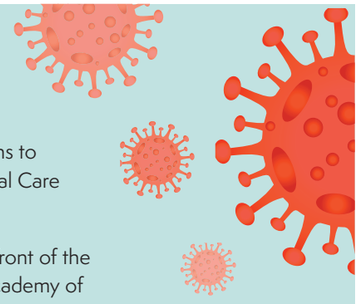
Networking is built into our online platform with multiple opportunities, from speed networking, coffee lounges and round table discussions, as well as the chance to join one of our lunchtime workout sessions.

No matter what stage of your career, Anaesthesia 2021 has something for you.

We are really looking forward to seeing you online in May so block out your diary and book your place now.

Visit rcoa.ac.uk/anaesthesia to book and view the programme.

COVID-19: Lessons for the future of Anaesthesia and Critical Care



Make sure you visit **rcoa.ac.uk/covid19conference** to check out the latest additions to the programme for our COVID-19: Lessons for the future of Anaesthesia and Critical Care Conference.

As the global community of anaesthesia and critical care we have been at the forefront of the world's response to the COVID-19 pandemic. The College and the International Academy of Colleges of Anaesthesiologists (IACA) alongside the *British Journal of Anaesthesia* are coming together for a three-day virtual conference on the 15–17 June 2021. With the aim of sharing those vital lessons learned and to help clinicians better prepare for COVID-19 or similar future respiratory pandemics. Book your place now at: **rcoa.ac.uk/covid19conference**

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NEWS IN BRIEF

News and information from around the College

Updated Patient Information resources

The College has updated *Anaesthesia explained*, (rcoa.ac.uk/anaesthesia-explained) an online guide for patients detailing each step of the patient journey for undergoing anaesthesia. The Patient Information factsheets on medical conditions relating to anaesthesia have also been updated.

A list of authors and contributors who have been involved in the College's patient information can now be found on the College website at: rcoa.ac.uk/authors-contributors.

Translations are also now available for the leaflet *Anaesthesia and your weight*, view the translations on the College website at: rcoa.ac.uk/patientinfo/translations.

The new SAS doctor contract

The College welcomes the introduction of a new specialty doctor and specialist grade contract in England and Wales. The contract is in the final stages of sign off in Northern Ireland. Scotland is awaiting a Scotland-specific contract, hopefully by the end of 2021.

The 2008 specialty doctor contract was introduced with the intention of streamlining the career structure for doctors not in training or in a consultant post. At the same time, the associate specialist contract was closed to new entrants.

The main changes are:

- improved pay progression
- the introduction of a new senior grade to be known as the specialist grade.

This restores an opportunity for career progression and recognition of clinical expertise and seniority, which was removed with closure of the associate specialist grade. The full statement is available here: rcoa.ac.uk/sascontract

COVID-19 patients 26 per cent more likely to die after emergency bowel surgery, but mortality rates improved for COVID negative patients

NELA National Emergency Laparotomy Audit

Research led by the College focusing on the care of over 10,500 NHS patients before, during and after emergency bowel surgery has been released (bit.ly/3vJWCNJ). Results have shown that patients with COVID-19 were 26 per cent more likely to die within 30 days of their surgery than would have been expected if they did not have COVID-19.

The Interim Report of the National Emergency Laparotomy Audit covers patients undergoing surgery between 23 March and 30 September 2020, with data being compared with the same time period in 2019. It captured the impact of the first wave of the pandemic on emergency bowel surgery. The procedure, also known as an emergency laparotomy, is one of the highest risk operations a patient can undergo – with an almost 10 times greater risk of death than that of major elective gastrointestinal surgery even in pre-pandemic times.

CPD functionality for Lifelong Learning

The CPD functionality in the Lifelong Learning platform continues to be very well used and in excess of 1,000 personal CPD activities are being added each week. All events which have been approved through our CPD accreditation scheme are featured and easily searchable in the LLp, and approval remains available for 'virtual' as well as for face-to-face events.

Full details about how to apply for CPD accreditation of your event, including online plus Word application forms, are available on the College website: rcoa.ac.uk/cpd-accreditation. All events which have been CPD accredited also appear on the College website.

Becoming an FRCA examiner

There's still time to become an FRCA examiner – as the application window for examiner recruitment 2021–2022 is still open. Submit your completed application form by Friday 21 May 2021. To check whether you are eligible, please read the person specification before submitting your application form. CVs are not required.

A full job description can be found on the College website at: rcoa.ac.uk/become-frca-examiner.

FPMLearning – the new Pain Medicine Education Hub

The Faculty of Pain Medicine is delighted to announce the launch of FPMLearning, our new open resource for all trainees providing a variety of Pain Medicine teaching materials including case reports, journal club, recommended reading, webinars, podcasts, and other resources. FPMLearning can be found on the FPM website: fpm.ac.uk/fpmlearning.

FPMLearning will continue to grow; more resources are in the pipeline regarding exams and training, and we are keen to hear feedback from trainees.

Read more about the new hub on page 42.

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CEO Update

BUILDING A STRONGER COLLEGE THROUGH THE COVID PANDEMIC

Jono Brüün
RCoA Chief Executive Officer
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At 5:37pm on 17 March 2020, sitting on a train pulling out of London, I wrote an email to all RCoA staff. It was a sunny Tuesday evening, and a few last remaining members of the Facilities team, myself and Sharon Drake – our Deputy CEO – had just finished closing Churchill House to members, fellows, staff, volunteers and visitors for the foreseeable future, as a result of the first wave of the COVID-19 pandemic.

I cycled through eerily quiet London streets to get to Paddington Station, which was almost deserted. I found a seat in an empty carriage, pulled out my phone and typed out the message.

In my email, I thanked the team for their Herculean efforts in preparing for the impact of the pandemic on the College. I mentioned how:

- the Education, Training and Exams team were preparing to move all our exams online
- the Clinical Quality and Research team had launched new and responsive COVID-19 clinical guidelines for our members
- our Support Services were providing additional IT and HR support
- the Communications and External Affairs Directorate had kept multiple audiences updated and informed of the College's ongoing commitment to its members, despite the need to close the doors to the building.

Over a year has now passed since I wrote that memo, but it feels like a world away.

We are so used to working remotely now from kitchen tables, spare bedrooms and in my case, a shed at the bottom of my garden. We have stayed focused on trying to meet or exceed the needs and expectations of our members. All while home-schooling our kids, sharing space with our flatmates, caring for our loved-ones, or trying not to get distracted by our pets!

It's easy to get sucked into thinking that things will just go back to how they were before the pandemic. But, of course, that's not the case. COVID-19 has changed such a lot, and its effects will continue to ripple through our working lives for many years to come. I am excited by the potential of all that change, and optimistic about the positive effects it may have on the College, its members and staff in the years ahead.

From very early on in the pandemic, we made a deliberate effort to remain positive, and grasp any upsides the situation could throw at us. For example, in the early stages of the crisis, I discussed the leading role our members would have in the response to COVID-19 with our President, Professor Ravi Mahajan. We felt that this presented the College with a unique responsibility to try and pull together the lessons of that experience across the world, to guide the anaesthetic and critical care response to future pandemics.

A year later, and with contributions from journal partners and other international medical colleges, the RCoA has launched a global online conference on *COVID-19: Lessons for the Future of Anaesthesia and Critical Care* which promises to be an excellent collaboration on a vitally important subject.

Elsewhere, the senior team of managers and heads of department created a Stronger College initiative, which sought to use the changes forced on us by COVID-19 to embrace new working arrangements, to be more business ready in future, and to become more digital.

Some of the effects of that programme are already being felt. The move to online events, for example, has delivered an increase in delegate numbers of 72 per cent (1,404 to 2,427 across 31 like-for-like meetings) and trainee attendance in particular has grown by almost 60 per cent in those meetings (300 to 477).

Our consideration of culture contributed to a new focus on the College's responsibilities around equality, diversity and inclusion (rcoa.ac.uk/equality-diversity-inclusion). Research was commissioned, following the murder of George Floyd, that will help us engage with issues relating to equality, diversity, inclusion, representation and discrimination within and without the College, and I have been delighted to see us engage more frequently and readily on these issues under the leadership of my colleague Russell Ampofo, who is driving this work for the College on behalf of the Board of Trustees.

The College has done all this while maintaining or improving the activities I highlighted in my email on 17 March 2020. This has been delivered as a partnership between our staff and our members, especially the Council members and trustees who lead the effort on behalf of the specialty.

There is always more that could have been done, decisions that could have been made earlier or better, and different opportunities we might have grasped. However, I am proud of the College's achievements in a difficult year, of the agility and graft of our staff team, and for the leadership and diligence of our elected officers and council members. We are a stronger College as a result of their efforts over the past 12 months.

Find out more about our new online conference ***COVID-19: Lessons for the Future of Anaesthesia and Critical Care*** at: **rcoa.ac.uk/covid19conference**

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Dr Susie Thoms
RCoA Anaesthetists in Training Committee

Guest Editorial

WELL, WHAT A YEAR IT HAS BEEN!

Unprecedented, unusual and unique

It's been a year of new, now familiar, language – 'Rona', 'FFP3', 'furlough', 'shielding', 'Zoom', 'lockdown', 'super-spreader', 'quarantine', 'doomscrolling', 'social distancing', 'home schooling', 'R-numbers', 'spike proteins', 'bubbles', '#nextslideplease'... It's been a year of learning – huge adaptation on a scale we have never known to provide the care needed. It's also been a year of disruption, frustration and challenge for every one of us, no matter what our circumstances.

Despite this, we have risen to the challenges, and it has been a year of incredible camaraderie, self-development and pride for many of us.

Anaesthetists in training in the UK have gone above and beyond the call of duty, both in our clinical practice and in the immense contribution made to clinical governance, quality-improvement work, and training. We have adapted to NHS life in 'Covid times' – serving at the very frontline of clinical care. Colleagues in all four nations have overcome the often complex difficulties presented by COVID-19, innovating and adapting for the benefit of our patients, our colleagues and our training programmes.

Being a doctor in training is a huge professional and personal commitment at any time – never more so than in recent months. Redeployments, disruption to exams and recruitment, adapting to working in PPE, new emergency and elective pathways – the challenges and changes are endless.

Meanwhile, we are juggling the pressures at home – our family lives turned upside down, learning to live life at a 'social distance'. What can be said is that the challenges are acknowledged and understood, and that there is great support for us.

In this issue, we include some of the innovations that trainees have developed during this challenging time. We are also focusing on the beckoning horizon, which holds the new curriculum and the integration of this into training.

Keen to bring you some alternative perspectives, we have an article from a surgeon in training, and a journey to the northernmost school of anaesthesia – the life of a rural anaesthetist.

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Curriculum 2021 is undoubtedly the next major challenge for the anaesthetist in training to navigate. In this spring *Bulletin*, we are delighted to have three articles from experts developing the new curriculum, to help demystify the transition and introduce some of the new assessments. Over the next few months there will be further communications from the College, and the Anaesthetists in Training Representative Group will be a good source of knowledge for local areas.

Dr Soumen Sen, our current RCoA Education Fellow, takes us through a 'Q&A' of the new curriculum, answering some of the burning questions about the 'what?', 'why?' and 'how?' of the transition to the 2021 Curriculum (page 16).

Drs Gethin Pugh and Carolyn Johnston introduce 'QI and the 2021 Curriculum'. They talk us through the quality-improvement requirements and introduce us to the A-QIPAT assessment tool (page 18).

We have a fascinating article from Drs Joe Lipton, Alex Isted and Jonathan Dilley about the new Entrustable Professional Activities assessments. They cover the inception of the idea, the aims of the assessments, and how these can change the way we think about training our novice anaesthetists (page 20).

In an issue all about anaesthetists in training, it might be easy to forget that other colleagues have training needs too, be they our surgical colleagues, medical students or students from other professions – everyone needs time to learn. Ms Jasmine Winter, a surgical registrar in London, highlights this in a brilliant article suggesting that an 'Estimated Training Allowance' might one day be part of our WHO checklist, and the benefits that would come from everyone in the operating theatre taking responsibility for teaching (page 22).

Dr Tim Jagelman takes us to the very north of the UK, telling us about his time spent as an advanced clinical fellow in Remote and Rural Anaesthesia. This is a fascinating look at his training experience and time in the programme, despite COVID-19 being in the mix (page 24).

We round off this edition with a collection of pieces on innovations during challenging times (page 26).

Anaesthetists in training have taken the lead in many new projects and initiatives in teaching, clinical practice and wellbeing.

The Virtual Anaesthetics team tell us about their interactive pain teaching programme, helping to make up for some of the lost opportunities in face-to-face patient contact in pain medicine during COVID-19.

Drs Laura Bubb and Ben Awolumate from the Mersey School of Anaesthesia talk us through their airway workshop – a simulation initiative to bridge the gap in some of the missed clinical exposures during the pandemic.

'Virtual operating lists' are a novel educational solution for lost theatre-training time. They have been created and delivered by Dr Suzanne Grenfell and team in Essex, and offer a great example of thinking outside the box to achieve training objectives.

The great outdoors – a sanctuary for many during Covid. Never have we appreciated being able to travel to the coast or the countryside more than when we're under lockdown and staring at the same four walls! Dr Mhairi Macdonald and the team from Ysbyty Gwynedd in Bangor share their rural-swimming wellbeing ideas.

Keep safe, keep going, keep sharing your experiences and knowledge with us. We hope you enjoy this edition and the summer ahead.

THE 2021 CURRICULUM FOR ANAESTHETISTS IN TRAINING

It has been a difficult year for anaesthetists in training. As we look forward to maximising our educational opportunities, we can use the new curriculum to jump-start our training and to train in a more holistic way.

As anaesthetists in training, we have had a major influence on the 2021 curriculum – being consulted in its development and providing feedback about the proposed changes. Any shift in the culture of training and assessment has to start with the trainee viewpoint, and it is critical that we understand the reasons behind these changes and are familiar with the proposed implementation.

By understanding our curriculum, we can influence and direct our training in the way that suits us. This knowledge will also help us in the future, as we shift from trainee to trainer, to use the curriculum to develop others.

As part of my own role as the RCoA Education Fellow, I am one of many anaesthetists in training involved in the development of the curriculum and have been encouraged to bring a viewpoint that is both representative and an accurate reflection of current issues in anaesthetic training. This has helped to ensure that the 2021 curriculum is focused on the people that it is designed for.

I hope to answer some key questions about how the new curriculum affects anaesthetists in training below.

Why has our curriculum changed?

The GMC has asked for all postgraduate medical curricula to be revised to identify common areas in training and focus on the 'Generic Professional Capabilities' common to all doctors.[1] This follows the *Shape of Training* review, which showed that existing training was inflexible, slow to adapt, and had too many tick-box exercises.[2] During the development of the new curriculum we have incorporated the recommendations of our own review of the 2010 curriculum[3] and made anaesthesia-specific improvements.

What are 'Generic Professional Capabilities'?

The GMC describes these as a series of skills, attributes and behaviours that must be embodied by all clinicians, and which are interchangeable across all curricula. They are a response to perceived gaps in current curricula and form curriculum building-blocks. The anaesthetic curriculum embeds these as 14 domains that reflect professional and clinical learning outcomes.

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What are the 'Stages' of training?

These are the new terms to reflect the new structure of anaesthetic training. Stage 1 is the equivalent of core training, Stage 2 is intermediate, and Stage 3 is higher.

Is the new curriculum longer?

No, it is still seven years, but it has been restructured. Stage 1 now takes three years (compared to two years of core training previously). Stage 2 takes two years (ST4/ST5) and Stage 3 takes two years (ST6/ST7).

Why has the structure changed?

The College was keen to use this opportunity to try and improve the programme for anaesthetists in training. In the development of the 2021 curriculum, feedback was sought from anaesthetists in training, and this showed that more than 40 per cent of CT2s did not go straight into ST3, with pressure to pass the FRCA Primary exam and a desire to gain further anaesthetic experience (especially in obstetrics) being particular concerns.

The new curriculum adds an extra year to Stage 1 (the old core training) to help with these issues, giving more time to prepare for the Primary exam and a broader clinical experience before embracing registrar responsibilities.

There are a lot of new terms in the curriculum, can you explain these?

The 2021 curriculum describes a range of key capabilities that are divided into the seven Generic Professional Capabilities domains and seven clinical or specialty-specific domains. Each domain has an associated High Level Learning Outcome.

Anaesthetists in training may use a broad range of evidence to demonstrate attainment of the key capabilities. The curriculum gives examples of such evidence that may be used to achieve these key capabilities for each of the stages of training.

Evidence of completion of all of the 14 domains for a stage of training is required before proceeding to the next stage. Such points in the curriculum are referred to as 'Critical Progression Points'.

When does the new curriculum begin?

The new curriculum is due to start in August 2021 for Stage 1 (CT1) and August 2023 for Stage 2 (ST4).

I am already in the training programme, how do I convert onto the new curriculum?

This varies depending on your present stage of training. The GMC require that all anaesthetists in training transition onto the new curriculum within two years. Ultimately, this will require reviewing and aligning your existing evidence and completed learning outcomes with the appropriate new stages of training. Working with your educational supervisor, you can use the gap analysis provided on the RCoA website to help with this transition.[4]

Are there any guides to help with the curriculum?

Any curriculum is a large body of work and can be intimidating at first. With this in mind, the College is committed to help by trying to make the new curriculum document as easy to navigate as possible and to present it in a format that is both suitable and relevant to the modern anaesthetist in training.

One of the major aspects to this is a user-guide to the curriculum for anaesthetists in training. The intention of this guide is to help anaesthetists in training to become familiar with the new curriculum quickly and smoothly.

I have more questions – where can I get more information?

This is a vast project, and there is always a possibility of further updates. Please use the 2021 curriculum section on the College website at: rcoa.ac.uk/2021-curriculum-assessments or email 2020cct@rcoa.ac.uk.

References

1 Excellence by design, *GMC* (bit.ly/36IbU8r).
2 Shape of training review, *GMC* (bit.ly/3bdl1mC).
3 Fellowship Report, Dr Aidan Devlin, RCoA/ Health Education Kent, Surrey & Sussex Education Fellow (rcoa.ac.uk/media/10301).
4 Curriculum gap analyses, *RCoA* (rcoa.ac.uk/curriculum-gap-analyses).

Further information is available via the website at: **rcoa.ac.uk/anaesthetic-cct-curriculum-2021**

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QI AND 2021 ANAESTHETICS CURRICULUM

Safety and Quality Improvement comprises one of the 14 domains of training in the new 2021 anaesthetics curriculum. While Quality Improvement (QI) is included in the existing curriculum as an optional part of Annex G, there is a much greater emphasis on the role of QI as part of the new curriculum.

The new curriculum describes both generic professional capabilities and specialty-specific or clinical domains. The generic professional capabilities describe a framework of principles and professional responsibilities for all doctors, translated into educational outcomes for all phases of medical education. Patient Safety and Quality Improvement represents one of the interlocking and overlapping domains.

Figure 1 Domains of the generic professional capabilities, *GMC*, May 2017

What is the role of QI in the new curriculum?

A new spiral QI curriculum

The new curriculum describes a spiral approach to QI training, with a focus on understanding QI methodology at an early stage of training, progressing to leading a local QI project and supporting others during the later stages of training. This is reflected in the key capabilities described for this domain, at the different stages of training.

Anaesthetists in training can draw on a broad range of evidence, including Supervised Learning Events (SLEs), personal activities such as the attendance at QI training events, and reflections to demonstrate attainment of the key capabilities within the domains of training.

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A-QIPAT

The *Anaesthesia – Quality Improvement Project Assessment Tool* (A-QIPAT) has been introduced to support formative assessment of QI projects throughout the new curriculum. The A-QIPAT can be used to provide feedback on QI activities as part of a project plan or report, or as a project presentation.

This is a formative assessment with the emphasis on feedback to improve performance. It is good practice for this to be completed in realtime to maximise the benefit of the learning from the project discussion.

The A-QIPAT can be used to assess both part of a QI project or a specific tool at an early stage of training, as well as the application of QI methodology as part of a completed QI project.

This new SLE will be incorporated into the Lifelong Learning Platform as part of the update for the adoption of the new curriculum. In the meantime, a pdf version is available on the College website at: rcoa.ac.uk/a-qipat

This new SLE can also be used in the case of audit activities. Audit may be considered a tool that can be used as part of QI activities. However, anaesthetists in training should use opportunities to broaden their QI experience beyond audit as they progress through training.

This domain of training will be assessed by a designated local trainer as part of a new approach to assessment.

What resources are available to support QI development?

Raising the standards: RCoA quality improvement compendium

In September 2020, the College launched the 4th edition of the former 'audit recipe book': *Raising the standards: RCoA quality improvement compendium*. This innovative resource provides further guidance for QI and audit activities across all areas of anaesthesia, including suggested areas for projects, possible measures, and ideas for change. This resource combines leaders in clinical areas of anaesthesia with QI editors to develop more than 100 QI recipes that are applicable to clinical practice, covering all subspecialities of anaesthesia, intensive care and pain medicine.

Section A includes a textbook style component, introducing details of the key QI principles and methodologies that underpin QI in clinical practice.

Section B contains many self-contained QI 'recipes' mapped against the different clinical areas of anaesthesia, including many new topic areas such as environmental sustainability, prehabilitation and wellbeing. Each recipe describes the background, key documents and standards that you might need to consider, along with suggested QI methodology for a project.

The contents are also mapped to national programmes such as the recommendations of National Audit Projects (NAPs) and the National Emergency Laparotomy Audit (NELA). Trainees are encouraged to contribute to established projects or continuous improvement schemes to complete their learning requirements, with the understanding that conceiving, planning and implementing changes is very difficult during rotational training.

All recipes are linked to the relevant ACSA and GPAS standards, as well as to curriculum learning objectives. It will be updated to reflect the updated curriculum and changes to GPAS. The Compendium is available on the College website at: rcoa.ac.uk/quality-improvement-compendium.

RCoA QI Regional Leads Network

The College has developed a network of QI regional leads who are engaged in QI activities across the different schools of anaesthesia, and who may be able to signpost you to opportunities within your region. A list giving your local QI Regional Lead is available at: rcoa.ac.uk/quality-network

In addition, many schools provide local training courses mapped against the contents of the curriculum.

Where can I find more information?

Further information can be found on the College website using the links below:

2021 Curriculum
rcoa.ac.uk/anaesthetic-cct-curriculum-2021

Raising the standards: RCoA quality improvement compendium
rcoa.ac.uk/quality-improvement-compendium

ACSA standards
rcoa.ac.uk/acsa/standards

GPAS standards
rcoa.ac.uk/gpas

The new face of novice anaesthesia training

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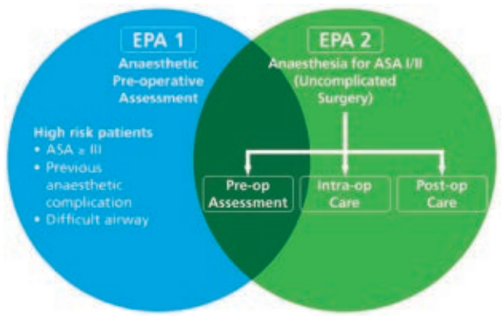
I was an ST3 in 2014 when a CT1 in my department had a difficult time with the novice period. She had diligently ticked off the 19 workplace-based assessments (WBAs) for the Initial Assessment of Competence (IAC), and had started 'solo' on-calls. After a handful of shifts, clinical concerns were raised, and she was removed from the rota. It became clear that the prevailing judgement of the consultant body was that she hadn't been ready for the transition.

I was incensed by how she'd been treated and resolved to do something to bridge the gap between the stated curriculum and the expectations of the workplace.

Entrustable Professional Activities (EPA) had been gaining popularity in the medical education literature as a framework for competency-based training.[1] Despite the off-putting name, EPAs struck me as a relatable and intuitive way of describing clinical work.

'An EPA is a clinical task which a sufficiently competent professional is trusted to complete under distant supervision'.

Figure 1 EPAs for the novice period



EPA 1 – Performing an anaesthetic preoperative assessment – includes the recognition of patients with an increased perioperative risk.

EPA 2 – Providing general anaesthesia for low-risk patients having uncomplicated surgery.

I enlisted some consultant collaborators, and we came up with two EPAs for the novice period (Figure 1) by asking ourselves, 'what do we expect a CT1 anaesthetist to be able to do on-call?'

In August 2019, seven departments agreed to try out the new novice curriculum. We produced a workbook that fleshed out each EPA, describing the expected knowledge, skills, attitudes and behaviours underpinning each. Progress was framed around a supervision scale, starting at level 1 (requires direct, proactive supervision in the room) and ending at level 3 (on-call activity, consultant at home, registrar in the hospital). To achieve the IAC, anaesthetists in training needed to perform each EPA at supervision level 3.

Learning and assessment

The EPA workbook contained a range of learning activities. Compulsory elements included a failed-intubation simulation, focused discussions on core anaesthetic drugs, and an assessment for checking the anaesthetic machine. But the list of 19 WBAs was replaced with a more flexible system of 'Supervised Learning Events' (SLEs). We gave guidance on how to use SLEs to gather feedback and record reflections from training, but encouraged consistent participation over any minimum number. Trainers gave global feedback for each SLE, using the supervision scale and benchmarking progress against the expectations of the programme.

We encouraged trial sites to set up a 'Novice Training Faculty', who worked more consistently with the anaesthetists in training and took collective responsibility for their progress. Summative assessment was by the collective judgement of the novice training faculty, drawing information about learner performance across the range of learning activities.

The anaesthetist in training's perspective

Dr Alex Isted
South London School of Anaesthesia

"By the time I commenced my anaesthetic novice period, I had navigated three electronic portfolio platforms, had linked work-based assessments to countless ACCS curriculum items, and had begun the IAC. It's fair to say that I felt a growing sense of 'assessment fatigue', and I anticipated more of the same on participating in an EPA pilot scheme.

"In fact, the process turned out to be extremely useful and even refreshing. Too often, assessment methods feel more like a checkbox exercise than a genuine opportunity to provide quality feedback and mark progress. However, the EPA took a different approach. It simply distilled the novice period's learning objectives into two core assessments: 'can you do a pre-assessment?' and 'can you give a safe anaesthetic?".

"It was clear to me – and consultants new to the process – what my learning objectives were, and the EPA put the emphasis on providing constructive points to finesse my approach. By framing my performance in terms of the level of supervision my consultant felt I needed, it gave me the opportunity to objectively take stock of my progress. My feedback was genuinely very useful and helped shape my learning throughout the novice period, and I welcome the EPA's integration into the curriculum."

The College tutor's perspective

Dr Jonathan Dilley
York Teaching Hospital

"EPAs appeared to be the tool we had been looking for as College tutors. Gone were the 19 isolated WBAs, and in were global assessments of clearly and simply defined entrustments. The consultant body understood the requirements, supported its introduction, and valued professional opinion feeding into the process.

"In the main, trainees embraced the introduction of clear global endpoints and gained confidence from visible progression of the supervision scale. Some, perhaps not fully invested in anaesthesia, found this harder to achieve than the IAC. In our minds, EPAs raise the bar of attainment.

"Logistically, we found core faculty meetings difficult to arrange as face-to-face events. The process evolved into a rather disjointed email trail as a poor substitute. In a world now at ease with video conferencing, a live discussion feels a far more achievable aim."

Conclusion

With EPAs for the novice period, we have the chance to build on the unique learning environment we enjoy in anaesthetics. We must recognise anaesthetists in training as mature, capable professionals and empower trainers to use their expertise to guide the next generation through the first phase of their learning journey.

The EPA trial evaluation has been submitted for publication and will be made available on the College website.

Acknowledgements

Thank you to the EPA curriculum team in south-east London, and to Dr Bernd Oliver Rose in particular.

Reference

1 Ten Cate O *et al*. Curriculum development for the workplace using Entrustable Professional Activities (EPAs): AMEE Guide No. 99. *Med Teach*. 2015;**37**:983-1002.

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Surgical training: anaesthetists to the rescue!

(A light hearted review – with an important message!)

The pandemic has brought all NHS staff closer together; we have to deeply peer into each other's eyes for clues to aid our muffled communication. There we have found scared, brave, fierce, sad, and joyful eyes looking back.

The feeling of being part of a greater NHS superhero league is pervasive; working in restructured teams, in new roles and supporting each other through tough times has undeniably rejigged team dynamics.

On my ICU redeployment, I understood the distinctions between ITU and theatre ventilators, adjusted to alarming pO2 levels, and was comforted to see basic plumbing principles still applied to uncover filter clogging. I also surprisingly learnt a lot about anaesthetic training application systems, turnover time of GUM tests, and all things 'bicycle'. Differences in training obstacles and progression requirements did not cast surgeons in a favourable light, and, as always, anaesthetists offered to come to the rescue.

Anaesthetists in training perform many more procedures than we surgical trainees could ever aspire to. The abundance of opportunities and lack of pressure to achieve targets seems to translate into a harmonious carousel of shared learning whereby everybody gets as many goes as they need. There doesn't seem to be the need for startling appearance acts of thieving trainees in the emergency theatre, subtle scrubbing races in order to be the first to swiftly scuttle over to the *right* side of the operating table, nor for grandiose representations of personal contributions in operative logbooks.

Secondly, although change is happening, a stronger hierarchy and a slowly mellowing patriarchy persist in surgery, their effects still lingering in the training opportunities and pathways of current trainees.

However, human factor studies among operating theatre teams found that steep hierarchies instilled an unhelpful reign of terror and, by preventing 'speaking up', may adversely affect patient outcomes.[1] Anaesthetists have been at the forefront of adopting recommendations from these studies into clinical practice, formalising team training and flattening hierarchies while maintaining inclusive leadership.[2]

Another important confounder is the training environment. There are limits to how many questions you can ask and how much of a comprehensive answer you can expect while trying to stop exsanguination from a bleeding duodenal ulcer or dissecting the last bit of cancer from a suspicious nerve bundle in the deep and narrow bloody black hole of an APER. Although this applies to any teaching performed during an emergency or under pressure, the art of surgery is a craft to be handed down; you need to see it and be watched doing it to get it right. Despite the ever-expanding availability of simulation and digital resources, we thus depend on feedback from our seniors – if they can bear to observe and withstand their itching desire to take over. And of course, in contrast to the anaesthetist – eagerly seeking human company to share knowledge and distract them from monotonously bleeping machines – the surgeon is a more elusive creature.

What anaesthetic and surgical trainees do have in common is the disappointing inability to control time or patient factors. We all need extra time, patience and support when training, and how we achieve these shouldn't be just a matter of luck, charm and cunning premeditation.

So how can we all support each other and grow together? Firstly, it is essential to recognise that we all have training needs – healthcare assistants, surgeons, scrub nurses, operating department practitioners, and anaesthetists. The consideration of these training needs is such an invaluable aspect of list planning that it should be formally incorporated into the brief at the beginning of every theatre-list or case. Can we imagine a time when the WHO checklist might include an Estimated Training Allowance? This would be an essential factor in getting the whole operating team on board, ensuring that everybody's expectations are aligned through a shared understanding of timelines and individual support requirements. After all, there is no shame in learning, and we should support each and every member of the operating theatre team, especially those in training. If altruistic reasons won't suffice, at least the prospect of easier professional relationships in future should support the investment of time and teaching efforts now.

Creating an environment that encourages shared learning opportunities would also be extremely beneficial. During surgical pauses, the ears of surgical trainees may be subtly perked up to catch the pearls of knowledge being discussed at the top end. As we know, good teamwork and communication are critical to patient outcomes. However, in every surgical case there is a patient for whom we share responsibility, and understanding what the other specialty is doing to that patient is actually quite important. Although there is a lot going on in the operating theatre, and anaesthetists are busy keeping the patient alive, there are moments that are amenable to educational discussions, and who are better positioned than the anaesthetists to take the lead? It may be more useful than commenting on incisions closing by secondary intention?

A marvellous mentor once told me that training is ultimately the responsibilty of the individual, who forgets that they personally contribute towards ensuring a safe, protected and nourishing learning environment for trainees in all disciplines every single day – because, after all, that is everybody's responsibility.

References

1 Pattni N *et al*. Challenging authority and speaking up in the operating room environment: a narrative synthesis. *Br J Anaesth* 2019;122(2):233-244. doi: 10.1016/j.bja.2018.10.056. Epub 2018 Dec 1. PMID: 30686309.

2 Jones CPL *et al*. Human factors in preventing complications in anaesthesia: a systematic review. *Anaesthesia* 2018;**73** Suppl 1:12-24. doi: 10.1111/anae.14136. PMID: 29313908.

Action points for operating theatre training

- Plan lists in advance, tabling in training needs.
- Introduce and welcome any new team members.
- Clarify training objectives for each trainee (ODPs, theatre nurses, students, surgeons, anaesthetists).
- Set a timeline for the list, including an Estimated Training Allowance.
- Discuss if and when the senior surgeon should step in.
- Offer to call the senior surgeon if needed.
- When teaching, involve other members of the operating theatre team.
- Encourage interactive discussion and questions.
- Review learning points and training achievements in the debrief.

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The northernmost school of anaesthesia: remote and rural anaesthesia training

I climb the hill to work, head down against the wind, the town wrapped in darkness and morning fog. This is Lerwick, and its Gilbert Bain Hospital is home to the northernmost department of anaesthesia in the UK – a long, long way from Russell Square. I am its only anaesthetist in training – an advanced clinical fellow in Remote and Rural Anaesthesia and part of a team of one substantive consultant anaesthetist and a loyal group of rotating locums.

Practice here has the broadest of scopes. The hospital has two operating theatres in which a range of routine general, urology and gynaecology surgery is offered. Visiting specialty surgeons expand the range, and emergency work is the same as anywhere. It is not unusual for an operating list to start with a caesarean section, take in a cholecystectomy and end with a hemiarthroplasty, potentially with the same surgeon scrubbed for all of them. Outside the operating theatre there are no paediatricians, so the anaesthetists are quickly involved with any unwell child from newborn upwards. They are responsible for the two-bedded HDU, and for any patient needing Level 3 care until an air ambulance and retrieval team can arrive, which in bad weather might be several days. Then there is the usual governance, logistics, resuscitation training, and management required in any department, except here there are fewer people to share it.

To be an anaesthetist here is to be a true generalist, able to adapt to and address any clinical situation when the nearest specialist centre, Aberdeen, is 250 miles and a flight away.

Training anaesthetists for remote and rural practice is in the curriculum, although you might never find it – tucked away somewhere after sedation for dentistry and military anaesthesia. I first heard of it after my ST4 ARCP. When asked where I was headed I mused on generalism, on how I liked the slightly odd bits of anaesthesia, remote sites, transfers, that sort of thing. Fast forward a few years and here I am, on the pilot fellowship for the latest incarnation of rural training.

The fellowship has three parts. I started with a post in the Emergency Medical Retrieval Service (EMRS), learning about aeromedical transfer of critically ill patients. This team, part of the ambulance service, links the islands and rural general hospitals of the highlands to the ICUs in Inverness, Aberdeen, and beyond, thereby helping to provide equity of access for a not insignificant proportion of the population. For me this was nine months taken out of programme, as I was the first registrar for a brand new North team based in Aberdeen.

I then spent three months in 'edge of practice' roles including neonatology and palliative care (plus a period of COVID-19 redeployment). Perhaps the most important part of this was the time focused on resuscitation and stabilisation of the unexpectedly unwell newborn. Shetland sends higher-risk mothers to Aberdeen, but the unexpected can and does happen, with a handful of neonates requiring critical care each year.

Finally, I have spent six months on Shetland putting it into practice. With only three surgeons, it is possible to develop the sort of relationships which are less accessible when rotating irregularly through lists and specialties in the big centres. They start to talk to you about future patients and list planning, you get a feel for their working norms and can adapt your anaesthetic to them. In essence you are able to work more like a consultant, which is, after all, the goal of any advanced training. Add in the inclusion in the routine management business of the department and hospital, taking on training of HDU nurses or paediatric resuscitation, appraising the impact of proposals for new services, running significant event debriefing, and the myriad other opportunities here, and you have the full package.

I'm not certain I will see myself as a rural anaesthetist in five years' time. Apart from anything else, my partner (who our school of anaesthesia fantastically released on a career break to come with me) has big-centre career plans, but I believe that training here will have prepared me for work anywhere. There is also a benefit to Shetland – liaison with the mainland relies on mutual understanding, and training like this spreads that knowledge to parts of the wider health service that otherwise might not appreciate just how different things can be. Networks work best when we know, understand and trust each other, which is precisely what this fellowship helps to build.

With the evolution of the new curriculum, the exact content and duration of future fellowships might change – most likely to three months with EMRS and three on Shetland; we hope to advertise soon. Anaesthetists in training who may be interested should contact myself (timothy.jagelman@nhs.scot) or regional advisor (alastair.mcdiarmid@nhs.scot) if they wish to find out more.

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INNOVATIONS

VIRTUAL OPERATING LISTS: a novel educational solution for lost theatre training time?

During the first wave of the COVID-19 pandemic, when 'virtual' became the new reality, we designed a novel educational solution to the problem of lost clinical exposure: the 'virtual operating list'. The intention was not to replace clinical experience, but to deliver flexible training opportunities in an online learning environment, providing an alternative for some of the in-situ teaching interactions normally experienced on a training list and allowing optimisation of the reduced clinical opportunities available.

Concept

After surveying the learning needs of anaesthetists in training, and with College tutor and module lead approval, 'virtual lists' were designed to reflect a normal operating list containing a series of fictional cases mapped to the College curriculum, with case complexity appropriate for each stage of training. Pre-reading materials,such as e-learning and relevant guidelines, were included – akin to preparation for a normal anaesthetic training list, aiming to facilitate a more beneficial educational interaction. Trainees and trainers arranged a mutually convenient time to meet online using a secure virtual platform. Each list was designed to last no longer than an hour and to deliver a focused two-way conversation rather than a summative assessment. At the end of the discussion, if appropriate, each trainee could send a suitable WPBA (CBD) for completion.

Feedback

The feedback has been universally positive. All trainees surveyed found the structure of the lists effective and felt that they facilitated the meeting of outstanding modular requirements. 66 per cent achieved a CBD, and 100 per cent agreed that they gained confidence and understanding of the clinical topic. Although initially planned as a temporary solution, there are ongoing requests from all grades of trainee demonstrating how popular these sessions are.

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INNOVATIONS

VIRTUAL ANAESTHETICS

What has happened in the pain service in North Wales will be a familiar story to many of you – clinics cancelled, staff redeployed away from the service, and, with that, the loss of training opportunities. We wanted to replicate those opportunities as far as possible, and in doing something a bit different we needed to be a bit unconventional – that's how Virtual Anaesthetics started.

Virtual anaesthetics uses an interactive fiction platform, a bit like 'choose-your-own-adventure' books, to create a virtual pain service. Each module is a clinical episode within the service and uses variables entered by the learner to interact with them throughout the narrative. The learner joins our virtual multidisciplinary pain team and can make decisions that change the way the case progresses. Depending on how the narrative plays out, learners might get personalised emails, letters, or investigations pertinent to the case. They might get texts or be signposted to specific external guidelines or resources. They can listen to audio files from patients, multidisciplinary team meetings, or from our virtual pain management programme. There's the chance to choose which procedure the patients are offered and then go through it in the virtual world. The learner gets to see how their clinical decisions impact on our virtual patients, with both good and bad outcomes. But regardless of how the storyline plays out, by the end of each module the learner has had access to the same resources, meeting curriculum learning objectives along the way.

The beauty of the platform is that you can be part of a fictional pain team, access data, guidelines and patient information in a high-fidelity way, and then act on that information to make clinical decisions with no strings attached.

There is the option to give feedback at the end of each module and, encouragingly, 100 per cent of respondents have said they want to do more.

The modules are freely available through virtualanaesthetics.com on any device with internet capabilities. We are adding to what's on offer all the time, and expanding our scope to include new virtual worlds that support learning in other areas of the anaesthetic curriculum.

We think what we're doing is really exciting and has a huge amount of potential, so why not go and have a look and have a go. There's a contact form on the main site or a short optional feedback form at the end of each module if you want tell us what you think.

For more information visit:
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INNOVATIONS

DEVELOPING AN AIRWAY SKILLS WORKSHOP

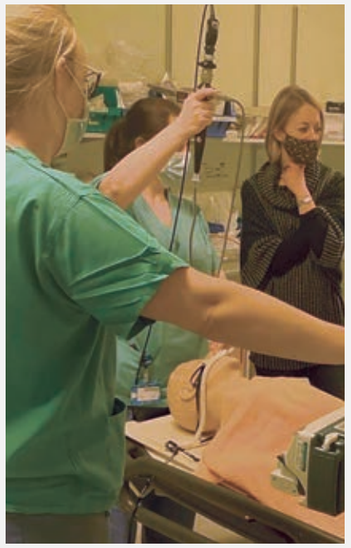
In the Mersey region, anaesthetists in training rotate through the regional Head and Neck Centre for 2–3 month placements to undertake their Higher Airway unit of training. It had been noted locally that there seemed to be less opportunity for anaesthetists in training to gain practical experience of advanced airway skills.

To enable them to make the most of any clinical experiences that presented themselves and to increase confidence, we set up a mannequin-based workshop with a consultant faculty to give them the opportunity to practise skills in fibreoptic intubation, and Bonfils and Aintree catheter airway exchange.

Setting up a practical workshop during COVID-19 presented its own set of challenges. In addition to the usual steps of securing a venue, arranging faculty and sorting out rota issues, we also needed to ensure that the course was 'Covid-secure'. Exactly what this entails is likely to vary between trusts, but things to consider would be:

- ascertain whether your trust is allowing face-to-face teaching to occur and what their stipulations are – your College tutor is a good person to ask about this
- check what the participant-number limits are for any venue you are planning to use, and keep group sizes as small as possible
- equipment will need cleaning between every participant – you will need to factor in time for this, as well as having a copious supply of wipes and hand gel
- with COVID-19 isolation rules you may have last-minute cancellations by attendees, faculty – or even yourself. Try to have as much set up in advance as is practical, and have either reserve faculty or a plan in place should you not have a full complement. If numbers change, can some of the teaching be delivered by video link, or is it possible to rearrange the programme to fit the new numbers?

Our attendees found the workshop extremely helpful for gaining understanding and confidence, so it has now been included as part of the local induction process for anaesthetists in training undertaking Higher Airway.



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INNOVATIONS

KEEPING OUR HEADS ABOVE WATER

At 6pm on a cold winter evening, a group of anaesthetists slowly make their way to the edge of Llyn Padarn, a lake in North Wales. There is a low hum of excited chatter and nervous anticipation.

From winter wetsuits, to those still braving swimming costumes and trunks, there is little that will alleviate the initial bite of cold water. Entry to the lake takes various forms, be it a slow and delicate walk in or a quick dive from the pier. The night air is punctuated by gasps, shrieks, and laughter, as one by one we get into the water. But soon there is calm. A collection of brightly coloured hats, head-torches and swim-floats can be seen bobbing in the dark as we swim. On the coldest evenings this is just a short distance, increasing with lighter evenings and warmer weather. All too soon we reach our exit point. After a dash to get dry, it is time for each of us to make our way home, the troubles of the day forgotten and already looking forward to the next Monday night swim club.

Working in anaesthetics and intensive care at Ysbyty Gwynedd in Bangor, we are fortunate to have some of the best lakes and mountains in the UK on our doorstep. Several of us were already enthusiastic open-water swimmers prior to the COVID-19 pandemic. Over the last year, with increased hours, more stress at work, and many of us living and working far from home, we felt that an outdoor swimming club would provide some much-needed relief and promote wellbeing within our department. The benefits of cold-water swimming on both physical and mental health are well known, and we cannot recommend it highly enough. When lockdown restrictions allow, we meet in an organised group with consultants, trainees, ODPs and recovery nurses all in attendance. For many of us, the swimming club is a highlight of our week, and it promotes team building within the department.

Although current restrictions have meant putting a hold on our swim-meets, we hope it won't be long before we are back in the water in altogether sunnier times. Should you find yourself in North Wales on a chilly Monday evening, pop down to Llyn Padarn and take a dip with us. Trust us, you'll enjoy it, and soon enough you'll find yourself back for more of this infectious hobby.

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Visit the College website for further wellbeing resources at: **rcoa.ac.uk/support-wellness**

TRAINEE WELLBEING IN THE NORTH WEST

Anaesthetic trainee wellbeing was brought to attention in 2017 with the release of the joint survey into trainee fatigue by the Royal College of Anaesthetists and the Association of Anaesthetists.[1]

Shortly after this, the College released the concerning findings of its own survey into morale and welfare.[2] This showed that 85 per cent of anaesthetists in training were at high risk of burnout, 78 per cent experienced detrimental impact on their health as a direct result of their employment, and 61 per cent felt their job negatively affected their mental health. Following on from this, various initiatives have been undertaken both at national and at local level. In January 2020, we sought to find out if the situation had improved locally in the North West and, in particular, to find out what was working.

What we did

Utilising the platform of the Mersey Anaesthetic Group for Quality Improvement (MAGIQ), an anonymous survey using Google forms was sent out to all trainees in the North West Deanery. A mix of free-text-answers and linear-scale questions were included. We felt that free text would increase depth of understanding in the responses. Data was thematically analysed by three independent trainees to categorise them. The survey was completed by 103 trainees across all training grades, and both full-time and less-than-full-time working patterns were represented. The survey took place from February to March 2020.

Working relationships and value

The greatest positive impact on trainees' wellbeing and sense of value was reported as coming from relationships and culture in the workplace. Supportive, approachable teams and time together with peers make a difference. 74 per cent of trainees said they felt valued at work. Other themes which make trainees feel valued included the quality of training and the feedback and recognition received for work done. From trainees' own words, we created the 'VALUED' initiative, which summarises these key themes. It can be used as a tool for assessing how valued trainees feel and targeting improvements.

Physical and mental health

Concerningly, 80 per cent of trainees reported that their physical health is negatively impacted by their job, and this was regardless of working pattern or training grade. When asked about their mental health, trainees had a more divided response, with half of trainees reporting that their job has a more negative impact on their mental health and half reporting it has a more positive impact. Reasons for this impact, particularly on physical health, clearly need urgent further investigation and action.

Free-text responses cited the following as key factors

- 'Rotas have the most negative impact on trainees, and are the areas that most wanted to see changed to improve overall health and wellbeing. Appropriate notice for shifts, respect for reasonable leave requests, recognition of the impact of nights and long hours (especially on rolling rotas) were all frequently cited.'
- 'The ability to access good-quality training, with less-frequent hospital rotations, and access to simple facilities, such as a locker, parking, and clean and comfortable rest areas, makes a positive difference.'
- 'Feedback was deemed to have an important impact on the sense of feeling valued, with trainees wanting regular, realtime feedback which is constructive and contextualised. The simple act of saying thank-you should not be overlooked.'

What can we all do to help?

Our results indicate that trainee wellbeing is still a clear issue. In our personal experience it is a topic that is now more openly discussed, which is a positive step forward. We have found that small, simple things have a large impact and should not be overlooked. We hope that sharing this data will help raise awareness of these issues, and we advocate the use of our VALUED initiative in your hospital as a checklist for trainee wellbeing and to establish where and how improvements can be made for your trainees. In the North West, we were keen to avoid our data becoming just another laminate factsheet to be put up on noticeboards, and we intend to delve deeper into several of the themes.

Figure 1: VALUED initiative

The future

Feedback is a key component of training, and impacts on trainees, consultants and the ARCP process. With this in mind, we are keen to improve the process for all. We suggest regular 'temperature checks' of trainee wellbeing at a local level and further investigation of the worrying impact on physical health.

Finally, we would like to highlight the fact that this survey took place just before the global COVID-19 pandemic. With growing pressures on the NHS and trainees, we believe that now, more than ever, we need to support the wellbeing of trainees and all other staff.

A big thank-you to our colleagues at MAGIQ, Dr Hannah Davies, Dr Simon Mercer and Dr Sarah Thornton for their support during this project.

References

1 McClelland L *et al*. A national survey of the effects of fatigue on trainees in anaesthesia in the UK. *Anaesth* 2017;72:1069-1077.
2 A report on the welfare, morale and experiences of anaesthetists in training: the need to listen. *RCoA* 2017 (bit.ly/RCoA-Welfare2017).

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SUPPORTING NOVICE ANAESTHETISTS: a mentor scheme

Too soon, we forget the seemingly monumental task of comfortably giving a safe anaesthetic within three months of starting training in anaesthesia. In our region we have addressed this by creating a peer-to-peer mentoring scheme to support novice anaesthetists through their early training. The South Coast Anaesthetic Mentor Programme (SCAMP) aims to improve the wellbeing of new anaesthetists in training by matching them to volunteer registrars.

New beginnings

The first year in anaesthesia brings with it a steep learning curve, and most anaesthetists in training have not experienced anything more than a taster week during their foundation training. It is easy to forget quite how much new information a 'novice' has to assimilate in a few months before gaining their Initial Assessment of Competency (IAC).

As a specialty, we are privileged to essentially serve an apprenticeship with guidance and hands-on training from senior trainees and consultants from the very first day. There is a huge new vocabulary to learn, and, although novice courses help demystify some aspects, (re)learning all the physiological and pharmacological principles mentioned at some point during medical school is tough. As mentors we need to be mindful in helping to avoid novices feeling 'Consultant A told me to do something yesterday that is frowned upon today by Consultant B'. However, shift work and rota patterns mean that trainees rarely spend significant amounts of time with the same colleague, making clinical pastoral care difficult on a day-to-day basis.

Since starting SCAMP, the main issues that novices have highlighted include theory, practical aspects of anaesthesia, exams, quality-improvement projects, and balancing it all with 'life'. We have found that regular contact between mentors and mentees allows the theoretical questions that arise during the first year of training to be answered non-judgmentally – and this includes the questions that it can be difficult to ask senior clinicians, but that are valid.

The first year of training involves learning a lot of new practical techniques that can be frightening to many who have not yet put large tubes into large (or small) lumens. Focus may be on 'must intubate the trachea', but time to sit down with a cup of tea to talk about other practical techniques can be hugely beneficial. The dreaded exams, tips on quality improvement and audit projects are a common theme of meetings. Often as soon as the IAC is complete, trainees are asked 'when are you going to do the exam?' Reassuring a novice that there are no right answers to this can be hugely helpful. There is no 'right' time, and curriculum changes will mean advice may change – advice that trainees who have recently passed are well placed to give. SCAMP has highlighted that having constructive individualised conversations with novices towards the end of their IAC about when they think they may be ready for the exam seem to help preparation and minimise stress.

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SCAMP

SCAMP started as a single-site mentor programme after I saw several cohorts of novices go through the journey described above. Wellbeing measures provided for novices currently includes courses tailored to getting many 'up-to-speed' with the theory and practice, as well as the allocation of an educational supervisor. However flat the hierarchy is within anaesthesia, I all too frequently heard questions asked to fellow trainees that novices did not want to ask their clinical or educational supervisor. Many of these questions arose from clinical scenarios when performing out-of-hours work.

The strength of SCAMP is in its local organisation and informality. Having no requirement for formal mentoring training means that busy registrars are happier to sign up. We provide mentoring tools, but we also ensure that mentors are aware that they are not a replacement for the current educational supervisor model. Organisation at a local level allows allocation of pairs based on on-call rotas, where working together allows for a time of great learning and help in developing the mentoring relationship.

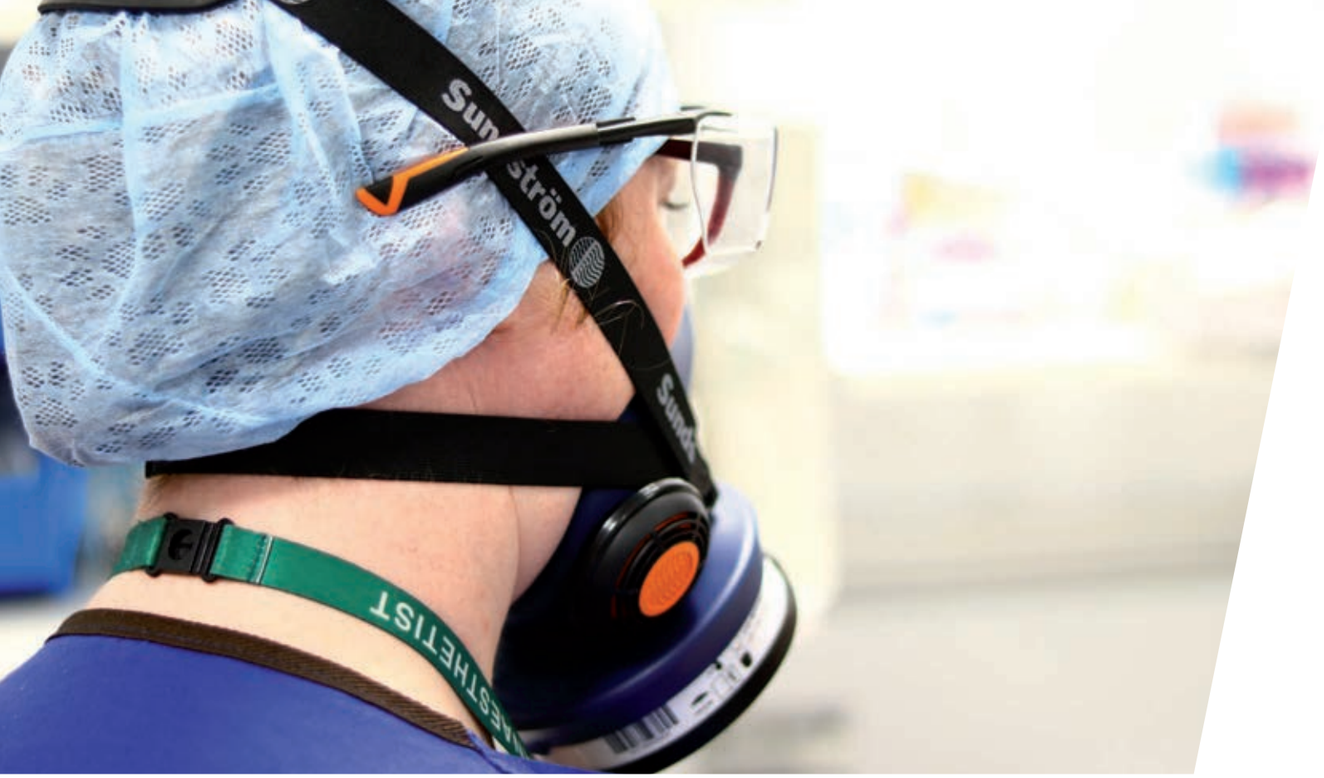
After several successful years we have expanded the mentor programme to six hospitals across the south coast of the Kent, Surrey and Sussex Deanery, with a local registrar coordinating within each department.[1] Expanding the programme has increased the support we can give to our region's novices, but has made the programme more difficult to manage by involving more coordinators and having to allow for the different types of on-call rota at each hospital.

Robust support from the College tutors, who can help allocate a local coordinator, has allowed SCAMP to continue to flourish. In our last feedback from mentors and mentees (immediately before COVID-19), 85 per cent felt SCAMP was beneficial, with only seven per cent mentioning an issue that their mentor could not provide assistance with. The future for this programme is to keep local mentoring programmes supported to help support novices, but also to develop the mentoring skills of senior trainees before they become educational supervisors themselves. In these unsettling and stressful times, a strong ethos of peer support is more important than ever.

Acknowledgements to Dr Abhijoy Chakladar for editing help.

Reference

1 Hall A *et al*. Improving anaesthetic mentoring: the South Coast Anaesthetic Mentor Programme (SCAMP). Transitioning from local to a regional mentor scheme. *Anaesthesia* 2019; **74** (Suppl 4), 47.



PANDEMIC MODULE

COVID-19 has brought a lot of lives to a standstill. Strictly speaking, I have not been an anaesthetist in training during the pandemic, but I do appreciate how aspects of life can be put on hold.

At the end of 2016, when I was a CT3 anaesthetic trainee, I was diagnosed with cancer. The period of initial diagnosis and treatment was a blur of denial and fear. This did not last long as I found that I was lucky enough not to have widespread disease. As I settled into the months of treatment, I remember that the most overwhelming feeling was one of stagnation. I could not plan ahead. I could not start a family. I could not continue my career. This feeling was heightened as I perceived the entire world to be moving on. However, during this pause permeated with uncertainty, I was able to find greater appreciation of things that often remained muted in my previously busy life. I learnt new things, found new priorities, vowed to adhere to these, and found a profound appreciation for the kindness of others. COVID-19 has likewise frozen the lives of many. I look at the patients that lie sick and without visitors. I see friends who have lost jobs, those that have struggled financially, those who were unable to plan life events. We cannot plan ahead, and we are forced to live and dwell in the moment.

The COVID-19 freeze has certainly affected our anaesthetic training, and this has been described in journals and in the recent GMC training survey.[1,3] Sneyd *et al* write eloquently about the effect of the pandemic on anaesthetic training across six continents in the October edition of the *British Journal of Anaesthesia*.[1] They describe the reduction in clinical exposure, postponement of exams, threats to training progression, challenges to teaching delivery and increase in mental health stress. Food for thought was also provided by Anwar *et al* who intentionally elaborate on the positive learning experiences gleaned from the pandemic.[2]

Indeed, this dawn that is ushering in a revamped 2021 anaesthetic curriculum is an apt time to appreciate and consider all we have learnt from this not-so-optional and highly unpopular 'pandemic module'. One does not need formal workplace-based assessments and completion of units of training to appreciate the knowledge, skills and attitudes that have grown in this context. I summarise these in Table 1 as a standing ovation to all anaesthetists in training and our consultant colleagues. Some of these have been mentioned by Anwar *et al*.[2] We have learnt much by being actively involved in processes, by witnessing the actions that transformed individual departments, and by following the relevant literature in anaesthesia journals. My department's transparency about its emergency protocols and processes, and its rapid and effective distribution of information meant that we have learnt much from our consultant body during this crisis. This invisible, undesirable module has armed us with a set of competencies that we should see both as useable and transferable. This is more than a silver lining in the context of all that has threatened our training; it is a different form of education.

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Table 1 Introducing the domains of the imaginary anaesthetic 'Pandemic Module' – not an exhaustive list

DOMAIN	ASPECTS
Professionalism	Displaying willingness to support our ICU colleagues. Keeping knowledge/skills up to date during the rapidly progressing pandemic.
Knowledge	Enhanced knowledge of disaster management. Lessons learnt in resource stewardship. Lessons learnt in infection control. Enhanced awareness of mental health stressors.
Leadership and Management	Lessons learnt in rapid information distribution. Insight into NHS patient 'flow' and the change in balance of elective/urgent work. Insight into how emergency rotas work. Insight into resource allocation: staff, estates, equipment and drugs. Awareness of how emergencies are coordinated within a department.
Skills	Donning and doffing safely. Engaging in MERIT for COVID-19 while learning lessons from pre-hospital medicine. Expanding ability to administer regional anaesthesia. Developing IT skills. Employing creativity in the approach to learning and assessments. Employing creativity to enhance communication that is restricted by PPE.
Education	Producing initiatives that prototype and support the delivery of remote education. Provision of peer training for the new skills that are made necessary by the pandemic.
Attitudes	Surviving and thriving during rapid change. Demonstrating kindness.

References

1 Sneyd *et al*. Impact of the COVID-19 pandemic on anaesthesia trainees and their training. *BJA*. 2020;**125(4)**:450-455.
2 Anwar A *et al*. Medical education in the COVID-19 era: impact on anaesthesiology trainees. *J Clin Anesth*. 2020;**66**:109949.
3 National training survey 2020: summary of results. *GMC*. (bit.ly/2OqiMni).

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ANAESTHETIC EYEBROWS: COMMUNICATION IN PPE

Successful teamwork in the clinical setting is reliant upon good communication, which is a core non-technical skill for anaesthetists and a key part of the anaesthetic trainee curriculum.[1,2] When communication fails, it potentially compromises patient safety.[3,4] COVID-19 has presented healthcare workers with many new challenges, and a survey conducted for critical care and theatre staff identified that personal protective equipment (PPE) routinely causes unexpected communication issues in the theatre and emergency settings.

Reasons for this included difficulty hearing and being heard, the inability to lip-read, and difficulty recognising colleagues. Recent reports have suggested that procedures such as tracheal intubation may produce fewer aerosols than initially presumed.[5] However, PPE continues to be a normal part of our everyday practice in anaesthesia. Guidance on how one optimises communication when wearing PPE remains limited, creating uncertainty within teams.

The following suggestions aim to optimise and reinforce the use of familiar communication techniques in order to overcome the common communication challenges faced in PPE.

Verbal techniques

- Close the loop
  - Closed-loop communication (CLC) is fundamental to efficient and successful communication, and is particularly important in time-critical and high-stress environments. It enables acknowledgement and confirmation of information passed between team members.[6]

1 **Call out**
Sender transmits message: *'The saturations are falling; increase the oxygen to 15L/minute.'*

2 **Check-back**
Receiver acknowledges and repeats back to sender: *'Increasing oxygen to 15L/minute.'*

3 **Verification**
Sender verifies message: *'Correct.'*

- Less is more
  - Keeping communication brief and optimally timed is the key to ensuring its success.[1,6] Methods of communication used in aviation, including the 'sterile cockpit' and 'mitigating speech' techniques, are aimed at minimising distractions during time-critical interventions when the impact of a mistake could be fatal.[6,7] In the clinical setting, this translates to avoiding unnecessary interruptions or ambiguous language during procedures such as intubation, for example, the anaesthetist asking for quiet at the start of induction.

Non-verbal techniques

- Name badges
  - When individual names are used, it strengthens CLC, resulting in more clear and effective communication between team members.[9] Using name badges with PPE is a simple and realistic way to achieve this, and can be incorporated into the donning process.
- Prepare to fail
  - Checklists in clinical practice save time and avoid errors in emergency situations.[1,3,10] Their success is reliant upon timing, the inclusion of all relevant team members, and carrying them out in their entirety. COVID-19 precautions have resulted in intubations frequently taking place in theatre in order to reduce potential transmission between theatre and the anaesthetic room. This new system, while wearing PPE, creates stress and unfamiliarity, particularly during unforeseen emergencies such as an unanticipated difficult airway. Ensuring that checklists are optimally used and that A-D airway plans are communicated to the anaesthetic team prior to donning PPE will minimise uncertainty and maximise coordination, efficiency and safety within the team.
- Hand signals
  - It has been shown that when hand signals are used, such as pointing to an individual team member when addressing them, team leaders maintain control more effectively.[8] This is particularly relevant when team leaders are wearing PPE and may not be clearly audible to the whole team, and when team members are not all known to one another.

References

1 Jones CPL *et al*. Human factors in preventing complications in anaesthesia: a systematic review. *Anaesthesia* 2018; **73**:12-24.
2 Lorello GR *et al*. Simulation-based training in anaesthesiology: a systematic review and meta-analysis. *Br J Anaesth* 2014; **112**:231–245.
3 Lingard L *et al*. Communication failures in the operating room: an observational classification of recurrent types and effects. *BMJ Quality and Safety* 2004; **13**:330-334.
4 Flin R *et al*. Anaesthetists' non-technical skills. *Br J Anaesth*. 2010; **105**:38–44.
5 Mahase E. Covid-19: anaesthesia procedures may generate fewer aerosols than presumed, study suggests. *BMJ*. 2020; 371:m3914.
6 Brindley P, Reynolds S. Improving verbal communication in critical care medicine. *J Crit Care* 2011; **26**:155-159.
7 O'Connor P *et al*. Teamwork and communication. In: Flin R, Youngson G, Yule S, eds. *Enhancing Surgical Performance. A Primer in Non-technical Skills*. Florida: Taylor and Francis Group, 2015; 105-118.
8 Härgestam M. Trauma team leaders' non-verbal communication: video registration during trauma team training. *Scand J Trauma Resusc Emerg Med* 2016; **24**:37.
9 Burton Z *et al*. Mad as a hatter? Evaluating doctors' recall of names in theatres and attitudes towards adopting #theatrecapchallenge. *Br J Anaesth*, 2018; **4**:984-998.
10 ICU Intubation guidelines. *Difficult Airway Society*, 2018 (bit.ly/2Ooa5Kc).

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THREE UK FELLOWS IN BRITISH COLUMBIA

As two senior trainees and one new consultant from UK schools of anaesthesia, we undertook fellowships in Vancouver. Our collective experience in three of the major teaching hospitals has given us a broad perspective on the practice of `anesthesia´ in British Columbia (BC). In this article, we highlight some interesting differences between Canadian and UK culture and practices.

Shamir spent a year at Vancouver General, a tertiary centre for subspecialties including head and neck, hepatobiliary, transplant, and trauma. The model of perioperative care is somewhat different from the UK in that several purely perioperative roles are filled by dedicated 'anesthesiologists'. For example, a dedicated perioperative echocardiography role is filled by an accredited cardiac anaesthesiologist. They perform transoesophageal echocardiography for cardiac cases but can also be called to any case where a patient would benefit – for example, during liver transplants or open abdominal aortic aneurism repairs. A designated 'perioperative anesthesiologist' is available to see inpatient 'consults', to help with any tricky cases in the theatre or 'operating room' (OR, as it is called in Canada) and to oversee the PACU, leaving the OR staff free to carry on their list. Strong links with dedicated physician-led perioperative medicine teams ensure that patients are followed up beyond their PACU stay. The day-to-day experience in the OR is also different – there are no anaesthetic rooms, and inductions are all performed in the OR. There are no operating department practitioners! However, help is available from trained anaesthesia assistants for cardiothoracics, liver/lung transplantations or awake tracheal intubations.

Charlie's fellowship was at BC Women's, a major obstetric tertiary centre for BC. Two anaesthetic consultants (or a consultant and fellow) are on-site at all times. Clinically, there are a few interesting differences. For example, IV cannulation is seen as primarily a nursing role; loss-of-resistance syringes are made of glass; wire-reinforced, flexible soft-tip, single-orifice end-hole epidural catheters are used (it is vanishingly rare to see an intravascular catheter with these); hyperbaric 0.75 per cent bupivacaine with preservative-free morphine and fentanyl in spinals is normal (alternative opioids such as sufentanil and hydromorphone are also available but there is no diamorphine); thiopentone is not available in North American hospitals. Obstetric patients choose to have their care overseen by either their family doctor, a midwife, or an obstetrician. However, all patients in labour are cared for by a registered nurse (who is not a midwife). Coming from the nurse-midwife and obstetrician model in the UK, this is somewhat confusing to begin with. For example, it is not uncommon to meet the patient's GP scrubbed in with an obstetrician for a caesarean section. This system has developed largely due to the geographical expanse of Canada, where remote rural communities rely on GPs trained in anaesthetics and surgery.

Sachin's fellowship was in cardiothoracic anaesthesia at St. Paul's Hospital, where services include mechanical-assist devices and heart transplantation. Significant impressions from his experience relate to the culture of support and high levels of autonomy. Any new job starts with a period of adjustment, and clinical performances tend to be impaired during this time; at St. Paul's, colleagues give continuous encouragement as well as time and space to perform, even in the face of external pressures. Optimism, enthusiasm and innovation are abundant, and skepticism is restrained. The evolution of this culture is multifactorial, but a few observations were noted. Their postgraduate medical training is significantly different to our apprenticeship model. Services are not dependent on Registrars ('Residents'), allowing a focus on learning. Training time is well protected and consequently condensed to five years. Residents' knowledge and confidence are high, while a healthy work-life balance appears to be maintained. This level of competence is partly due to medicine being a highly competitive, postgraduate degree. Services are led by consultants, and non-salaried payment structures can compensate them more fairly for all clinical activities undertaken. Overrunning lists and late-night emergency cases do not cause so much consternation as a result. Referrals are usually made directly to consultants, who then review patients personally.

Anaesthetists control not only their rotas but their working patterns too. There is flexibility for assuming non-clinical roles (for example, leadership or quality improvement), which are often supported and funded separately. There were, of course, challenges to working in a different country and healthcare system without the usual support networks. Training in the UK has provided great preparation for these challenges, with a wide range of skills, experiences and resilience gained through a lengthy and demanding training programme. Respect for the NHS and the doctors it produces is very high in Canada; coordinated UK national projects such as NCEPOD, the National Audit Projects, and ICNARC are unmatched globally as the recent RECOVERY trial attests to.

It is not easy to fully illustrate the amazing experiences we all had in beautiful British Columbia, both in and outside of work; hopefully our photos give you some impression! We would all thoroughly recommend these fellowships to future anaesthetists in training.

TO BE OR NOT TO BE... (AN ANAESTHETIST)

I wonder what went through the Bard of Avon's mind when he penned these words, as it resonates with every aspect of life even centuries later – and especially so in the minds of healthcare workers during the pandemic.

Ever since March 2020, this thought has lingered in my mind, and it makes me wonder if many of my anaesthetic/ICM colleagues have been in a state of similar quandary. It was triggered when my 11-year-old came to me in tears, late one evening.

I had come home after a long day at work and was in a thoughtful mood as my husband, who also happens to be an anaesthetist, had left for the overnight on-call. Working in the same trust, we have handed over and taken over not only patient care at times, but also childcare. There have been occasions when our daughter waited in one of the office cubicles in the hospital while we finished the handover. She was a proud little girl showing off to her friends, talking about her occasional tours to the hospital.

That evening, she was upset by the fact that both her mum and dad were anaesthetists, that she always seemed to spend time with just one of them and very rarely both. They worked weekends, nights, and even on Christmas day. They constantly talked about rotas... She went on and on, finally finishing by saying that when she grows up, she never wants to be a doctor! I did not prolong the conversation that evening as it was late, and I decided to sleep on it after tucking her into bed. However, I was perturbed by the discussion as clearly it is not reassuring if we have a whole next generation who resort to thinking the same way, considering the already struggling NHS workforce and the gaps reported in the latest census report.[1]

It struck me hard how the pandemic has affected not only us as health professionals, but also the wellbeing and life perspectives of little minds. Being an optimist, I quickly reassured myself that this was my little girl who loves being poetic and dramatic at times and that this moment and phase of life would pass soon.

Thanks to online schooling, the following week she was learning the anatomy of the heart and circulation in the mornings and had loads of fun and reflective activities in the afternoon as part of the children's mental health week. I was truly relieved that she was back to her inquisitive self, asking me lots of questions about the circulation and the chambers of the heart. I took my opportunity and cheekily said that I could answer all her queries because I was a doctor! And she beamingly replied that she was very happy and wanted to be one too!!

But that little conversation of ours made me pause and wonder if there are anaesthetists, intensivists and nurses who are having second thoughts about the wonderful profession they have taken up...and I am not entirely wrong.[2]

I am an SAS anaesthetist, and I love my job and all the challenges that come with it. As SAS doctors, I guess we have all had moments in our career when we reflect on the Bard's most famous line – 'To be, or not to be: that is the question' – in different contexts, whether it is embarking upon examinations, pursuing the CESR route, taking up leadership roles, getting involved in College activities, or even going back into training.[3]

I believe that the opportunities are endless for those who have an open mind and who are willing to step out of their comfort zones, and the best time to be seizing these opportunities is when you think of it! Quoting Shakespeare again 'We know what we are, but know not what we may be'!

With the recently released COVID-19 winter snap poll survey results,[2] it is imperative that we take time to reflect and reset, not only for a robust 2021 but also for the years to come. It is encouraging that the recently launched 'Anaesthesia – fit for the future' campaign will hold exciting opportunities and more career-fulfilling pathways for SAS doctors.[4]

As we slowly but steadily tread on the waning curve of the second wave, with the vaccination programme rolling out rapidly as the sun shines again and with spring just around the corner, I hope that we take time to pause and congratulate ourselves that we have indeed come a long way together as individuals and as a team.

It has not been easy for many of us, both personally and professionally, and for those of us having second thoughts, I hope and wish that we find our inspirations just as my little one did and that we 'never cease to be anaesthetists'!

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References

1 RCoA Medical Workforce Census Report 2020, *RCoA*. (rcoa.ac.uk/census-2020).
2 One in three anaesthetists suffering with mental health problems caused by the pandemic, *RCoA* (rcoa.ac.uk/snap-survey-2021).
3 Developing SAS Doctors to maximise team potential, *RCoA* (rcoa.ac.uk/dev-sas-doctors).
4 Anaesthesia – fit for the future, *RCoA* (rcoa.ac.uk/anaesthesia-fit-future).

Get involved with our **Anaesthesia – fit for the future** campaign at: **rcoa.ac.uk/anaesthesia-fit-future**

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Faculty of Pain Medicine (FPM)

FPM-learning

Although challenging in many ways, the past year has proved to be a great catalyst for promoting remote teaching and learning. In response to demand and support from trainees and trainers alike, we have launched FPM-learning – a source of remote learning accessible through the FPM website.

FPM-learning incorporates a broad range of modules including excellent resources that are already available: e-Pain and Essential Pain Management – aimed at medical students and foundation-year, core, and intermediate trainees. Opioids Aware provides excellent medication advice for all health professionals. The site links to the FFPMRCA Exam Resources site, which includes suggested reading material, previous exams topics, and MCQ and SOE practice questions.

FPM-learning promotes communication skills, signposting to internet sites with relevant material and modules on health coaching. Further sections include podcasts and webinars aimed at promoting teaching mapped to the curriculum. Regular case presentations include scenarios commonly seen in pain clinics, but also focus on some unusual cases which pose ethical dilemmas. A regular Journal Club and Recommended Reading for the month provide a list of open access peer-reviewed articles which reflect the multidisciplinary aspect of pain medicine.

We are also pleased to promote access to virtualanaesthetics.com – a Welsh anaesthesia resource comprising a series of simulated interactive clinical scenarios in pain medicine (see page 27 for more information). The site links to relevant NHS resources, and guidelines, including NICE and Cochrane guidelines. Developing and maintaining this site would not be possible without the contribution of many – including pain-medicine trainees, members of Training and Assessment Committee, and FPM Board and webinar speakers. Special recognition goes to Dr Sonia Pierce, Regional Advisor Pain Medicine for Wales, and her trainees for the Virtual Anaesthetics interactive programme.

We welcome feedback regarding FPM-learning, and if you have any suggestions or contributions that could be uploaded on the website please contact us at: contact@fpm.ac.uk

For more information about FPM Learning visit **fpm.ac.uk/fpmlearning**

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Faculty of Intensive Care Medicine (FICM)

TRAINING UPDATE

Firstly I want to thank all the anaesthetists and dual trainees who have stepped into the breach during the pandemic. Your help and commitment have saved many, many lives, and I am very aware that you have had your training disrupted and that the constraints imposed by the curriculum have made it a real headache to compensate for this.

We are trying to be as flexible as we can from the FICM perspective, and are in regular contact with the GMC to try and smooth your path. You will by now be familiar with the derogations that are in place, and hopefully these will help. However, there is ongoing dialogue about your predicament, so we will continue to seek solutions as the pandemic unfolds.

And then, of course, there is the new curriculum. For those of you following an anaesthetic/ICM dual-training path the good news is that the new portfolio for ICM is held on the same platform as the anaesthetic e-portfolio so that there will be better cross pollination for you. The new e-portfolio for ICM should also be easier to use. The ICM curriculum has been approved by the GMC, and our next step is to match the areas of overlap between ICM and the partner specialties. Most of these should be straightforward as they have already been established in the old curricula, an example being that time in cardiothoracic, neurosciences and paediatrics in Stage 2 is counted towards both ICM and anaesthesia.

Lastly, we have had to move critical progression points to remote assessment, the FFICM Exam and Recruitment being two examples where we really miss the face-to-face contact. My apologies for having to go down this route – there really has been no option. But I am sure we will all be mightily relieved when we can get back to some semblance of normality.

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Revalidation for anaesthetists

Lifelong Learning platform updates

The previous edition of the *Bulletin* featured some data on usage of the Lifelong Learning platform including, the addition of more than 40,000 personal CPD activities in the 14 months since this functionality had been launched in the system, and we are delighted to report that this total is now approaching 60,000 activities.

We would like to respond to an enquiry which has been received from some users about the CPD reporting functionality. They have mentioned that their CPD activity report includes items from outside their filtered date range. In this situation, it should be checked that all of the CPD activities have been given an end date as well as a start date. If they don't have an end date the system will assume that they are still active as of today and will include them in the activity report.

Some other users have commented on the need to enter the dates and CPD credits attached to a multiple-day accredited event when associating this with a CPD activity. This corrects a serious issue with the old system where these fields could not be edited. This could have resulted in probity issues where for example a doctor had only attended two out of three days of an event but the system would still have recorded their full CPD credits allocation. It's also now possible to associate more than one CPD activity to an accredited event, where for example the user has been involved both as a member of the faculty and as an attendee.

One feature of the old system was its alignment to the CPD Matrix, and, based on member feedback over an extensive period of time, this was discontinued in the Lifelong Learning platform. However transitional arrangements can be mapped through the Framework of CPD Skills, an entirely optional resource, which has recently been reviewed and updated, including the addition of Preoperative Assessment and Patient Preparation, and of Advanced Chronic Pain. Further feedback on the Framework is very welcome.

Finally, the new anaesthetics and ACCS curriculums are going to be launched in August 2021, and extensive work is now underway to accommodate these into the Lifelong Learning platform. Further updates will follow across the College media and on our website via rcoa.ac.uk/lifelonglearning.

PERIOPERATIVE JOURNAL WATCH

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Perioperative Journal Watch is written by TRIPOM (trainees with an interest in perioperative medicine – tripom.org) and is a brief distillation of recent important papers and articles on perioperative medicine from across the spectrum of medical publications.

Perioperative risk factors for recovery room delirium after elective non-cardiovascular surgery under general anaesthesia

The authors aimed to determine perioperative risk factors for the development of recovery room delirium (RRD) in patients undergoing elective non-cardiac surgery under general anaesthesia. RRD was diagnosed according to the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). 228 patients were included, and RRD developed in 57 (25%). The following risk factors were identified using univariate and multivariate logistic regression: use of inhalation anaesthetic agents (OR = 6.294, CI 1.4–28.8), primary malignancy (OR = 3.464, CI = 1.396–8.592), American Society of Anaesthesiologists Physical Status (ASA-PS) III–V (OR = 3.389, CI = 1.401–8.201), elevated bilirubin (OR = 2.535, 95% CI = 1.006–6.388), and invasive surgery (OR = 2.431, CI = 1.103–5.357,). RRD was associated with higher costs and a longer hospital stay (17 versus 11 days, p=0.002).

Wu J *et al, Perioperative Medicine*, 2021, 10:3 doi.org/10.1186/s13741-020-00174-0

Impact of short-acting vs. standard anaesthetic agents on obstructive sleep apnoea: a randomised, controlled, triple-blind trial

Short-acting anaesthetic agents are currently recommended for patients with obstructive sleep apnoea (OSA). This randomised, controlled, triple-blind trial looked at the effect on OSA severity of a desflurane-remifentanil technique compared with standard agents (sevoflurane-fentanyl). Sixty patients for hip arthroplasty were randomised to either group, and respiratory polygraphy was performed preoperatively and on the first and third postoperative nights. Mean values for the supine apnoea-hypopnoea index on the first postoperative night were 18.9 (CI 12.7–25.0) and 21.4 (CI 14.2–28.7) events. h−1, in the short-acting and standard anaesthesia groups respectively (p=0.64). Corresponding values on the third night were 28.1 (15.8–40.3) and 38.0 (18.3–57.6) events.h−1 (p=0.34). This trial calls into question current recommendations on short-acting agents in OSA.

Albrecht E *et al*, *Anaesthesia*, 2021, 76, 45-53 doi.org/10.1111/anae.15236

Association between plasma tau and postoperative delirium incidence and severity: a prospective observational study

This study assessed the association of postoperative delirium with biomarkers of neural injury.

The authors conducted a secondary analysis from a prospective cohort of 114 patients undergoing elective surgery with overnight hospital admission. Incidence of delirium was assessed against the primary outcome of serum tau protein at postoperative day one (POD1). The rise in plasma tau from preoperative serum to POD1 was greater in patients who experienced delirium (p<0.001), and this correlated with disease severity (p<0.001); the correlation held independently of age, sex, preoperative cognition and inflammatory biomarker IL-8 (p=0.026). A decline in plasma tau correlated with resolution of delirium. In summary, this paper contributes to the emerging research into biomarkers of delirium, opening further avenues of research into causation and clinical monitoring.

Ballweg *et al*, *BJA*, 2021, 126(2), 458-466, doi.org/10.1016/j.bja.2020.08.061

The application of Enhanced Recovery After Surgery (ERAS) for patients undergoing bariatric surgery: a systematic review and meta-analysis

Adverse outcomes after bariatric surgery occur in approximately 1 in 20 patients. ERAS provides perioperative support to optimise rehabilitation and has been trialled with success in several areas. This meta-analysis reviewed 17 studies to compare ERAS against standard care in adults undergoing weight-loss surgery (n=8182). Length of hospital stay and incidence of postoperative nausea and vomiting were significantly lower in the ERAS group compared to standard care (p<0.001). There was no significant difference in safety measures between the two groups (postoperative complications, re-admission, reoperation, or emergency room visits). While differences in implementation of ERAS did lead to some heterogeneity in results (for example in pain control), this paper highlights the benefits of ERAS for both patient outcomes and cost-feasibility of bariatric surgery.

Zhou J *et al, Obesity Surgery*, 2021 Jan 9. Epub ahead of print. doi.org/10.1007/s11695-020-05209-5

The College is committed to developing a collaborative programme for the delivery of perioperative care across the UK: cpoc.org.uk

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Clinical Directors' Executive Committee

One trust's approach to medical leadership development

At its best, medical leadership, from the shopfloor to the boardroom can enhance the performance of a team, leading to improved clinical outcomes and greater staff and patient satisfaction.

However, despite the need, there is hardly an oversupply of doctors wanting to enter formal leadership roles, and those that do are soon left in no doubt that, while these roles can be extremely rewarding, they are challenging journeys of inner growth and development. Like clinical roles, they are best undertaken with appropriate training and a large dose of support.

Starting from the beginning: our new consultants

In 2015, the human resources director of The Luton and Dunstable hospital tasked our Head of Organisational Development (OD) and me to develop a scheme to support the transition of new consultants into their role. Through a survey of our existing consultants, we established what was good about the existing arrangements, what was missing, and what difference it would have made to them had a support scheme been in place.

Acting on the findings, we set up a programme that included a 'meet and greet' conversation with the Associate Medical Director for Culture and OD, a lunchtime New Consultant Forum which gave space for conversation, and included presentations on revalidation, the Maintaining High Professional Standards policy, serious incidents, and how to write a business case. We offered consultants a trained mentor from outside their own department and a place on an externally provided course for new consultants.

As this programme developed, I became more aware, through issues presented at mentoring sessions, of the skills areas useful to new consultants – in particular, personal effectiveness, conflict resolution, change management, and effective leadership. Although the New Consultant Forum was valued as a place to come together, regular lunchtime meetings were something that few could find the time for, and on external courses our new consultants were not networking with each other.

In response, we have adapted parts of our programme, and we now offer an internally delivered new consultants' course that provides workshops on the skills areas identified above, retains the presentations, and gives time for our new consultants to network with each other and with members of the executive team. We are promoting the use of an Emotional Social Competency Inventory (ESCI) 360 degree tool for increased self-awareness around emotional intelligence. Coaching sessions with a qualified coach are available to anyone who wants to develop their leadership skill set further. The programme has been well received by our new consultants.

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Moving on: our clinical directors

For our clinical directors (CDs), we worked on the same basis – that leadership development requires knowledge, skills, enhanced self-awareness, and a network of support. We took into account the fact that our leaders were at different stages in their development and that one size would not fit all. For knowledge and skills development we chose to offer topics based on the areas that seemed to cause the greatest concern to CDs.

The Head of OD and I then interviewed all of our CDs and road-tested our suggestions, largely finding them to be in keeping with what was wanted. Also on offer, was access to a mentor for support, and a coach from the East of England coaching register for skill development; we also promoted the use of the NHS Leadership Academy 360 tool.

The output from each interview was an individual leadership Personal Development Plan (PDP), and the Head of OD then signposted CDs to both internal and external courses to enable PDP progress.

Since 2015, we have evaluated and refined our CD leadership programme. CDs too need a place to talk, and we now hold a quarterly half-day Medical Leaders Forum. Chaired by a senior medical leader, this has no formal agenda, but is a place to exchange views on business, leadership and culture with each other and the executive team. We are also moving towards yearly supportive leadership appraisal conversations between CDs and the CEO and medical director around 'how are you, what's working well/not so well in your leadership position, how can we support you, what could we usefully do more or less of for you' as opposed to 'how are your departmental KPIs?' that is the stuff of business meetings.

Support to make it happen and the future

The leadership programme has been developed thanks to an extremely supportive and forward-thinking director of human resources. The merger of Bedford and Luton and Dunstable hospitals in 2020 gave us the opportunity to establish a formal OD faculty with a broader range of OD skills, greater educational opportunities, and the ability to run internal Action Learning sets.

Personally, I have benefited a lot from developing as an executive coach; it's a source of pleasure to play a part in developing colleagues and, in turn, learn from them, and I would highly recommend it to others.

More information on the Clinical Directors' Network is available from:

rcoa.ac.uk/clinical-director-network

Patient perspective

EXPLORING INEQUALITIES IN PATIENT SAFETY

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The COVID 19 pandemic has starkly highlighted the long-standing issues of disproportionately poor healthcare outcomes occurring in particular patient groups. Much of the previous work on addressing these health inequalities has focused upon the social determinants. Pauline Elliott talks to Dr Cian Wade about his work exploring other causes of these disparities and finds out how he ensures meaningful patient and public involvement in his study.

PE: Thank you for talking to me about your work on health inequalities, Cian. How did it come about and what do you hope to achieve?

CW: The National Patient Safety Team at NHS England and NHS Improvement have found that risk of preventable healthcare harm is experienced unequally across different patient groups. These are the patient groups that typically suffer inequality of health outcomes. This suggests that there are aspects of our patient-safety practice and wider clinical care that also contribute to health inequalities. Relatively little work has been done to explore where this increased risk of preventable harm occurs along a patient's journey and what the reasons for it are. The implications of our findings are that our healthcare system needs to better evaluate what measures we can take to mitigate the increased risk of harm in these patient groups.

In my joint role as Clinical Fellow at the Academy and the National Patient Safety Team, I'm helping develop a strategic plan for how we can reduce inequalities in patient safety.

PE: That sounds like a really interesting and challenging project, which will potentially improve clinical practice and patient outcomes. How are you going about it?

CW: The project has two phases. In Phase 1 we aim to articulate where along a patient's journey the areas of particular risk of harm lie, what those risks are, and what the underpinning principles contributing to those risks are. In Phase 2 we aim to identify and develop solutions that will mitigate those risks. We hope this approach will provoke the wider system into focusing more effectively on these issues and lead to improved equality of healthcare safety.

PE: Why did you decide to explore these issues using the model of the patient's journey?

CW: Our scoping evaluation identified a wide range of themes that contribute to inequality of safety. Grounding these in real patient journeys brings these issues to life. Our approach immediately puts the patient at the centre of our thinking, and therefore focuses the work on areas that have the best potential for improving patient safety. Conceptualising these challenges in this way also helps to focus system leaders on finding solutions to points of particular risk.

PE: How will you engage patients and the public in your work and why is that important to the outcomes of the study?

CW: The most important thing is to involve patients right from the very start so that they can help paint these journeys for us from their lived experiences. Consultation and roundtable discussions with groups such as the Academy Patient and Lay Committee are therefore essential for the success of this project.

PE: The College hosts the Centre for Perioperative Care (CPOC)[1] whose work is also modelled around the patient's journey. CPOC is a partnership between patients, the public and professional stakeholders to facilitate perioperative care for patient benefit. Do you see parallels in your study and is there potential for shared working?

CW: I also happen to be collaborating with CPOC on improving perioperative shared decision-making, with patient journeys at the heart of our approach. Improving shared decision-making is a key vehicle by which patients will be more involved and engaged in their own care, and we hope by extension, in their own healthcare safety.

PE: When do you expect to be able to share the outcomes of your work and how will patients and the public get to know about it?

CW: We hope to have both Phase 1 and Phase 2 of the project completed by the summer. However, the sorts of issues we have unearthed will require years of cross-system work and iterative improvements to tackle. We hope that this initial project will provide others within the system with the framework and impetus to drive their own improvements in the equality of healthcare safety.

PE: Thank you very much Cian. This is clearly incredibly important work, and it's great to see that you are committed to meaningful engagement with patients and the public. I look forward to talking to you again to learn about the results and impact of your project.

Reference

1 Centre for Perioperative Care (cpoc.org.uk).

To find out more about our Lay Committee, please visit our website at: **rcoa.ac.uk/lay-committee**

LIDOCAINE INFUSIONS: SAFETY AND SILENCE

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In April 2019 Yvonne Hewitt died, two years after suffering cerebral damage as a result of an infusion-rate error. An intravenous lidocaine infusion had been prescribed for postoperative analgesia following major surgery, and the trust did not have a protocol in place for its use.

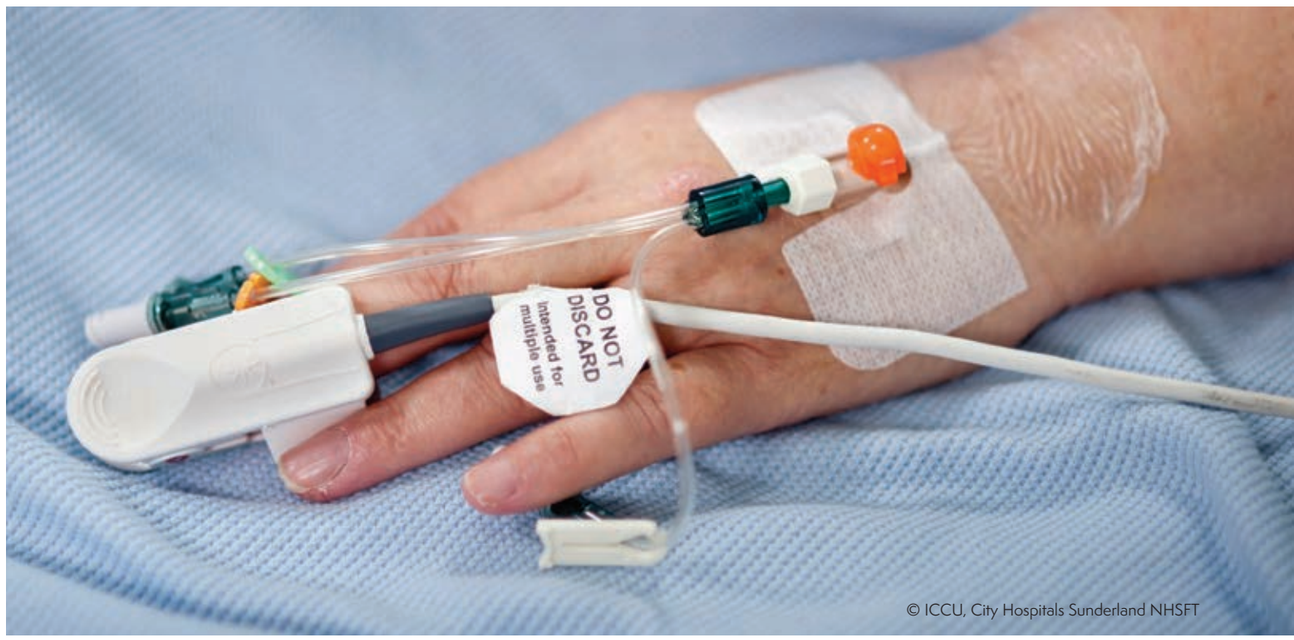
As a consequence of this and other near-miss incidents, the issue of lidocaine infusions for acute pain came to the Safe Anaesthesia Liaison Group (SALG), a long-standing collaboration between the Royal College, the Association, and NHS Improvement. Surprise was apparently expressed that this off-licence use of a local anaesthetic was relatively widespread, despite there being no national guidelines. True, there were studies and meta-analyses which demonstrated a benefit, albeit a relatively small one, from the practice, but it was clear that there were narrow safety margins and that risks could not be completely mitigated by using weight-related infusion regimens, however carefully applied.

After due consideration, the wise heads of SALG were of the view that this was an established practice which could be made safer by the application of national guidance, and so SALG produced a cautiously worded draft safety guideline. However, the Medicines and Healthcare Products Regulatory Authority (MHRA), responsible for drug regulation and represented on SALG, objected strongly to the unlicensed use of a hazardous drug for very limited proven advantage. Council of the Royal College, to whom the SALG draft was sent for consideration, agreed with the MHRA assessment, and refused to endorse the guidance.

This impasse came to the attention of the profession in the February 2021 edition of *Anaesthesia*. Irwin Foo and a stellar cast of experts published an international consensus statement on the efficacy and safety of intravenous lidocaine for postoperative pain and recovery. The authors provided a comprehensive analysis of the evidence surrounding the use of lidocaine for this purpose, and made 15 detailed recommendations for clinical practice.

So far, so good. But, the putative anaesthetist, already drawing the lidocaine into the 50 mL syringe, would have their eye inexorably drawn to the accompanying editorial, jointly written by the chair of SALG and the anaesthetic advisor to the MHRA. This piece, in the self-same issue of the journal that told you how to use intravenous lidocaine, essentially told you NOT to use intravenous lidocaine. Not quite in so many words, but the sentence at the end of the opening paragraph seemed clear enough: 'This editorial outlines why, in the case of IV lidocaine, the use of this unlicensed medication cannot be endorsed.' The authors' reasons for this stance can be broadly summarised as:

- no credible molecular hypothesis to explain why lidocaine should have analgesic properties
- poor evidence of clinical efficacy
- risk of harm arising from a narrow therapeutic index
- issues arising from using lidocaine for an unlicensed purpose, including patient consent
- transfer of possible legal liability from the anaesthetist to the doctor caring for the patient on the postoperative ward, the authors emphasising that the latter should exercise a 'license to stop' the infusion 'immediately and at any time' if they do not believe it to be efficacious.



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Anaesthetists are accustomed to dealing with potentially hazardous drugs. Indeed, our role could almost be characterised as doing very dangerous things in a very safe way. Using a drug outside its licence is also a fairly commonplace anaesthetic experience, as anyone who has anaesthetised a child or added diamorphine to a spinal injection will attest. In this case, it seems to be the combination of risk of harm, lack of licence, poor analgesic effect and transfer of risk beyond the immediate remit of the anaesthetist that led the authors to take such a strongly negative position.

I have chosen to highlight the lidocaine controversy in this column as it was the first agenda item in the first meeting of the newly formed RCoA Ethics Committee. We were asked by the College to consider whether it was enough that the College remained silent on the issue, or whether it had a duty to make a statement reflecting their view that the technique was unsupportable? We were advised, and agreed, that the College has a 'special moral authority' to speak out when presented with a practice which generated polarised views as to whether it was safe. Remaining silent does not necessarily correspond with a neutral position. This also reflects general trends in ethical medical practice which do not condone a doctor remaining silent when they know of a colleague whose practice is unsafe, and which stress the importance of making patients aware of the risks of proposed interventions when seeking consent to treatment.

The College's vision is: 'advancing the delivery of safe patient care', and its mission includes: 'improving patients' safety, wellbeing and outcomes through the maintenance and advancement of standards in anaesthesia, critical care and pain medicine'.

We were therefore of the view that the College had an ethical and moral duty to actively alert its members, and the general public, of its reluctance to support the use of lidocaine infusions in this way. As a result of this, the president of the College and the dean of the Faculty of Pain Medicine have put a joint statement on the College website, drawing the attention of anaesthetists and members of the public to the publication of the consensus statement and strongly encouraging clinicians to read the accompanying editorial on the College website at: rcoa.ac.uk/statement-lidocaineinfusions.

OXYGEN DELIVERY DURING COVID-19

On 1 April 2020, NHS England issued an urgent alert highlighting potential shortages of oxygen during the COVID-19 pandemic. Until this point, clinicians and patients had been largely unaffected by the practicalities of oxygen delivery to the bedside, and instant accessibility was taken for granted.

However, within days, oxygen became a finite resource, with some NHS trusts forced to limit admissions due to oxygen failures. Oxygen supply became the focal point of many trusts' responses to COVID-19, including that of the University Hospital of North Tees (NTUH). The pandemic catalysed a review of our oxygen provisions and prompted discussion around the financial and environmental sustainability of our current practices and how we prepare for the future.

Our experience

The North Tees and Hartlepool Hospitals NHS Foundation Trust provides services to 400,000 people across two main hospital sites in the north-east of England. The main hospital site in Stockton is a 563-bedded acute hospital built in 1968, and it has a 14-bed critical care unit.

Oxygen supply challenges were identified several weeks before the peak of the outbreak in the north-east of England. This was in part due to representation from respiratory and anaesthetic clinicians in the trust's

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Clinical Advisory Group, who were responsible for managing our COVID-19 response strategy. Preparations to increase to 2.5 times current capacity began with a review of oxygen delivery systems, ventilators, and oxygen consumption.

Two key issues immediately became apparent –

1 Oxygen supply was limited by a relatively small vacuum-insulated evaporator (VIE) capable of a maximum flow of only 1,000 L/min. Modern VIEs are capable of approximately 3,000 L/min.
2 Supply–demand mismatch was occurring due to the linear configuration of the oxygen pipeline network. This resulted in critical pressure drops in areas furthest from the VIE. Vulnerable areas included critical care, theatres, the respiratory unit, and the site of the proposed dedicated Covid ward. Small (15mm) diameter peripheral pipelines also greatly restricted oxygen flow rates even in times of adequate supply.

Our response

A number of solutions were rapidly implemented.

- The proposed site for the designated Covid unit was moved to an area with a more robust oxygen supply.
- Total oxygen capacity was temporarily increased by moving the VIE from the Hartlepool site to North Tees, providing an extra 500 L/min. Continuous water de-icing of the VIEs was provided by the estates team in response to freezing.
- A new 22mm pipeline was laid in the medical tower, which doubled the available flow rate, and further pipeline was laid throughout the hospital to create a ring-supply, upgrading the existing linear configuration. This prevented pressure drops in peripheral wards and allowed rapid rerouting of oxygen to areas of increased demand, increasing the flexibility of the system. Capacity was further enhanced by the addition of cylinder manifolds.
- Throughout these changes the estates team worked tirelessly to visit clinical areas four-hourly to measure pipeline pressures and calculate oxygen consumption. This data was converted into realtime graphs ensuring supply and demand were constantly optimised.
- This monitoring identified that patients using Trilogy CPAP machines by Philips Respironics were consuming up to 100 L/min of oxygen. This had the potential to cause rapid and unpredictable emptying of the VIE and a potentially catastrophic shutdown of the oxygen supply. Significant work by the respiratory team demonstrated large differences between predicted and real-life oxygen consumption of Trilogy CPAP machines. This prompted the development of a daily flow diagram to identify patients who could be escalated to critical care or stepped down to A30 home ventilators, which proved both safe and effective.

Reflections and next steps

Currently there is little research regarding the environmental impact of medical oxygen. However, as demand continues to increase sustainable practice will become essential for service provision. Upgrading infrastructure will be required in many trusts across the UK at potentially significant financial cost. At North Tees and Hartlepool the above steps have increased oxygen from 500 L/min to 3,000 L/min, and we extend our thanks to the Estates and Respiratory teams who worked tirelessly throughout the pandemic to achieve this. We have demonstrated that by making adjustments in ward planning, pipeline configuration and equipment selection it is possible to maximise the resources we have available to us, with the hope that it will sustain us throughout further Covid waves and beyond.

Generational humility, Generation X and medical education

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A middle child, born in 1972, my life unfolded right in the middle of Generation X. Now aged between 40 and 55, the generational cohort that currently makes up the bulk of the consultant body and therefore the trainers of the younger generations of anaesthetists, is called Generation X.

I am writing this in response to Dr Barrie's article, 'Intergenerational differences and medical education', that appeared in the November issue of the *Bulletin*.[1] Apart from their numbers, no further mention was made of Generation X. Attention is given to the generational attributes of the Millennial and Generation-Z cohort, and how these can lead to frustration and misunderstanding for their Baby-Boomer trainers.

Not being a sociology or educational expert, I have been an Educational Supervisor for several years and find the generational topic fascinating. The near-omission in Dr Barrie's article of the most numerous Generation X reminded me of a non-scholarly article from *PaperCity* magazine about this 'forgotten' generation.[2]

As history unfolds, the defining historical events, societal trends and technological advances shape the changing values, attributes and motivations of generations as they emerge and mature.[3,4,5] Three types of generational effects have been described: life cycle, period, and cohort.[4] In a world that changes slowly, generational effects are mostly related to stage in life. In a rapidly changing world, cohort effects create additional differentiation with regards to experience, expectations, values and behaviours.

Generation theory all but disappeared from academic study after a peak in the 1960s and 1970s to re-emerge in the 2000s, latterly appearing to be 'more popular culture than social science'.[6] Critiques of generation theory caution against the creation of generational stereotypes and remind us that within-group differences are often larger than between-group differences. Any stereotyping, whether by race, gender or generation, can contribute to unconscious bias.[6,7] On the other hand, recognising generational influences on individuals can bring greater understanding between trainers and trainees.[4]

Generation X may well be able to understand their Millennial and Generation-Z trainees better than their senior Baby-Boomer colleagues for several reasons. Not only are they generationally adjacent and therefore closer in life-cycle effect, but also they have had to adapt to and integrate rapidly with advancing technology and the emergence of the virtual world from at least as early as their late teens. The bigger conceptual gap for how engagement works, including expertise and authority-expectations, is in the transition between the Baby Boomers and Generation X.[4]

Over the years, Generation X has been described in various ways. As kids, they were the 'latchkey' generation,[8] spending their afternoons without adult supervision. This shaped them to be more oriented towards their peers and gave them the opportunity to become self-reliant, independent, resourceful and pragmatic.[9] During their 'misunderstood' years as young adults, they were the 'slacker' generation, perceived as rebellious, cynical and without ambition. Yet here they still are, getting on with things, solving problems, collaborating and adapting. The typical Generation Xer is apparently unimpressed with authority, values freedom as reward, and needs the use of technology for maximum engagement.[4]

It is important for the current generation of trainers to understand the potential dangers and benefits of how they acknowledge and understand generational effects. Jauregui J *et al* propose the concept of generational humility. This approach invites curious exploration of the needs, values and motivations of learners, as well as continual evaluation of assumptions about them.[6]

Teaching techniques tailored to the needs of Millennials are reported to require the provision of clear direction and structure; role-modelling, coaching and mentoring; as well as engagement and regular feedback.[4] Education in anaesthesia in the UK has evolved over time to include all of these ingredients. With an attitude of humility and curiosity we can continue to explore and evaluate the effectiveness and quality of education in anaesthesia.

Dr Barrie mentions the paucity of research in this area of medical education, with references given being opinion pieces. Rather than being individual personality traits, generational characteristics are broad trends that can help us to understand behaviours and attitudes of older and younger colleagues. Additionally, they can also be a bit of fun as we recognise ourselves and remain curious about what we can learn from those both older and younger than ourselves beyond the subject matter of our educational material.

References

1 Barrie J. Intergenerational differences and medical education. RCoA *Bulletin* 2020; **124**:22-23.
2 It took a global pandemic, but Generation X is finally getting love, by Courtney Dabney. papercitymag.com. (bit.ly/3re4MeD).
3 Schenarts PJ. Now arriving: surgical trainees from Generation Z. *Journal of Surgical Education* 2020; **77**:246-253
4 Williams VN *et al.* Bridging the Millennial generation expectation gap: perspectives and strategies for physician and interprofessional faculty. *American Journal of the Medical Sciences* 2017; **353**:109-115.
5 Walsh DS. Mind the gap: generational differences in medicine. *Northeast Florida Medicine* 2011; **62**:12-15.
6 Jauregui J *et al*. Generational 'othering': the myth of the Millennial learner. *Medical Education* 2019; **54**:60-65.
7 Tervalon M, Murray,Garcia J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved* 1998; **9**:117-125.
8 Bower B. Home alone: latchkey kids on good behaviour. *Science News*; 1991; **140(4)**:54 (bit.ly/2Pvkrsb).
9 ValueOptions. Generation X [Born 1965-1980]. (bit.ly/3sNVC8X).

PREHABILITATION DURING THE PANDEMIC

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Dr Eleanor Harvey
Anaesthetic Clinical Fellow, Royal Marsden NHS Foundation Trust

Dr Louisa Shovel
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Dr Susanna Walker
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Dr Ramanathan Kasivisvanathan
Consultant Anaesthetist, Royal Marsden NHS Foundation Trust

At the Royal Marsden NHS Foundation Trust, we offer a prehabilitation programme to cancer patients. It's called MILE (My Integrated Lifestyle and Exercise), and is for those having neoadjuvant chemotherapy prior to major surgery. The aim is to improve physical fitness, physiological function and emotional wellbeing to help aid better recovery after surgery. MILE has four pillars: physiotherapy, psychology, nutrition, and anaemia optimisation.

Between March and May 2020, when the impact of the COVID-19 pandemic on the NHS was most severe, many of our patients had their surgery delayed and instead underwent additional cycles of chemotherapy. Our usual prehabilitation service, along with many other non-urgent treatments, was suspended. However, it quickly became clear that the social restrictions brought on by the pandemic would be with us for many months. With the shielding rules, our patients are likely to be vulnerable or socially isolated, so the need to provide them with physical and psychological support became paramount. We adapted our service in a number of ways, particularly by making better use of virtual technology, and have since successfully delivered remote prehabilitation to 87 patients (May 2020 to February 2021).

Physiotherapy

The shielding restrictions placed on our patients made it more difficult for them to maintain their physical fitness – already an uphill battle when going through multiple cycles of chemotherapy. Our physiotherapy team adapted their programme to be able to deliver it remotely. Patients have access to online exercise videos which they can follow at their own pace. They all get a virtual assessment, following which they are triaged either to online group classes of varying difficulty or to one-on-one sessions; this allows people to safely engage with therapy when isolating at home. Patients also have greater choice over how they exercise. The virtual aspect is more convenient for many, since it avoids the need to travel. Importantly, expansion is now easier with physical gym-space no longer being a limitation, and this will enable more people to receive prehabilitation in future.

Psychology

Psychological support is an essential aspect of cancer prehabilitation. The virulence of the pandemic and the need for social isolation have only heightened its importance. Our psychology team have developed an online programme for patients

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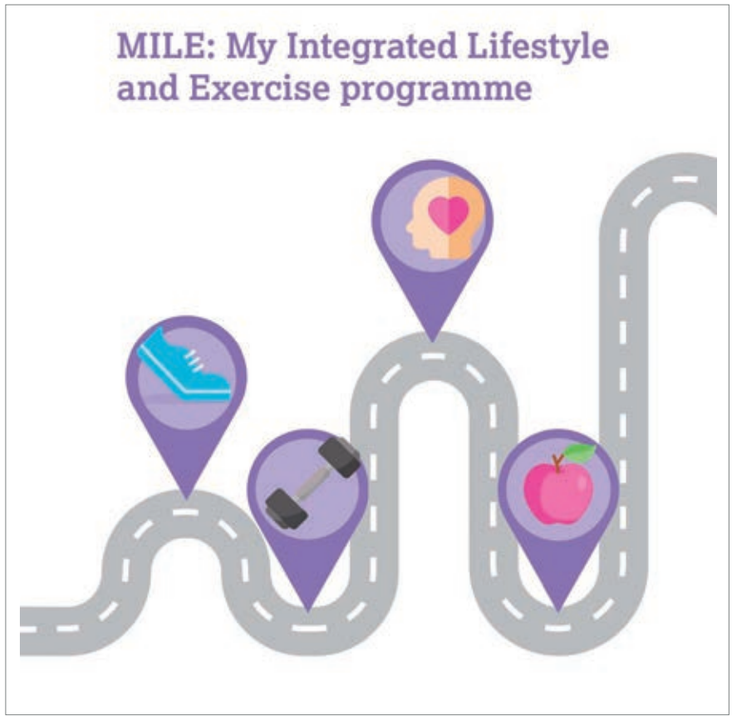

to help support and empower them with personalised self-help strategies, mindfulness guidance, and one-on-one virtual consultations. Those identified as needing greater input receive more intensive support throughout. Patients are also provided with information on local cancer support centres in their area as well as other online or telephone wellbeing and self-help resources, so they have a range of options to choose from.

Anaemia

Many of our patients have iron-deficiency anaemia, which historically would have been treated with intravenous iron prior to surgery. Since the pandemic, we have tried to minimise the number of hospital visits patients need in order to reduce their risk of exposure to COVID-19. Therefore, we are now synchronising iron therapy to coincide with pre-existing appointments for chemotherapy or radiological investigations. When this is not possible, we have given intravenous iron after surgery prior to discharge. Reducing the number of appointments with a more coordinated approach is not only safer for patients but also less disruptive to their lives by avoiding the stress and inconvenience of repeatedly travelling to hospital. This gives them a better overall experience.

Nutrition

It is common for our patients to experience weight loss or gastrointestinal symptoms that make adequate calorie intake a real challenge. They are all screened for malnutrition using the Royal Marsden Nutrition Screening Tool. Those who flag up as causing concern are given oral nutritional supplements and referred to our dieticians, who conduct virtual consultations and provide individualised treatment plans. Everyone else has access to online videos and recipe booklets giving them guidance on the importance of nutrition and how best to ensure they eat a healthy, balanced diet.

Conclusion

By adapting our prehabilitation model to cope with the COVID-19 pandemic we have been able to continue offering important multimodal therapy to vulnerable patients. With better use of technology, we expect some benefits to remain long after the current crisis – benefits such as making accessing therapy more convenient, improving patient experience, and increasing our capacity to offer it to more patients. There is limited data suggesting that virtual prehabilitation models are not inferior to in-person programmes.[1] We expect to learn more about the benefits and limitations of such options over the next few years from the results of large randomised controlled trials like SafeFit.[2]

References

1 Doiron-Cadrin *et al*. Feasibility and preliminary effects of a tele-prehabilitation program and an in-person prehablitation program compared to usual care for total hip or knee arthroplasty candidates: a pilot randomized controlled trial. *Disability and Rehabilitation* 2020; **42(7)**:989-998.

2 Jack *et al*. SafeFit Trial: Virtual clinics to deliver universal interventions in people with cancer (2020);identification number (NCT04425616). (bit.ly/3sHQqDK).

Please also see the College's Fitter Better Sooner information resources on our website: **rcoa.ac.uk/fitterbettersooner**

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The CESR route to specialist registration: time for a change?

After difficulty passing the Final FRCA, I completed my training without a training number. I recently gained entry onto the specialist register by applying for a Certificate of Eligibility for Specialist Registration (CESR). I was successful after pursuing it for a year, but found the process laborious, difficult, and only achievable with support from senior anaesthetic colleagues.

Anyone who has not completed their entire anaesthetic training within a UK training post can apply for a CESR. It's a route traditionally favoured by overseas doctors, but is increasingly being considered by UK trainees due to reductions in training posts.

The CESR process is a time-consuming, agonising process where the GMC and relevant royal college compare your skills and experience to those of a recent UK CCT holder. It involves submitting a very detailed online application form that is essentially an e-portfolio containing evidence similar to that submitted at ARCP. Once you have submitted the application form and paid your hefty fee, the GMC quality-assures your evidence before sending it to a royal college for assessment. Recommendations are made to the GMC by the royal college as to whether the applicant can be entered onto the specialist register or whether further training is required.

The differences between CESR and CCT

The path to CCT is very well trodden, but there are additional hurdles that CESR applicants have to overcome compared to trainees. As long as trainees pass ARCPs, specialist registration is nearly guaranteed at the end of ST7, enabling trainees in their final six months to apply for substantive consultant positions. The same luxury is not always afforded to CESR applicants, with many trusts expecting entry onto the register to be in place before CESR applicants can apply for consultant posts. This puts CESR applicants at a disadvantage. I feel there is also a general perception that a CESR is less desirable and less rigorous to attain than a CCT, when in fact the opposite is true. I felt my CESR would not be viewed on an equal footing with a CCT when I was applying for jobs.

Are there unnecessary delays?

Once the GMC receives an application, there is a predetermined schedule for their assessment and when they expect to submit to the respective college. However, delays to this schedule are frequently encountered, and it is not always clear to applicants when and why these delays occur. One example is that all evidence that you submit needs to verified as accurate by a consultant in every hospital from which you are submitting evidence. The GMC contacts each consultant independently, but may only make contact months after the application was submitted. This can cause delay if consultants are no longer available or have simply forgotten about the verification process. Applicants may only hear about this delay weeks after the GMC has tried to make contact.

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Such delays occurred in my application and it was frustrating at the best of times, infuriating at the worst. Infuriating as mistakes were made purely due to poor communication between GMC advisors working on my application and additionally between the GMC and the College. An example of this was being told by the GMC that my application was on hold because the pandemic had halted new CESR evaluations from the College. When I contacted the College Equivalence team directly regarding this they informed me that they had stopped taking applications for only a short period but restarted again and were currently taking a smaller number of applications. It took more than a week of repeated phone calls and emails to the GMC to persuade them their information was wrong.

Time for change

While the CESR route to specialist registration is invaluable, I found it opaque, unreassuring and unnecessarily stressful. There are many ways the process could be simplified for both applicants and regulatory bodies.

With the advent of lifelong learning, where all users are registered with the College and the majority of consultant assessors are also registered and recognised trainers, do workplace-based assessments and CUT forms need to be verified again for CESR applicants? Do logbooks need verifying if they are attached to a CUT form signed by an RCoA-recognised trainer? If there is a delay or a problem in contacting verifiers or referees, then the applicant should be notified immediately so the issue can be rectified in a timely fashion. Now that all CESR documents are submitted electronically and extensively categorised, does the GMC really require 30 days to check an application?

The current and projected shortages in workforce create a problem that we, as a specialty, have long tried to address. With the added backlog from the pandemic increasing our workload exponentially and with Brexit discouraging European anaesthetists from working in the UK, it has never been more important to streamline and improve our current routes to specialist registration.

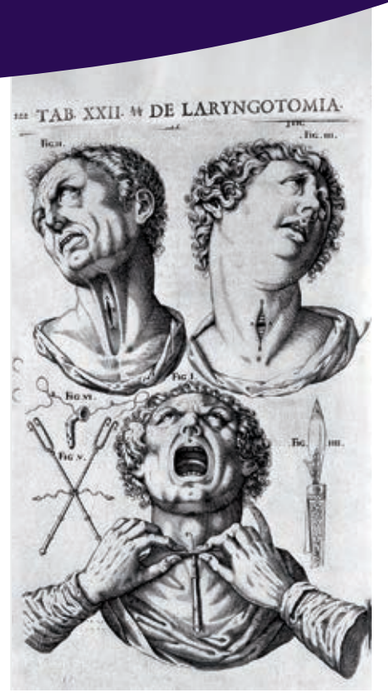
A message from Dr Ros Bacon, Deputy Chair of the RCoA Equivalence Committee

Applying for entry to the GMC Specialist Register via the CESR route requires a great deal of time and commitment. The introduction of the 2021 anaesthetics curriculum is going to impact on how our CESR application evaluations will work. All current and prospective applicants are strongly advised to visit the training pages of the College website at rcoa.ac.uk/anaesthetic-cct-curriculum-2021 for updates on the new curriculum and changes to our equivalence processes, and also to stay in touch with their local training teams during the transition to the 2021 curriculum.

AS WE WERE...
ALEXANDER THE GREAT AND TRACHEOTOMY

"Are there no more worlds that I might conquer?"
Alexandra the Great

The quote as arrogant as it seems to be, does not come as a surprise. Alexander the Great, arguably the most exhilarating figure from ancient times, waged war as a Homeric hero and lived as one, conquering native peoples and territories on a herculean scale. We look back at the evolution of the tracheostomy and Alexander's life-saving heroic action, on the battlefield, albeit a different kind. It turns out that the art of clinical airway management is as old as medicine itself. Tracheotomy is one of the oldest known surgical procedures, dating back to ancient Egypt and India.



Oldest description of tracheostomy ("laryngotomia") in a manual of the Italian surgeon and anatomist Giulio Casseri (Julius Casserius, 1552-1616).

The historical development of tracheotomy can be divided into five periods:[2]

1 The Period of Legend (2000 BC to AD 1546).
2 The Period of Fear (1546 to 1833), during which the operation was performed only by a brave few, often at the risk of their reputations.
3 The Period of Dramatisation (1833 to 1932), during which tracheotomy was performed only in emergency situations on acutely obstructed airways.
4 The Period of Enthusiasm (1932 to 1965), during which the saying, 'if you think of tracheotomy—do it!'[3] became popular.
5 The Period of Rationalisation (1965 to the present), during which the merits of tracheotomy versus intubation remain a topic of debate.

The first written documentation of tracheotomy appears in the Rig Veda, a sacred book of Hindu medicine written between 2000 and 1000 BC.[3,4] It describes 'the bountiful one, who can cause the windpipe to reunite when the cervical cartilages are cut across, provided that they are not entirely severed'.[2]

Homer, writing in the eighth century BC, referred to the operation to relieve choking persons by cutting the trachea.[5] Five centuries later in Egypt, following the work of Imhotep, a technique resembling tracheostomy was first documented in written form.[6]

Dr Karan Verma
RCoA Heritage Committee Member and
ST3 Anaesthetics, Norfolk and Norwich University Hospital, Norwich
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It is impossible to know exactly when the first tracheostomy was attempted, but there is evidence from hieroglyph slabs belonging to King Djer in Abydos and King Aha in Saqqara that tracheostomy was performed in ancient Egypt in about 3100 BC.

The next recorded mention is in the fourth century BC, when Alexander III of Macedon, more commonly known as Alexander the Great (356–323 BC), is said to have saved the life of a soldier choking from a bone lodged in his throat by puncturing his trachea with the point of his sword.[5] Though there are no further accounts of this episode, nonetheless the legend persists.

Until 1707 the procedure was known as 'laryngotomy'. It was Pierre Dionis who started calling it 'bronchotomy';[7] in 1718, Lorenz Heister recommended that it should be called 'tracheostomy' and that all other terms should be discarded. To allay the semantic debate, tracheotomy refers to surgical opening of the trachea, while tracheostomy involves insertion of a tube into the trachea.

In 1799, George Washington died of upper-airway obstruction after developing bacterial epiglottitis in the presence of three physicians, one of whom was aware of the described procedure of tracheostomy, but declined to perform it because he felt it was a futile effort and was wary of performing this 'novel' procedure on the president!

In 1909, Chevalier Jackson defined factors that predisposed to complications, such as a high incision, use of an improper cannula, poor postoperative care, and splitting of the cricoid cartilage.[8]

'Cold, calm eyes'... Mosaic of Alexander the Great: DEA/G Nimatallah/DeAgostini/Getty Images [9]

Indeed, the armamentarium for tracheotomy has evolved from thrusting a reed over the point of a sword into a choking soldier to the modern meticulous surgical procedure that predictably bypasses the upper airway for a variety of indications, both emergent and non-emergent.[3] The odyssey of the surgical airway has come a full circle. The legacy lives on...

Images courtesy of Creative Commons, Wikimedia Commons.

References

1 Casserius I. De vocis auditusque organis historia anatomica. Ferrara: Baldimus; 1600. Lib. I, Cap. XX: 119-124 u. Tab. XXII.
2 McClelland RMA. Tracheostomy: Its management and alternatives. Proc Roy Soc Med 1972: **65**: 401–404.
3 Frost EAM. Tracing the tracheostomy. Ann Otol Rhinol Laryngol 1976; **85 (5 Pt. 1)**: 618–624.
4 Stock CR. What is past is prologue: a short history of the development of tracheostomy. *Ear Nose Throat J* 1987; **66**: 166–169.
5 Gordon BL. Ancient Surgery: in Gordon BL. The Romance of Medicine: The Story of the Evolution of Medicine from Occult Practices and Primitive Times. Philadelphia: F. A. Davis; 1944: 461.
6 Musso CG 2005. Imhotep: the dean amongst the ancient Egyptian physicians. *Humane Medicine Health Care* **5**:169.
7 Dionis P. Cours d'operatione de chirurgiris, ed. Paris: L dHoury; 1751.
8 Jackson C. Tracheostomy. *Laryngoscope* 1909; **19**:285.
9 Image courtesy Wikimedia, from an ancient mosaic in Pompeii, Italy.

The College's Heritage and Archives Committee welcome any expressions of interest for new committee members. Please contact: archives@rcoa.ac.uk for more information.

NEW TO THE COLLEGE

The following appointments/re-appointments were approved (re-appointments marked with an asterisk).

Deputy Regional Advisers Anaesthesia

Barts and the London

Dr Sudhansu Pattnaik in succession to Dr Roger Cordery

Mersey

Dr Seshapillai Swaraj in succession to Dr Lee Poole

Oxford

Dr Ruth Webster in succession to Dr Desiree Choi

Dr Amit Kalla

East of Scotland

Dr Rhona Younger in succession to Dr Cameron Weir

Wales

Dr Haitem Maghur in succession to Dr Simon Ford

College Tutors

East of England

Dr Lynda Menadue (Peterborough City Hospital) in succession to Dr Jeremy Lermitte

East Midlands

Dr Sachin Valap (Kettering General Hospital) in succession to Dr Jaspreet Kaur.

London

Central London

Dr Katherine Batte (Whittington Hospital) in succession to Dr Trudi Young

Imperial

*Dr Mary Lane (Royal Brompton Hospital)

South East

Dr Akhil Gupta (University Hospital Lewisham) in succession to Dr Krish Srinivas

Dr Michael Shaw (Guy's and St.Thomas' NHS Foundation Trust) in succession to Dr Marina Choudhury

Dr Katherine Cheesman (Guy's and St Thomas NHS Foundation Trust) in succession to Dr Veda Ponnaiah

Oxford

Dr Richard Kaye (Stoke Mandevile and Wycombe Hospitals) in succession to Dr Luis Lee

South West Peninsula

Dr Tom Bradley (University Hospitals Plymouth) in succession to Dr Tom Lawson

Wessex

*Dr Jonathan Anns (Royal Hampshire County Hospital, Winchester)

West Midlands

Warwickshire

Dr Ashok Nair (Good Hope Hospital) in succession to Dr Naresh Sandur

Dr Martin Minich (University Hospital Coventry and Warwickshire) in succession to Dr Rati Danha

Dr Thomas Selvaraj (Warwick Hospital) in succession to Dr Sunil Bellam

Yorkshire & the Humber

South

Dr Helen Thornley (Rotherham NHS Foundation Trust) in succession to Dr Andrew Hartog

Scotland

South East Scotland

Dr Susan Irvine (Royal Infirmary of Edinburgh) in succession to Dr Adam Paul

Dr Phillip Docherty (Royal Infirmary of Edinburgh) new post

East of Scotland

Dr Katharina Gerber (Perth Royal Infirmary) in succession to Dr Rhona Younger

West of Scotland

*Dr Shashikiran Timalapur (Royal Alexandria Hospital)

*Dr Theresa McGrattan (Queen Elizabeth University Hospital, Glasgow)

Certificate of Completion of Training

To note recommendations made to the GMC for approval, that CCTs/CESR (CP)s be awarded to those set out below, who have satisfactorily completed the full period of higher specialist training in anaesthesia, or anaesthesia with intensive care medicine or pre-hospital emergency medicine where highlighted.

December 2020 – February 2021

Barts and The London

Andrew Wilkinson

Benjamin James Vowles

Hannah Emily Smith

Miran Kadr

Parvesh Verma

Robert Lee McCartney

Sanjeet Paul Singh Chana Dual ICM

Birmingham

Fayaz Roked Dual ICM

Jigneshbhai Patel

Defence

Thomas Gabriel Dickens Wooley

East and North Yorkshire

Andrew Kenneth Chamberlain Dual ICM

East Midlands

Amr Mohammed Talaat Abdelaziz Ali

Martin Andrew Smith Dual ICM

Rahil Dhimant Mandalia

East of England

Sarah Anne Procter

Imperial

Jagdish Sokhi Dual ICM

Laura Maria Peltola

Kent, Surrey and Sussex

Alexander Javed Kumar

Caroline Angela Rashbrook Nicholas

Katie Anne Allan Dual ICM

Naomi Barbara Anne Tate

Rachel Caroline Madders

Robert James Ardern Powell

Saurabh Mehrotra

Seliat Odedolapo Sanusi

Mersey

Jennifer Ann Gwinnutt

Maia Sibella Graham Dual ICM

Peter Daniel Moran

Rebekah Sensecall

Sean Bernard Doherty

North Central London

Anas Osama Fahid Ali Mahmoud Zyada

Dina H Hadi

Heloise Clare Hayakawa

Louise Anne Carter

Rebecca Louise Brinkler

Safeena Akhtar Afzal

North of Scotland

Andrew Ian Laurie Dual ICM

Divya Raviraj

North West

Adam Nicholas Swift

Ajith Gopinath

Fung Kei Ng

Insiya Susnerwala

Mahmoud Ibrahim Abdelwahab Alkholany

Naomi Fleming

Nico Zin

Northern

Clare Theresa Friel

Fiona Pearson

Ilma Songaile

Joanne Elizabeth Knight

Lynn Fairless

Matthew Gordon Brandwood Dual ICM

Rebecca Faye Parker

Northern Ireland

Karen Eveline Sykes

Nilay Mankad

Thomas Montgomery Price Dual ICM

Oxford

Annika Smith

Claire Margaret Seeley

Dwipanjan Das

Michael Edward Raffles Dual ICM

Yasir Azad Rashid

Peninsula

Gillian Barnett

Sean William Edwards

William Rutherford Dual ICM

Severn

Andrew Peter Grant

Charles Alexanderson Pope Dual ICM

South East London

Christopher Hall Dual ICM

Hafis Adetokunbo Oladapo Ayeni

Joseph Samuel Lipton

Kathryn Sarah Laver

Philip James Dart

Robert Dorian Gatherer Dual ICM

South East Scotland

Sean James Patrick Keating Dual ICM

Stephen Alexander Biggart

South Yorkshire

Catherine Webb Dual ICM

Kerry Elizabeth Neill

Raj Viro McNab

Rory Jefferson Colhoun

Andrew Robert Stewart Dual ICM

St George's

Britt Elizabeth Garwood

Kayathrie Jeyarajah

Victoria Eleanor Crozier Ferrier

Stoke

Amit Bhagwat

David Paul Robinson

Manpreet Singh

Srinivasa Sunil Kumar Dondapati

Stephen John Lord Dual ICM

Wales

Abubakr Adlan

Bethan Mary Morris

Matthew Jon Creed

Rhys Llwyd Volk

Warwickshire

Catriona Chalmers Frankling

Christina Clare Tourville

Nirojan Sivapathasundararajah

Wessex

Amanda Leonie Mortier

Louise Charlotte Bates

Susan Jane Hayward

West Midlands

Salmaan Mughal

West of Scotland

Clare Elizabeth Currie

Graeme Robert Foggo

Kevin Patrick McNamara

Marc Antonio Vilas Dual ICM

Neil James Brain Dual ICM

Peter James Robert Bolton

Stuart George D'Sylva

Stuart Young

West Yorkshire

Alexander Spyridoulias

Matthew James Bromley Dual ICM

DEATHS

With sadness, we record the death of those listed below.

Dr Richard Burtles, Edinburgh
Dr Neal Benedict Bowman, Caerphilly
Dr Nicola Jean Campbell, Chester
Professor Anneke Meursing, Rotterdam, Netherlands

To submit an obituary that will be published on our website (rcoa.ac.uk/obituaries), please email your text (500 words) to archives@rcoa.ac.uk

APPOINTMENT OF FELLOWS TO CONSULTANT AND SIMILAR POSTS

The College congratulates the following fellows on their consultant appointments:

Dr Andrew Chamberlain, The York Hospital

Dr Sioned Husain, Frimley Health NHS Foundation Trust

Dr Rachel Madders, East Sussex Healthcare NHS Trust

Dr Nilay Mankad, Royal Victoria Hospital, Belfast

Dr Robert O'Donnell, Queen Elizabeth University Hospital, Glasgow

Dr Rebecca Thorne, Frimley Health NHS Foundation Trust

Fitter Better Sooner

Endorsed by

Royal College of General Practitioners

Royal College of Surgeons

The College has developed a toolkit that offers patients the information they need to prepare for surgery, including the important steps they can take to improve health and speed up recovery after an operation.

The Fitter Better Sooner toolkit consists of:

- one main leaflet on preparing for surgery
- six specific leaflets on preparing for some of the most common surgical procedures
- an animation which can be shown on tablets, smart phones, laptops and TVs.

You can view the toolkit here: rcoa.ac.uk/fitterbettersooner

We have also created printable posters, flyers and stickers to help you signpost patients to the toolkit. The animation can be shown on TVs in waiting areas. You can find all these additional resources and instructions on how to download the animation in MP4 format (or request a version in PowerPoint) on our website here: rcoa.ac.uk/patientinfo/healthcare-professionals

Please share this toolkit with colleagues in both primary and secondary care settings.

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Dr Andrea Falvo

Member

Dr Benjamin Ryan Cullinger

Associate Members

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Dr Abdelrahman Shehata Shawky Abdelrahman

Dr Raissa Mall

Dr Angus James Bowman Perks

Dr Ashish Gandhi

Dr Nivethana Rajan Babu

Dr Saud Ahmed Ansari

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Mr David Olvera

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Mr Phillip Lynch

Dr Maria Italiano

Dr Noah Pavlisko

REVISION COURSES

Primary FRCA Online Revision Course

Start date: 21 June 2021

Content available until the Autumn Primary MCQ exam

Final FRCA Online Revision Course

Start date: 5 July 2021

Content available until the Autumn Final MCQ exam

Discounts may be available for RCoA-registered Senior Fellows and Members, Anaesthetists in Training, Foundation Year Doctors and Medical Students. See our website for details.

Book your place at rcoa.ac.uk/events

Bulletin | Issue 127 | May 2021

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