TRAINEE EYE

14th Edition | Autumn 2020

The Faculty of
Intensive
Care Medicine™

CONTENTS

Welcome from the Deputy Lead Trainee 3

A New ICM ePortfolio 4

New Deputy Trainee Representative 5

New HEE Guidance 5

Preserving Teaching in a Pandemic 7

Notes from a newcomer: a personal reflection on joining the critical care team during a pandemic 8

A Shared Approach to Pandemic Preparation 9

Pandemic Critical Care Working: Perspectives, practicalities and pointers 11

Caring for adults with COVID-19 in a standalone paediatric intensive care unit 12

FFICM Exam Dates 15

Guidelines on Establishing Enhanced Perioperative Care Services 16

#DiscoverICM - Get involved 16

Critical Care QI Resource 16

CESR-CP in ICM: New GMC Ruling 17

FICM Learning 17

Critical Eye 17

Totum Plus: New Membership Benefit 17

FICM OOPT/R Form 17

Follow us on Twitter: @FICMNews

NEWS & EVENTS

Please visit the News and Events section of the website for the latest news items at:

www.ficm.ac.uk/news-events-education

Managing Editors
Dr Guy Parsons
Ms Natalie Bell

Administered by
Mrs Rohini Makwana

Design by
Mrs Dawn Tillbrook-Evans

Dean
Dr Alison Pittard

Vice Dean
Dr Danny Bryden

We would welcome your thoughts on the content for trainees and topics you feel we should address in the future. Get in touch by emailing us at contact@ficm.ac.uk

© Design and layout by The Faculty of Intensive Care Medicine

WELCOME FROM THE LEAD TRAINEE

Dr Guy Parsons

Deputy Lead Trainee Representative

"Have been unavoidably detained by the world. Expect us when you see us." *Neil Gaiman, Stardust*

Does anyone else feel exhausted? No one for seconds? In another time of crisis FDR - a somewhat different American president - remarked pithily that *"a smooth sea never made a skilled sailor."* But what a storm we've had! Many of you may still feel sodden with perhaps an enduring dampness of spirit and a feeling that little would be more tempting right now than an extended stay in port. Tired flotsam we may be but we have learned the ropes and suffered a sea-change into something rich and strange.

We've learned to reach across specialty divides, squashing tribalism to welcome new colleagues into the fold, benefiting from their expertise and their helping hands. We've chipped away at the Covid conundrum through research too and, though the summit still escapes our grasp, footholds have been forged and there's now more we understand. We've shown we can take on the novel and somehow meet demand. We've redeployed, reorganised, refined our care, and found new ways to expand. Thank you all, you should be proud.

I know that at times it has been frustrating wishing for better leadership from those in government too busy proving themselves out of their depth on a wet pavement. I know that at times it has riled seeing the Cummings of cavalier attitudes towards the pandemic precautions. I know that at times watching fools blather on television has been hard to stomach. You've risen above all this and just got on with it, quietly providing excellent care to those most in need. Thank you all, you should be proud.

Bad weather looms again, however, and while we may be unrefreshed we must be ready. Case numbers are rising and as the days shorten winter lingers in the tang of fallen leaves.

How best to prepare though? I'll venture a few suggestions: first, we should continue to look after ourselves as best we can. Find time for catch-ups with friends and family, curl up with a good book or a mug of something warming when you can, seize those last few sunny afternoons. If we are plunged into another peak we'll all be sorely tested once more so prioritise your wellbeing, you'll need it.

Second, let's share what we've learned. We have faced similar challenges across the UK from disruptions to training to the alteration of our normal practices beyond recognition. This issue of Trainee Eye is full of advice, experience and learning from other trainees who have faced these challenges; see what you can gain from them.

While we're addressing the here-and-now we're also building for the future. Please see information in this edition about how we'll be redesigning the ICM ePortfolio to accommodate a new curriculum designed to deliver future success in our specialty. This work should reduce the burden of assessments and provide a more efficient, simplified and holistic view of your training progress. This means you can spend more time learning and developing excellent care and less time ticking boxes.

Finally, keep communicating. We at the Faculty are here to support you so let us know how we can help. We'll continue to champion your needs and advocate for our specialty on every stage.

I'll leave you with Shelley: "if winter comes, can spring be far behind?"

All the best,
Guy

Guy.parsons@nhs.net

A NEW ICM ePORTFOLIO

Ms Natalie Bell

FICM Board and Training Projects Manager

Mr James Goodwin

Associate Director of Faculties

Dr Guy Parsons

Deputy Lead Trainee Representative

Intensive Care Medicine is rapidly evolving and in the current crisis the vital role we play in the delivery of excellent patient care has never been clearer. Our skills and insights are in huge demand and this demand grows year on year. To ensure that we are developing the excellent Intensivists of tomorrow, our training and how we assess it must also evolve. Following a prolonged and concerted effort we at FICM have developed a new curriculum for Intensive Care to support excellence in our specialty for the future. Further information on this new curriculum (from our consultation in 2019) can be found here.

During this development we have listened carefully to the needs of trainees. You have stated clearly that you wish to reduce the administrative burden associated with demonstrating achievement of curricular requirements and you have sought greater flexibility and ease in demonstrating capabilities across domains of practice. We have worked hard to address this while maintaining rigorous professional standards. To meet your needs and the changes of the new curriculum we need a new ePortfolio.

After much deliberation and numerous meetings with ePortfolio providers, the Faculty is pleased to announce that the Royal College of Anaesthetists' (RCoA) Lifelong Learning Platform (LLP) has been chosen as the new platform for the ICM ePortfolio.

The bespoke LLP was launched by the RCoA in August 2018 as a much enhanced upgrade on their former trainee ePortfolio system. The LLP is maintained by an external supplier: *Cyber-Duck* and we have already started work with them on the new FICM ePortfolio.

The aim of integrating our ePortfolio in the LLP is to provide a more intuitive and user-friendly system for all ICM trainees (whether on dual or single CCT training programmes), enabling you to easily upload evidence and record your training. A fundamental change will be the use of High Level Learning Outcomes (HiLLOs) in this ePortfolio. These HiLLOs consolidate multiple areas of professional capability within a single domain, reducing the numbers of individual assessments needed to prove competence while offering greater flexibility and a more holistic view of clinical practice.

Dr Andy Gratrix, Clinical Lead for the ICM ePortfolio said:

"The Faculty's aim with the move to a new ePortfolio platform is to make life easier for our trainees and trainers. We have already revised the curriculum to remove the necessity for trainees to complete 96 competencies per Stage of training, and we want to build a new streamlined ePortfolio to align with this."

Having both the FICM and RCoA's portfolios on the same platform will also help to future-proof the system, ensuring there is shared corporate knowledge for its development and maintenance. ICM/Anaesthesia dual CCT trainees will now only have to use one platform to record their training and those ICM trainees on dual programmes with Emergency Medicine and the physician specialties can rest assured that clear and simple guidance on recording their progress across programmes will be provided.

We want to make your lives easier. An intuitive new ePortfolio with streamlined assessments, greater flexibility and the ability to capture your clinical practice more holistically will help. This is an ongoing project and we will be updating you regularly on our progress. We understand you have a lot on your plate right now and we seek only to notify you of these developments at present. We will provide clear notice of any actions we may need you to take in future and we will ensure you are supported with these. When the project nears completion we will also be seeking volunteers for user testing so that we can make sure your new ePortfolio works well for you – a call for this will go out in due course.

Should you have any questions or concerns regarding this please do not hesitate to contact us: contact@ficm.ac.uk. Any enquiries received will inform our FAQs.

NEW DEPUTY TRAINEE REPRESENTATIVE

We are pleased to announce that **Dr Catriona Felderhof** from the West of Scotland was duly elected as your new FICM Trainee Representative. She will take office at the FICM Board meeting on 13 January 2021 where she will be inducted as our first female FICM Trainee Representative. I'm sure you'll join us in congratulating and welcoming her to the Faculty. Thank you to everyone who voted in this year's election. You can read Catriona's election statement below.

"Originally hailing from Birmingham and coming via The University of Dundee, I am now a dual ICM and Anaesthetics ST6 trainee in the West of Scotland. I have been less than full time (since 2011) for the latter half of my training due to combining my training with having a family of three boys. I recently completed my term as the West of Scotland ICM trainee representative, and this has allowed me to gain experience on a local level of representing ICM trainee views to the WoS Specialty Training Committee. During this time, I established a communication network for the ICM trainees and maintained two-way communications, I set up support groups to improve trainee wellbeing and sought out ways to improve educational opportunities. I believe this to have been invaluable experience, and one which I think would be beneficial in developing the skills required for supporting the established trainee representative and for representing trainee views on a national level."

NEW HEE GUIDANCE

HEE have published guidance on Supporting the NHS during resurge phases of COVID-19 and the ongoing pandemic: managing the training workforce. This document will be updated on a regular basis, in response to changes in Government advice and local restrictions. Please check this page regularly for the most up to date guidance.

PRESERVING TEACHING IN A PANDEMIC

Dr Claire Hirst

Advanced ICM trainee, Yorkshire and Humber Deanery

Dr Rachel Ward

Stage 2 ICM trainee, Yorkshire and Humber Deanery

March 2020 saw the beginnings of a massive change in working for UK trainees, especially those in ICM and Anaesthesia. The implementation of intense surge rotas with disruptive working patterns, the loss of training days, the uncertainties around PPE and the challenges of managing patients with a new and complex disease process took its toll on both trainees and the training programme. Prioritisation of service delivery and the re-organisation of local critical care provision, combined with physical distancing rules lead to an inevitable temporary suspension of formal teaching activity in our region. However, a group of consultants and trainees recognised the wider benefits of formal teaching and explored ways to deliver this within the new realities of pandemic working.

Teaching before and after COVID–19

There was substantial variability in pre-COVID-19 teaching sessions across the region, depending on individual placements and the shape of departmental teaching programmes. A common format was a once weekly session on either an Anaesthetic or ICM related topic. Journal clubs were run at various sites, often outside of normal working hours. For ICM trainees, the regional teaching programme provided six full training days each year. These sessions required trainees to travel, sometimes a significant distance (i.e. Sheffield to Hull). From February onwards, these were all cancelled due to the pandemic.

In an effort to re-establish formal teaching, a small group of trainees and consultants formed a working group on WhatsApp. Priorities were identified as ensuring:

1) Widespread access for all trainees, irrespective of their location
2) Inclusion of those who were physically shielding and working from home
3) Breadth of topics across ICM and Anaesthesia, including non-clinical fields
4) Compliance with pandemic precautions such as social distancing
5) Sustainability of the programme.

A regular online teaching programme was established via Zoom video conferencing, by now a familiar app to many. This comprised daily afternoon sessions, usually 45 minutes in duration, every Monday to Thursday. Topics and login details for each session were provided to all trainees via the region-wide WhatsApp group on a daily basis. A group of trainees who were shielding and working from home acted as facilitators for each online meeting. The vast majority of sessions were consultant-led, with a variety of topics covered ranging from acid-base physiology to paediatric airway management to the NHS response to COVID-19.

There are obviously pros and cons to online teaching. Some of the benefits were that the programmes were easy to use, no travel was required, the sessions could be accessed either at work or home and we had the ability to record sessions for asynchronous learning. On the negative side, the sessions required a facilitator to set up and oversee, it was more difficult to interact with speakers, some platforms incurred a cost for unlimited access and there could be security concerns around data protection.

Feedback

Individual feedback for the presenter was gathered at the end of each session. In addition, we asked for formal feedback on the overall format and design of the teaching programme after a few months via a SurveyMonkey-based feedback questionnaire.

On average, 20-30 trainees attended each session. Feedback from sessions in July indicated that all respondents thought that the sessions had aided their understanding of the topic. Comments included:

"All in all, has been fabulous"

"Excellent, more please!"

"As a LTFT trainee who frequently misses teaching sessions that are not on my workdays this has been brilliant. Means I can attend teaching from home and has massively expanded my opportunities for doing so. Why didn't we do this sooner?!??"

"Excellent, so useful and really increased the amount of teaching we can benefit from. Chat function excellent for questions"

42 trainees responded to the feedback survey. All of the trainees attended at least one session. 41 trainees (98%) had attended at least one session from home.

Moving forward

The current schedule took a summer break over August and returned in September. Based on the trainee feedback received, we will explore mechanisms to make sessions more accessible for those at work, whilst retaining the remote and flexible access. An additional focus on exam preparation is being considered.

Our Training Programme Directors and the Heads of School have shown a keen interest in supporting our programme and assisting its future development across the region. Several trainees have already volunteered to lead on such a project, aiming to keep it relevant and responsive to trainee needs. There remain challenges in coordinating region wide online teaching in terms of a time that would suit the schedule of each individual hospital. However face to face teaching in the bigger centres is difficult to achieve due to the new social distancing guidance and higher trainee numbers. The current plan is for face to face teaching to be reinstated in the district general hospitals, and the online teaching sessions will initially be coordinated by our tertiary centre (Sheffield Teaching Hospitals NHS Foundation Trust), but with speakers from around and outside the region, and is open to all trainees in the region should they wish to attend.

The teaching will initially comprise of two short sessions each week; a consultant-led anaesthesia based teaching topic on a Tuesday and a consultant-led ICM based teaching session on a Thursday. The days of the week will alternate between the two specialties to maximise attendance opportunities to all trainees. Sessions will each last for 45 minutes to an hour and will be delivered via MS Teams. Topics will be mapped to the respective curricula. We aim to record the sessions and store these for a short time to increase accessibility for all trainees regardless of rota patterns.

The current plan for regional teaching is to move towards a virtual platform with sessions in the next few months planned to take place online instead of face to face. The continuation of other formalised teaching has been discussed at both the region's Anaesthesia and ICM STC meetings with a plan to focus on exam preparation, ideally for both FRCA and FFICM examinations as this was identified as a key part of the training programme. Within ICM an education committee has formed with a dedicated team to build on what has already been achieved.

Our online teaching offers many advantages but does not replace face to face meetings with peers from around the region, as this gives much needed opportunity for network discussions and support that cannot be as easily achieved online. There are now plans to resume regional teaching in the near future, our novel online teaching programme could provide an innovative way to supplement, extend and enrich this existing training experience across our region.

We would like to formally thank everyone who has been involved in this process, we could not have achieved this without your hard work.

NOTES FROM A NEWCOMER: A PERSONAL REFLECTION ON JOINING THE CRITICAL CARE TEAM DURING A PANDEMIC

Dr Travis Brooks

FY1 Critical Care, Great Western Hospital, Swindon

Joining a new department is often nerve-wracking; joining the Intensive Care team during a global pandemic was especially so for me. Aside from a brief week's experience in the specialty at Medical School, I had never worked in the ICU and yet there I was, the new ICM FY1 for the next four months.

In a previous life I worked with the Ambulance Service and had been involved with acute paediatric retrievals; these experiences were felt to be most suited to a placement in ICM during the pandemic rather than elsewhere in the hospital, however these experiences felt a long way away when I started as we admitted patient after patient with this new and deadly virus.

Despite being new and one of the most junior doctors in the hospital, staff throughout the department included me and truly demonstrated what a multidisciplinary team should be. We became a band, brought together by circumstance, working together to figure out what worked best against this new threat. This was reassuring for me as someone who had done very little ICM previously; whether you were the most experienced consultant or a novice like me this was very much a new frontier for us all. I found there was more that translated from my previous work than I initially realised; meticulous kit checks and careful preparation before donning and entering units was very similar to how I would prepare for a transfer, and the ability to adapt and work with changing circumstances was a skill I'd developed in the Ambulance Service.

Very quickly I became acquainted with life in the department and received training in ventilators, lines, drugs and so much more. I took the opportunity to shadow a shift before I started which, in retrospect, was extremely useful. What I didn't truly appreciate at the time, however, was the sheer scale of variations from the normal I was seeing with this novel virus. I feel going forward a lot of these processes and procedures may become the 'new normal'.

For any Foundation Doctors going into ICM my advice would be to know your limitations and feel empowered to voice these, but also to seize the opportunity to work in a new frontier of medicine. Listen to the advice of those around you; this extends to the wider team of Nurses and other Allied Healthcare Professionals too, they have a wealth of experience to benefit from. By engaging with and learning from everyone's experiences you will develop your skills and help to avoid making mistakes. Finally, be prepared for difficult experiences. ICUs see the sickest patients, in some of the most trying circumstances and these cases can sometimes have hidden personal toll. Working in the pandemic has taken its toll on everyone and work has yet to return to normal. Talk to the people around you and take time to reflect; it's easy for experiences to mount and become unbearable. Seek help when needed. You will see some extremely rewarding cases too and working in a well-oiled team can be really satisfying. There is a balance to find which you can anchor to.

Overall working through the pandemic was challenging and, with new challenges, new approaches are needed. Everyone can bring something to the table and I found being able to translate my previous experiences for the benefit of our unit was rewarding. Similarly, for other Foundation Doctors, I hope this highlights the important contribution you can make. While it can be intimidating, working in a 'new normal' ICU will hold both challenges and new opportunities to seize - the unique set of circumstances which lead you there may give you the skills to offer helpful new approaches for the future.

A SHARED APPROACH TO PANDEMIC PREPARATION

Dr Thomas Hine

Clinical Fellow in Anaesthetics, Milton Keynes University Hospital

At the start of the coronavirus pandemic, as case numbers grew alarmingly, it quickly became clear that a rapid reorganisation of the critical care service at Milton Keynes University Hospital would be required. From the outset the Anaesthetic and Critical Care Department chose to closely involve trainees in these changes. We feel this approach paid dividends for our staff and perhaps can offer some insights for the future.

Self-rostering, rest, and remote working

We set a goal of more than doubling our existing critical care capacity in preparation for a surge in demand. Working together, using the polling platform Doodle, a Registrar and Core Trainee took on the responsibility of organising our trainee roster to ensure sufficient medical staffing for this increased capacity. Importantly, allowances were made within this process for trainee self-rostering, with trainees marking each on-call as 'can do', 'if necessary', or 'cannot do'. We expected the pandemic to have a significant effect on staff members' home lives with the loss of usual support mechanisms and difficulties with childcare taking their toll; through allowing some self-rostering we could alleviate some of these challenges. Compliance with the 2016 junior doctors' contract was maintained and taking annual and study leave was encouraged to maintain morale and prevent fatigue. Additional hours were calculated and shared evenly between trainees, with new work schedules expediently produced by medical staffing to ensure trainees were properly reimbursed for the additional workload.

Increasing capacity was aided by a big commitment from the hospital to facilitate home working. Relevant hospital systems were made accessible to any trainee on their own device from home. This meant that trainees who were self-isolating at home or needed for childcare duties could still participate in the work of the department and add value. Practically this meant that trainees were able to contribute to routine paperwork and help review results from home, via secure native web applications and remote desktop functionality. Trainees working from home were counted as 'at work' instead of on sick leave, ensuring their accrued entitlement to NHS sick pay was not affected. The trust continues to offer these IT services and to distribute hardware, such as smartcard-enabled keyboards, signalling a long-term change toward this option of working.

We were clear throughout that ensuring adequate rest would be a key tactic to prevent burnout in what we suspected would be a prolonged expenditure of effort. We are fortunate to have access to offices with fold-flat beds and our hospital routinely provides free accommodation for trainees commuting long distances. During the surge these facilities were used more frequently. A clear respect for the need for rest, communicated from the top-down, and the lack of a cost deterrent to using these facilities meant trainees felt empowered to use them as needed.

Refining provision

Our ICU Outreach Service, comprised of highly skilled nursing staff with a critical care background, was suspended so that these nurses could be reallocated to help maintain critical care provision. We are most grateful for our colleagues' willingness to embrace this short-notice disruption to their work patterns. In order to monitor the wards for deteriorating COVID patients, a 'Review and Retrieval' team was instigated, staffed each day by a dedicated consultant and registrar.
This team was responsible for reviewing and maintaining an electronic list of the sickest COVID patients, conducting in-person reviews, and arranging retrievals to ICU where necessary. This team helped

relieve the referral workload from the medical ICU team, allowing them to focus solely on those patients already admitted. Whilst this team was highly effective, it was unfortunate to lose the excellent specialist nursing support normally provided to the wards by the ICU Outreach Service.

The critical care department as a whole was supported by an increased resident consultant presence at all hours, facilitating senior shared decision-making and the rapid targeting of senior input to areas of need. This higher-level of supervision increased trainee confidence dealing with a novel and emerging disease, whilst helping to reduce the workload to manageable levels. Increased consultant presence facilitated the undertaking of higher-risk procedures and decision-making throughout the night, helping to expedite patient care and flow through the department.

Collaboration on guidance and training

Trainees were directly involved in the development of COVID guidelines at Milton Keynes, for example with the development of our department's approach to the intubation and transfer of COVID-positive patients. At the start of the pandemic, trainees helped to plan and deliver training sessions to the expanded ICU MDT on scenarios including patient retrieval and donning and doffing of PPE. Many of these scenarios practised using grab-and-go equipment, such as emergency COVID intubation trays, which had themselves been developed and refined by trainees. Having trainee representation within these activities meant that trainees were up-to-speed with these protocols and equipment as soon as they were implemented, reducing the uptake lag-time normally associated with institutional change. The extent of trainee involvement demonstrates the large but sometimes overlooked potential for trainees as leaders, teachers, and service developers within their departments.

Reflections

There are several lessons we have learnt through this process which we feel could help with preparations for a second wave or indeed for future pandemics. First, we found an openness to trainee self-rostering fostered a holistic view of trainee availability, incorporating such concerns as burnout, altered home circumstances and the loss of traditional training opportunities. While our overall rota intensity increased to meet demand, self-rostering, the provision of easily accessed rest facilities, and the enabling of home working meant trainees could continue to add value to the department when a traditional rota system would have been too inflexible to facilitate this.

Second, in addressing our need to preserve our critical care nursing provision we identified areas of provision that could be refined and adapted to the most pressing immediate challenges. The introduction of a defined senior medical team to rapidly triage and assess coronavirus cases kept the core ICU team isolated from the distraction of referrals. This preserved head-space for doctors on both teams, enabling more efficient working. An increased consultant presence around the clock meant senior support could be targeted as needed, providing trainees with a welcome feeling of security.

Finally, the involvement of trainees in change planning enabled alternative training opportunities to be seized as traditional avenues closed, for example in the acquiring of leadership competencies through the development of new hospital pathways and protocols. Trainee involvement in the delivery of inter-professional and inter-disciplinary teaching has helped foster better understanding and relationships between teams. These experiences have afforded trainees with insight into aspects that will become more prominent components of working life during consultancy.

The coronavirus pandemic has posed a critical challenge to intensive care. Across the country many different approaches will have been taken in response. We hope to have highlighted some beneficial steps which could be taken in preparation for whatever may be next.

PANDEMIC CRITICAL CARE WORKING: PERSPECTIVES, PRACTICALITIES AND POINTERS

Dr Katie Keen
FY1 Critical Care, Great Western Hospital, Swindon

In preparation for the anticipated influx of Covid-19 patients, junior doctors at our site were redeployed into five 'watches' based on their experience and current role. Prior to my medical training I had worked as a staff nurse in a paediatric cardiac intensive care unit gaining a number of skills there which suited a redeployment to ICU.

We've noted many challenges during this pandemic; wearing PPE, working in changing teams every day, and relying on telephones for intense and emotional conversations with families to name just a few. The difficulties of wearing uncomfortable, hot, communication-hindering PPE are marked, especially for those of us wearing full respirators. Non-verbal cues can easily be missed, peripheral vision obscured, and alarms not heard. By the end of a stint in PPE, it's really challenging to keep your mind focused, your communication clear and kind, and to stay vigilant. All you can think about is doffing and having a drink.

Inexperienced junior doctors can usually depend on the experience of ICU nurses. The need to have up-skilled nurses working within critical care for the surge made this invaluable resource scarcer. The ICU nurses were stretched managing their own complex patients and supervising these colleagues. My familiarity with trouble-shooting basic ventilation problems, adjusting inotrope infusions, preparing transducers and changing sheets on sedated patients meant I was able to help my nursing colleagues. It's clear, however, that there is a dire need for trained critical care nursing staff both now and in the future.

Communication with families has been particularly demanding. While visiting has been restricted we have needed to conduct this remotely, using telephones and tablets, sometimes with masks on muffling our voices. Explaining how critical care operates to families without being able to demonstrate at the bedside has been trying. Additionally, while relatives can usually see for themselves how unwell their loved one is when visiting, communicating this remotely has been hard.

Elective surgery is now ramping up again with critical care expected to be ready for this while continuing to manage coronavirus cases. I feel we all need a break but this doesn't seem possible. Only now, as I prepare for my transition to FY2, do I have the chance to reflect on my Covid-19 experience. Looking back I've collected my learning points for other juniors who may find themselves working in critical care in the near future:

- **Know your limitations and don't be afraid to ask for senior help**. If you've thought about whether or not to ask for help, you should. If a nurse suggests you might like to call your senior, you should. There was never a time when myself or my colleagues were criticised for escalating or seeking reassurance.
- **Offer to help without being asked**; whether it's bins to be emptied, patients to be rolled or a patient who needs to be watched so their nurse can pop out. This helps the whole team work better together and smooths your integration when new to it all.
- At the beginning of your rotation, if you have chance, **spend time with the AHPs** to try to better understand their specialist roles.
- **Regularly check receiving/admitting spaces are well stocked**. Covid-19 patients can deteriorate rapidly, a well-prepared admission runs most smoothly.
- **Take your time when updating relatives**, and if possible, do it when not wearing PPE. These conversations can be challenging and need sufficient time to run smoothly. Ensure they understand and find out what their questions are. It can be hard to communicate ideas remotely.
- **Look after yourself and your colleagues of all grades and professions**. Tribalism helps no-one.

CARING FOR ADULTS WITH COVID-19 IN A STANDALONE PAEDIATRIC INTENSIVE CARE UNIT

Dr Emma Fadden

ST8 Anaesthetics and ICM, Alder Hey Children's Hospital

Dr Anna McNamara

ST8 Paediatric Intensive Care Medicine, Alder Hey Children's Hospital

By the end of the first week in April, there were nearly 60,000 confirmed COVID-19 cases in England, 8,812 of which were in the North West. Whilst adult hospitals in the region were inundated with admissions, and their respective critical care resources overwhelmed with patients requiring higher levels of care, the paediatric services were comparatively tranquil. With non-emergency surgery curtailed, and only a limited effect of COVID-19 observed in children at the time, the logical conclusion was reached that a Paediatric Intensive Care Unit (PICU) with capacity to spare, even in a standalone paediatric centre, could accommodate adults.

Preparation

Having anticipated an increased paediatric critical care (PICU and High Dependency Unit/HDU) workload, approximately 260 members of clinical staff from throughout the hospital rapidly received training in the basics of intensive care. Ward nurses, health care assistants and theatre staff underwent training from the critical care education team, then observed nursing teams on PICU. An 'intensive care guide' for medical staff from a non-intensive care background was developed. Educational resources were rapidly collated and distributed using Microsoft Teams.

Alder Hey usually admits patients up to 16 years of age (with a few exceptions), with a critical care capacity of 21 PICU and 15 HDU beds. The paediatric HDU and burns unit were relocated to other wards to facilitate the creation of a 19-bed adult ICU area whilst also allowing for potential increased capacity for paediatric level 3 patients.

Workforce

Expanded staffing was required to run both a fully functional PICU (potentially up to 45 beds) and the adult ICU (up to 19 beds). The rota for medical staff of all grades and specialties was modified to accommodate shifts of thirteen hours, including an increase in the number of resident PICU consultants available across both paediatric and adult areas. The anaesthetic department was crucial in strengthening the running of our adult ICU; senior anaesthetic and adult ICM trainees undertaking their paediatric placements were a key resource, supporting paediatric trainees who often had no recent experience of managing critically unwell adults. Similarly, nursing and theatre staff with adult training were indispensable, working collaboratively with PICU nursing teams at the bedside.

Before handover for each shift, the medical team met to allocate roles according to skill mix, experience and frequency of staffing the adult ICU. Working in the adult (COVID) ICU was physically more exhausting owing to constraints of full PPE, undertaking manoeuvres of larger patients and reduced frequency of breaks to avoid unnecessary doffing. Handovers for PICU and the adult ICU were separate, with the latter carried out within the 'pod' in full PPE to aid differentiation of patients, which added discomfort and difficulties with communication.

Staff shortfalls inevitably became a challenge as some needed to self-isolate or shield. Consequently, both medical and nursing staff accepted additional shifts to maintain safe staffing levels. In addition,

paediatric trainees who had previously worked in PICU were redeployed from their ward rotations to bolster staff numbers. Although all study leave was suspended, annual leave was still encouraged to promote mental and physical wellbeing.

Adult patient selection, Cohorting & Resources

Patient selection

Following discussions with our regional adult critical care network (Cheshire and Merseyside, CMCCN), and in light of our standalone paediatric hospital status, chosen admission criteria included invasively-ventilated COVID adults aged 70 years or less, under 120kg and not anticipated to require input from multiple adult subspecialists. These constraints on patient size and complexity were selected to ensure that the anticipated demands placed on PICU would not exceed the equipment and expertise readily available. Potential admissions were selected by the regional CMCCN Gold Command and discussed with the designated on-call PICU consultant. In total, 11 adult patients were admitted from four different hospital trusts. Adult HDU patients were not accepted owing to issues concerning resources, staffing and safeguarding. Once clinically stable (with some successfully extubated), repatriation transfers led by PICU staff returned the surviving adults to the hospital from which they had been referred.

Cohorting

Prior to receiving our first adult, the paediatric HDU was remodelled as the adult COVID area. The burns unit staff and patients were relocated, and this area designated a paediatric COVID zone. COVID positive adults entered the adult ICU directly from the outside via a rear entrance, where there was no contact with any other staff or members of the public. The corridor remained closed until it had been deep cleaned, following the departure of the transferring team.

Equipment, Medication and Medical Management

Fortuitously most of our paediatric equipment could be utilised or upgraded for adult care. Adult-sized beds, hoists, and chairs were annexed from other departments. Suitable endotracheal tubes, nasogastric tubes, lines, urinary catheters and resuscitation apparatus were stocked. Medications and appropriate drug preparations were procured. Limited resources, such as infusion pumps and haemofiltration equipment, were tallied and distributed judiciously. There were 32 ICU (Dräger Evita) ventilators and 8 adaptable non-invasive (Respironics V60) ventilators within our hospital. Initially, the adults were ventilated using Dräger Perseus anaesthetic machines, as it was felt that the ICU ventilators should be reserved for paediatric patients. However, when secretions became problematic, and the potential influx of paediatric patients did not materialise, they were moved on to the Dräger Evita machines; the enhanced humidification made a significant improvement. We adapted our practice in several ways, including modifying our method for securing endotracheal tubes (to minimise mouth trauma) and our management of sedation regimes (cycling between propofol/fentanyl and morphine/midazolam dependent upon readiness for extubation). Delirium was challenging, with a frequency far higher than our paediatric population. PICU staff learned quickly from adult-trained colleagues how to fine-tune dexmedetomidine, quetiapine and olanzapine.

Resources

Patient management was standardised as far as possible, with the aim of optimising care and streamlining the process for staff. An 'Adult COVID cheat sheet', providing a simple algorithm for adjusting and troubleshooting ventilation strategies, was placed in every bedspace. A daily review sheet was used to document the salient information for each patient, which was particularly helpful for trainees from a paediatric background and facilitated handover by highlighting salient information for extremely unwell patients.

Communication

Patients & Family

A 'family liaison group' shouldered the responsibility of making most telephone calls to understandably anxious relatives, which was invaluable in these unprecedented circumstances; full PPE made even the simplest tasks in patient care significantly more arduous than usual, so having a team dedicated to communicating routine updates twice daily meant that clinicians were able to spend more time at the bedside. This team comprised four paediatric/neonatal surgeons, a PICU nurse consultant, a paediatric pulmonologist, along with clinical psychology support. We allocated

a dedicated staff member to each patient as a communication link, providing continuity and familiarity for the family and obtained tablet devices, enabling loved ones to see their relatives and record messages for them. When a patient was approaching end of life, next of kin were provided with full PPE and were permitted to visit the patient, with the duty PICU consultant present. After death, the family liaison team provided bereavement support.

Teams

Collaboration and multidisciplinary team working were essential. Worldwide uncertainty regarding the pathophysiology of COVID, including optimal management of antimicrobials and anticoagulation, was compounded by the variation in treatment according to a patient's hospital of origin. For clarity and consistency, we liaised with our local adult ICU at The Royal Liverpool Hospital for guidance, in addition to obtaining ad hoc advice from intensivists, haematologists, cardiologists and pharmacists. A weekly visit by a senior adult intensivist afforded additional support. Guidelines and protocols were made available to all staff through the Microsoft Teams platform. It was updated as new information became available and also became an integral part of communication between the adult COVID ICU and other areas of PICU, enabling prompt replenishment of drugs and equipment.

Wellbeing

Critical care clinical psychologists were accessible for one-to-one sessions, both through self-referral or following referral by another team member, and were generally well-received. Group sessions were felt to be greatly beneficial as an opportunity to get together, share experiences and be offered support. An exceptionally welcome adjustment in our working day was free hot and cold food during the pandemic. This meant that time was not wasted in long queues or in compromising social distancing measures, enabling us to feel more rested during break times. Periodically, reminders of support from the general public really boosted staff morale, with donations of food, shift survival kits, toiletries and scrub bags.

Service Restoration

In the week following the repatriation of our last patient, the adult COVID area was deep cleaned and reopened as the paediatric HDU. After two weeks, the medical staff rota reverted to its former structure and the doctors from theatres and the wards returned to their usual roles. Elective cardiac surgery did not restart for a further two weeks, whilst we stepped down critical care to its near original state.

Adult and Paediatric trainee experience

From the perspective of an adult ICM trainee, there were elements that worked very well from the start and others that improved as time went on. In the initial stages, teething problems included ensuring the presence of equipment appropriate for adults and the removal of paediatric sizes (such as heat and moisture exchange filters), availability of certain drugs which are rarely or never used in paediatrics and accessibility to guidelines for problems commonly encountered in adult practice. Issues that we faced usually pertained to the, often quite simple, differences in routine practice for adults and children such as management of bowels or delirium. We were not, however, alone in our struggle to determine the optimal strategy for aspects of care such as anticoagulation or ventilation.

For doctors with a predominantly paediatric background, taking on the challenge of caring for a much larger patient with the complexities of chronic adult illness was daunting. Patients often had common issues, most of which are not encountered in paediatrics. Obtaining adult guidelines and establishing a point of contact with The Royal Liverpool helped to ease issues relating to prescribing and standardised our practice. Proning was a more complex task in adults than in children, particularly in PPE, and required a team of six to perform. The team consisting of surgeons, anaesthetists, operating department practitioners and healthcare assistants, became experts at this and arrived at scheduled times twice daily. These eased the burden on clinicians working in the adult ICU and proved useful for performing routine care, such as checking pressure areas and making sure endotracheal tapes were secure.

The paediatric staff worked extremely hard under exceptional circumstances, putting their apprehension aside, to care for these patients as if they were their own family. We were in a unique position of admitting only patients whom we had never met before they were sedated and ventilated and, contrary to the patients usually under our care, had decades of life experience behind them. Written accounts of their

personalities, interests and family lives from long before COVID, provided by those who knew them best, had a significant impact on all of us and afforded us an insight into the people we were treating. When some of the patients unfortunately, yet inevitably, failed to recover or when others were successfully repatriated to their original hospital, either ventilated or extubated, we felt that we knew them, even if they didn't know us.

The first patient repatriation occurred on 20 April 2020. Gradually, the numbers dwindled as more were stable enough to be transferred to adult critical care units. This was unfortunately juxtaposed with a total of four deaths. The final patient to leave, also the last to arrive, was discharged on 30 April 2020, just 23 days after the first adult was admitted.

Conclusion

Over the course of three weeks, we learned more than we could have anticipated under circumstances that, only a few months earlier, we could never have envisaged. Although our daily work on PICU has settled, and we hope that adult units will not be so overwhelmed that their patients are admitted here again, we still regard the patients that we cared for as 'ours' and know that, should we be called upon again, we will be better equipped, more experienced and ready.

Learning Points

- There are many transferrable skills between adult and paediatric critical care medicine. Working together we were able to optimise our patients' management whilst learning new skills from each other.
- Intensive care ventilators were vital for providing optimal humidification.
- Clear and frequent communication within our critical care, wider hospital and specialists in a neighbouring trust, was vital for high-quality, standardised patient care.
- This period was physically and emotionally difficult. Adequate time off between shifts and provision of mental wellbeing and support were paramount for staff.

FFICM EXAM DATES

The next sitting of the FFICM MCQ examination is **12 JANUARY 2021**. Applications for this examination open on 12 October 2020 and close on **19 NOVEMBER 2020**. The format of the examination has now changed to include 50 MTF and 50 SBA questions answered over 3 hours. For more information and example questions, visit the FICM examination page on the website.

The next sitting of the FFICM Final OSCE/SOE will take place on 2**2-24 MARCH 2021**. Applications for this examination open on **4 JANUARY 2021** and close on **25 FEBRUARY 2021**

Details about the FFICM exam including regulations, fees and potential COVID-19 restrictions can be found here.

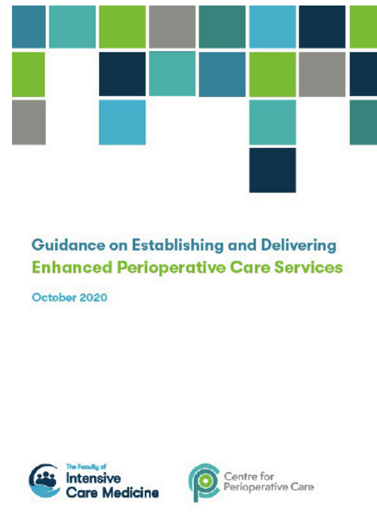
If you have any queries, please contact the Faculty at contact@ficm.ac.uk.

GUIDELINES ON ESTABLISHING ENHANCED PERIOPERATIVE CARE SERVICES

Following the publication of our Enhanced Care Guidance in May this year, the FICM is delighted to collaborate with the Centre for Perioperative Care (CPOC) and numerous other professional bodies to produce Guidelines on Establishing and Delivering Enhanced Perioperative Care Services.

It is envisaged that Enhanced Perioperative Care facilities will release critical care capacity previously used to support initial postoperative care for such patients, leading to a reduction in 'last minute' cancellation of inpatient surgery, for which one of the biggest risk factors is requirement for postoperative critical care.

Collaboration on the guidance came from many national bodies – we thank them all for their input.



#DiscoverICM – GET INVOLVED

Those of you who are active on Twitter may have seen the #DiscoverICM campaign that first ran in the lead up to the 2019 recruitment round. The campaign was very well received and we have made these Twitter releases a regular feature to inspire and capture the interest of the Intensivists of the future.

We would love as many Intensivists as possible to be involved, if this sounds like something you would be interested in why not follow Richard's lead and tell us what you love most about working in ICM. Drop me an email at shall@ficm.ac.uk and I will send you the details.

#DiscoverICM
www.ficm.ac.uk/careers

The Faculty of Intensive Care Medicine

"Something I find immensely attractive about ICM is the opportunity to provide quality care at the extremes of illness as part of a truly multidisciplinary team. The depth of ***knowledge*** *and degree of* ***dedication*** *in our specialty is inspiring. Throw in the generalism, the procedures, the tech and the holistic approach and I think we've got the best job going. We're an ambitious,* ***innovative specialty*** *with a real focus on building for the future and that's exciting to be part of."*

Dr Guy Parsons, FICM Deputy Trainee Rep

CRITICAL CARE QI RESOURCE - ADVERT

The Professional Affairs and Safety Committee is planning to provide an online QI resource for all clinicians and the wider multidisciplinary team within critical care. This will include an online library of suggested QI topics relating to day-to-day practice within critical care units. We are seeking contributors and e-group members to build the QI library. For more information about becoming a contributor or e-group member please contact us at dtillbrook-evans@ficm.ac.uk

CESR-CP in ICM: NEW GMC RULING

We would like to take this opportunity to update you on the further guidance published by the GMC on CESR combined programmes (CESR-CP). On 7 October 2020, a new rule came into effect and the GMC will now issue a certificate of completion of training (CCT) to doctors on a CESR combined programme (CESR-CP) where there is no minimum UK training time listed for ICM in the European Union legislation. Doctors entering or who have entered the ICM training programme on a combined programme taking into consideration prior unapproved training posts will now be eligible for a CCT. Please click here for more information.

CRITICAL EYE

The latest, Critical Eye is now available on the FICM website. This issue can be found here. If you would like to contribute to future issues (the next one is out in February 2021) please get in touch at contact@ficm.ac.uk

FICM OOPT/R Form

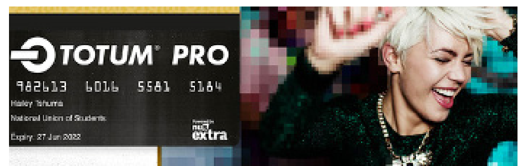
The Faculty have now produced a template form for both single and dual trainees wishing to count their OOPT/R experience towards their training for a CCT/ CESR (CP) in ICM or a dual programme with ICM. Please use this new form. It can be found here.

FICM LEARNING

Continue to visit FICMLearning.org for new educational content every week. Recent podcasts include **Decision Making**, **Simulation** and **Frailty**. New blogs include **Max and Kiera's Law** and **Management of Stroke and Sub-arachnoid Haemorrhage**. Look out for any tweets with the hashtag #FICMLearning on @FICMNews. If you would like to contribute content to FICMLearning, please get in touch via contact@ficm.ac.uk.

TOTUM PLUS: New Trainee Benefit

TOTUM PRO is the only discount card available for professional learners to purchase giving discounts from a wide range of high street and online retailers. Discounts range from travel and eating out, to health, technology and fashion. Professionals using the card are able to benefit from a whole host of exclusive discounts. To apply for this please e-mail: membership@rcoa.ac.uk



Churchill House | 35 Red Lion Square | London | WC1R 4SG
tel 020 7092 1688 | **email** contact@ficm.ac.uk

www.ficm.ac.uk

@FICMNews