OPINION ARTICLE

All hands on deck: early graduation of senior medical students in the COVID-19 pandemic [version 1]

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Abstract
This article was migrated. The article was marked as recommended.

During the COVID-19 pandemic, early graduation of senior medical students simultaneously offers useful clinical experience in preparation for junior doctor posts, whilst helping address staffing shortages due to illness or self-isolation. Having recently graduated early from medical school, we offer our reflections on the obstacles and opportunities associated with working in an uncharted clinical environment. We are not the only ones on a steep learning curve at this time: this pandemic will challenge and provide learning for staff of all levels.

Keywords
Medical students, COVID-19, graduation, junior doctors

Open Peer Review

Migrated Content
"Migrated Content" refers to articles submitted to and published in the publication before moving to the current platform. These articles are static and cannot be updated.

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2. P Ravi Shankar, American International Medical University
3. David Bruce, None
4. Ronald M Harden, AMEE

Any reports and responses or comments on the article can be found at the end of the article.
Introduction
The spread of COVID-19 is putting extreme pressure on healthcare systems globally. To bolster the healthcare workforce at this unprecedented time, clinical academics and recently retired doctors have been brought back into clinical practice (Haynes, 2020), clinical rotas have been re-organised, and final-year medical students who have been deemed to have reached their competencies are graduating early. Final-year medical students in Italy, USA and now the UK can register to work and apply their skills early to assist in the COVID-19 pandemic (Harvey, 2020).

In the UK, senior medical students are being offered the opportunity to begin their post-graduate training early, involving provisional registration and interim contracts with similar terms to junior doctor contracts (UK Foundation Programme, 2020). To protect new doctors, the contracts stipulate several safeguards, including assignment of a named clinical supervisor; direct supervision when seeing acutely unwell patients, and daytime working hours. It is expected that new doctors would be deployed in supporting areas, avoiding COVID-19 escalation wards and intensive care units where possible.

Reflection
Having recently graduated early from medical school, we offer our own reflections on the obstacles and opportunities associated with working in an uncharted clinical environment. We know that we will be joining the workforce at a challenging time. Beyond the direct threat that COVID-19 may pose to our own health, we are concerned that staff sickness and self-isolation may have substantial effects on our supervision (Hope, 2020). Clinicians will be in a state of rapid flux and turnover, and at a time where we would already be adapting to new environments and new people which may become disorienting. The importance of adequate supervision and rapport building with our mentors remains constant but adapting to these challenges requires flexibility within the clinical team. How we respond to the pandemic may set a precedent for how we manage the medical student to junior doctor transition in the future.

Reassuringly, The Medical Schools Council of the UK has stated that medical students working pre-qualification should not be allowed to work beyond their competencies and that shadowing and induction must continue as normal (Medical Schools Council, 2020). We recognise that challenging clinical situations - such as exposure to difficult decision making and end of life scenarios - may approach earlier in our careers than previously anticipated. We hope that we can seek senior support when faced with challenging situations that stretch or fall outside of our skillset. Needless to say, proper supervision will reduce medical errors, but if mistakes do occur, we need senior support for reflection and to derive learning benefits which could benefit the whole team (Kroll et al., 2008).

In a time where all doctors are adapting to a new way of working, it should not be assumed that we are aware of pre-existing protocols. Nowhere is this more apparent than in the case of personal protective equipment (PPE). We are fortunate to have had recent online training how to don and doff PPE correctly, though local hospital inductions should ensure that all staff are performing this important procedure to a high standard.

The pandemic reflects an opportunity for immersion of senior medical students in a clinical team. The communities of practice theory of medical education highlights learning-by-participation rather than learning-by-acquisition, where the currency of learning is authentic work (Morris, 2018). Never has the opportunity been greater for senior medical students to learn by becoming a core part of the professional community. We hope that our learning won’t only be semantic: it should include management, personal skills and the fostering of an appreciation for the importance of the wider multidisciplinary clinical team, including allied health professionals, in our response to the pandemic. Furthermore, the disruption to the ‘social hierarchy’ of the clinical team caused by this novel challenge may benefit learning, as power dynamics are known to inhibit full engagement with the clinical team (Pemberton, Mavin and Stalker, 2007).

The pandemic should not be a time of educational stasis, it is a chance to harness the power of technology and novel educational tools. Digital inductions and virtual webinars with educational supervisors are one possibility, and medical schools are adopting this widely to deliver final sets of lectures and even high-stakes exams. These steps are necessary now but could also be used to supplement invaluable face-to-face contact in the future.

Whilst many medical students may feel compelled to work, we think it is important to be mindful of the risk of burnout inherent in entering a stressful job following premature termination of medical school with minimal interleaving holiday. Some steps can be put in place now to minimise risk. For example, it is important that starting work early is voluntary; we are pleased that this is the case for us in the UK. For some students, the time between ending medical school and starting work will be needed as a valuable break.

Lastly, the support networks normally available to junior doctors must still be present for senior medical students as they transition, albeit in a different format given social distancing. Again, technology can be leveraged: for example, with
regular video calls using a ‘Schwartz Round’ format, or instant messaging groups. In the coming months, an open culture of talking about concerns, mental wellbeing and experiences on the wards must be fostered, recognising that being mindful, open and honest about your concerns is a crucial part of doctors’ development. As final year students, we hope that these opportunities will be available to us, so we can take the lessons learnt with us in our future career.

Conclusion
As medical students transitioning to our new roles as doctors, we hope to bring with us enthusiasm, passion and a desire to innovate. We see the obstacles posed by COVID-19 equally as opportunities for mentorship, collaboration and mutual learning. We are open to the lessons from our senior clinicians, and we hope they are open to our perspectives too. In a situation where even the most senior clinicians are apprentices, the whole profession can grow from the challenges we face.

Take Home Messages
- As medical students transitioning to our new roles as doctors, we hope to bring with us enthusiasm, passion and a desire to innovate.
- How medical educators respond to the pandemic may set a precedent for how we manage the medical student to junior doctor transition in the future.
- We hope that we can seek senior support when faced with challenging situations that fall outside of our skillset.
- The pandemic offers a chance to harness the power of technology for education.
- Never has the opportunity been greater for senior medical students to learn by becoming a core part of the professional community.

Notes On Contributors
Laith Alexander is an MB/PhD student at the University of Cambridge. His interests lie in general practice, public health and psychiatry. His PhD in Neuroscience explored the role of the ventromedial prefrontal cortex in the regulation of emotion and cardiovascular function. He is due to start an Academic Foundation Programme junior doctor post in Psychological Medicine & Psychiatry at St Thomas’ Hospital, London in August 2020. ORCID: https://orcid.org/0000-0003-1297-6548

Matthew H. V. Byrne is an anatomy demonstrator at the University of Cambridge and will start as an Academic Clinical Fellow in Urology at Oxford in August. He is currently undertaking a PGCERT in medical education at the University of Cambridge and has previously been awarded a MRes in Transplantation. He founded a national charity that facilitates medical student volunteers delivering talks at secondary schools. ORCID: https://orcid.org/0000-0002-2414-352X

James Ashcroft is an Academic Clinical Fellow in General Surgery in the East of England Deanery with an interest in early academic education and technical performance training. His educational work has explored cognitive interventions in technical skill (awarded MRes) and early surgical learning (awarded MSc).

Jonathan C. M. Wan is an MB/PhD student at Trinity College, University of Cambridge. He carried out his PhD in computational cancer diagnostics and is continuing his research as a Bioinformatics Engineer at Memorial Sloan Kettering Cancer Center. He will be commencing an Academic Foundation Programme post in Oncology at Guy’s and St Thomas’ from August 2020. He is interested in oncology research and medical education. ORCID: https://orcid.org/0000-0003-0001-1802

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The author has declared that there are no conflicts of interest.

Ethics Statement
This manuscript includes the perspectives of the authors, and does not involve any investigation of human subjects.

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Bibliography/References

Harvey, A. (2020) Covid-19: medical students and FY1 doctors to be given early registration to help combat covid-19. BMJ. 368(March), p. m1268.
Reference Source

Haynes, L. (2020) Government urged to ‘get a move on’ recalling retired doctors in COVID-19 outbreak, GPonline. Available at:
Reference Source (Accessed: 2 April 2020).

Hope, R. (2020) Coronavirus: One in four NHS doctors ‘sick or in isolation’, Sky News. Available at:
Reference Source (Accessed: 2 April 2020).

Kroll, L., Singleton, A., Collier, J. and Rees Jones, I. (2008) Learning not to take it seriously: junior doctors’ accounts of error. Medical Education. England. 42(10), pp. 982–990.
Reference Source

Medical Schools Council (2020) Advice from Medical Schools Council to UK Medical Schools on actions surrounding Covid-19. Available at:
Reference Source (Accessed: 1 April 2020).

Morris, C. S. (2018) On Communities of Practice in Medical Education. Academic Medicine. 93(12).
Reference Source

Pemberton, J. P., Mavin, S. M. and Stalker, B. S. (2007) Scratching beneath the surface of communities of (mal)practice. Learning Organization. 14(1), pp. 62–73.
Reference Source

UK Foundation Programme (2020) Allocations to Interim FY1 Posts. Available at:
Reference Source (Accessed: 9 May 2020).
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Ronald M Harden
AMEE

This review has been migrated. The reviewer awarded 4 stars out of 5

This article is to be welcomed given that students are acknowledged now as partners in the learning process. I recommend the article as a useful read for all with an interest in medical education. Three things struck me about the article. 1. The suggested issues to be addressed if clinical experience is provided. 2. The argument that the pandemic should not be a time for educational stasis and 3. The plea that in the future more emphasis should be placed in medical education on immersing students as part of a clinical team

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David Bruce
None

This review has been migrated. The reviewer awarded 4 stars out of 5

In this paper the authors lay out their apprehensions and hopes as they start their medical careers early as interim Foundation Year 1 doctors (FiY1). Many good points are made and their views will be
interesting to new doctors in a similar position as well as senior doctors in the medical teams where they will work. While some of the concerns voiced will be generic to all new doctors, the COVOD pandemic has created specific issues and requirements – such as the need for PPE training and changes to normal support systems as a result of social distancing and it was helpful to hear the perspectives of those transitioning from senior medical students to new FiY1 doctors. The important matter of doctor wellbeing is also discussed. Again – the early start to working life without time for a break or holiday may be a cause of stress for some. As well as the importance to the safety and wellbeing of the doctors, we know that stress in medical teams can result in a decrease in the safety and quality of patient care. The work by Coia and West emphasises the importance of the autonomy, belonging and competence as key needs for wellbeing and motivation at work. Suggestions for improved use of technology in promoting learning are helpful and Schwartz Rounds are certainly worth exploring. The paper is well written, and I would only make two comments that might improve the authors message. First – I was unclear what was meant by the authors’ hope that learning wouldn’t only be semantic, and second, I felt the reference to senior medical students was confusing as they had graduated and were provisionally registered with the GMC – so new doctors might be better. Finally – as the GMC has stated “The placement of these new provisionally registered interim Foundation Year 1 doctors will be facilitated by medical schools working with foundation schools and in support of service providers. Deploying these doctors will take account of the need for induction, supervision, and support for their wellbeing, and into roles appropriate to their skill set and that best support delivery of frontline services.” It will be valuable to have a follow up paper that describes the experiences of the authors having completed this new start to their medical careers.

**Competing Interests:** No conflicts of interest were disclosed.

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**P Ravi Shankar**
American International Medical University

This review has been migrated. The reviewer awarded 3 stars out of 5

This is another of a series of articles on the COVID-19 pandemic and its impact on education written from the perspective of senior medical students. The authors can briefly describe how they are graduating early and modifications to the usual graduation process due to the pandemic. They have mentioned their apprehensions and concerns some of which have also been addressed in other articles. The pandemic offers both challenges and opportunities. The creation of a supported environment is important. I am not sure when the authors will enter the clinical workforce or whether they have already started working.
Many of their concerns may also be applicable to situations other than the COVID-19 pandemic.

**Competing Interests:** No conflicts of interest were disclosed.

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James Gray  
University of Sheffield

This review has been migrated. The reviewer awarded 2 stars out of 5

An interesting reflective piece to read however given that this is written pre-commencement of the posts it is difficult to know whether this is truly relevant to Covid19 or simply a reflection of all the concerns and insecurities of the transition. On that basis it is a potentially interesting read for all those who will welcome newly qualified clinicians into their teams however I don't think it necessarily adds a great deal that is Covid specific. A more valuable piece of work would be to evaluate these thoughts against the reality after a period in post as this may lead to valuable insights to aid supporting the transition from student to clinician in the future with possible innovations that have come out of this pandemic being shown to add value.

**Competing Interests:** No conflicts of interest were disclosed.