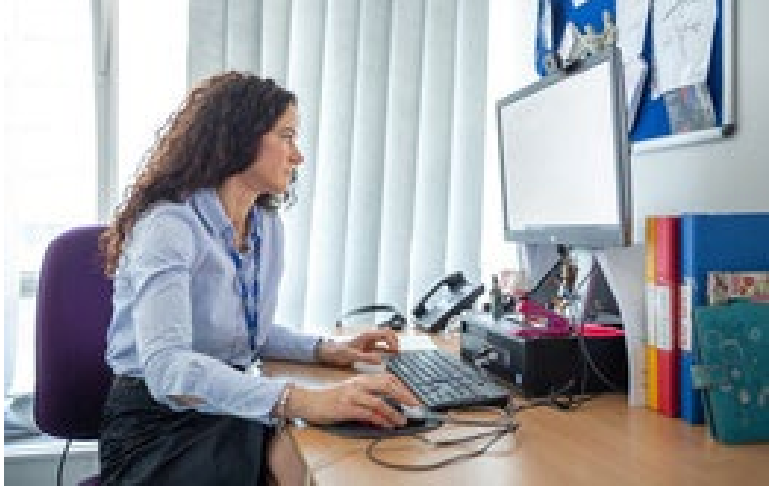

Covid-19 Insights

Digitally converting undergraduate primary care

Arti Maini[1], Chance Pistoll[2], Nina Dutta[3], Neepa Thacker[4], Roisin Bhamjee[2], Claire Mahoney[2], Viral Thakerar[5,6] and Sonia Kumar[1,6]

[1]Undergraduate Primary Care Education, Imperial College London, London, UK
[2]Primary Care, University of Melbourne, Melbourne, Victoria, Australia
[3]Medicine in the Community Apprenticeship (MICA), Imperial College London, London, UK
[4]General Practice and Primary Healthcare (GPPHC), Imperial College London, London, UK
[5]People, Communities and Healthcare (PCH), Imperial College London, London, UK
[6]Medical Education Innovation and Research Centre (MEdIC), Imperial College London, London, UK

... a digital curriculum offering a motivating educational experience and modified clinically focused in-term assessments, and that captured the complexities of an experiential clinical setting

In March 2020, our medical schools in London and Melbourne suspended clinical placements in response to the coronavirus disease 2019 (COVID-19) pandemic. This had a seismic impact on our courses, which draw on experiential learning theory through students being placed in a primary care setting for several weeks, consulting with patients under general practitioner (GP) teacher supervision.[1] Our undergraduate primary care teams were already working together on educational research and our conversations revealed shared concerns about the impact of placement suspension and social distancing on students' knowledge, clinical skills, teamworking, professional development and mental health. We needed to create, rapidly, a digital curriculum offering a motivating educational experience and modified clinically focused in-term assessments, and that captured the complexities of an experiential clinical setting.

Drawing on collaborative learning theory, digital learning pedagogies and theories of motivation, we were keen to emphasise the role of autonomy, competency and agency to maximise student engagement during large and small group digital learning, and preserve student and faculty member interactions, including real-time personalised feedback for students.[2–4] We also wanted to incorporate the COVID-19 response into our curricula. So far, our innovations have received positive student feedback and high student interaction and engagement. Below we discuss some of our educational innovations.

At Imperial College London, we are delivering small group

 © 2020 The Authors. The Clinical Teacher published by Association for the Study of Medical Education and John Wiley & Sons Ltd.

teaching sessions on a video conferencing platform, using the break-out room function to enable students to role-play primary care patient consultations. Students participate in weekly webinars to discuss clinical cases and to submit questions, before and during webinars, through a chat-box function. Interestingly, course evaluation found that several students felt liberated to interact more freely than usual because of the greater degree of anonymity, leading to more engaging and inclusive learning. Imperial undergraduate primary care educators have created online interactive workbooks and incorporated existing resources, such as Imperial's 'Science Matters: Let's Talk About COVID-19' digital course, hosted through Coursera (Coursera Inc., Mountain View, CA, USA), a freely accessible global educational platform. New material is also being rapidly created, including a digital health coaching course hosted through Coursera.

In Melbourne, students are assigned to small groups facilitated by an academic as part of a new weekly near-peer learning session. Group members work together to teach each other about key concepts in primary care through creative presentations, using art, video, stories and PechaKucha™ (PechaKucha, Tokyo, Japan) (a fast-paced storytelling format in which 20 slides are shown for 20 seconds each and accompanied by commentary). Student presentations are supplemented by facilitated clinical case discussions and role-plays. We have also converted in-person primary care workshops into an online format through breaking sessions up into three complementary components: an initial pre-recorded video lecture, to introduce new concepts and set learning expectations; independent weekly learning activities; and an interactive facilitated online session, using breakout rooms, a readiness assessment test and team-based application tasks.

At Imperial, our third-year students are undertaking a digital community action project (CAP) to support communities remotely with the COVID-19 response through working closely with local community organisations and third-sector organisations. These projects replace the face to face CAP that students would normally undertake. Our community collaborations lead had already established a strong relationship with the organisations invited to participate. These organisations were asked to identify projects based on community needs that our students could contribute to through collaborating with community leaders. Examples include creating accessible captioned videos in multiple languages to cover national guidance relating to COVID-19, creating mini-tutorials and resource packs to support older people in the community accessing digital groups, and developing a support package for local vulnerable groups.

In Melbourne, our in-term written assessment has been redesigned to focus on the community impacts of the COVID-19 pandemic. Students are required to write on one intervention, guideline or policy that has been implemented with implications for primary care. Students then reflect on how these interventions affect our primary care communities, including intended and unintended consequences on vulnerable population groups, and how this experience will affect their own development as a doctor.

As we look to reinstate clinical placements in the near future, there are broad issues to address (Box 1) and new digital issues to consider (Box 2). A recently published article by the Association for Medical Education in Europe (AMEE) Technology Enhanced Learning Committee describes helpful principles and practical recommendations when migrating to online learning during the COVID-19 pandemic, and this is helping to guide our thinking.[5]

… we were keen to emphasise the role of autonomy, competency and agency to maximise student engagement …

Box 1. Broad issues to address when reinstating clinical placements

- Accessing personal protective equipment
- Maintaining social distancing within clinical environments
- Clarifying student indemnity
- Increasing service-learning opportunities
- Managing increased coronavirus disease 2019 (COVID-19)-related student and staff absences
- Promoting mental health and well-being
- Preparing for further periods of lockdown

Box 2. New digital issues to consider when reinstating clinical placements

- Harnessing educational technologies to support learning in modified clinical settings with increased remote consulting
- Up-skilling general practitioner faculty members and student training in telehealth and use of educational technologies
- Further developing and integrating digital curricular innovations

© 2020 The Authors. The Clinical Teacher published by Association for the Study of Medical Education and John Wiley & Sons Ltd.

... there are broad issues to address ... and new digital issues to consider...

Reflecting on the last few months of unprecedented change and challenge, we have gained strength through working cohesively and reflexively within our teams and have learned much from sharing ideas and experiences with our colleagues globally. We continue to work and learn collaboratively through regular discussions about innovative solutions to challenges and through sharing resources. This is helping us forge a way forward as we develop new approaches to medical education in the midst of a global crisis.

REFERENCES

1. Armstrong E, Parsa-Parsi R. How can physicians learning styles drive educational planning? *Acad Med* 2005;**80**(7):680–684.
2. Pluta W, Richards B, Mutnick A. PBL and beyond: trends in collaborative learning. *Teach Learn Med* 2013;**25**(Suppl 1):S9–S16.
3. Simpson O. Motivating learners in open and distance learning: do we need a new theory of learner support? *Open Learning: The Journal of Open, Distance and e-Learning* 2008;**23**(3):159–170.
4. Deci EL, Ryan RM. *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum; 1985.
5. Sandars J, Correia R, Dankbaar M, de Jong P, et al. Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic. *MedEdPublish* 2020;**9**(1):82.

Corresponding author's contact details: Arti Maini, Room 331, 3rd Floor Reynolds Building, Charing Cross Campus, Saint Dunstan's Road, W6 8RP, London, UK. E-mail: a.maini@imperial.ac.uk

Funding: None.

Conflict of interest: None.

Acknowledgements: This article is supported by The National Institute for Health Research (NIHR) in the United Kingdom (UK) under the Applied Health Research programme for North West London. The views expressed in this publication are those of the authors and not necessarily those of the National Health Service (UK), the NIHR or the UK Department of Health. Imperial College London would like to acknowledge Ms Bethany Golding (Department of Primary Care and Public Health, Imperial College London, London, UK), who led on the development of the Community Action Projects, Dr Felicity Lalloo and Dr Nicola Hawkins (Department of Primary Care and Public Health, Imperial College London, London, UK), who were integral to developing and implementing the undergraduate primary care digital curriculum, and the wider undergraduate primary care education team. The University of Melbourne would like to acknowledge the Department of General Practice's GP Curriculum Advisory Group, who has been instrumental in providing feedback on the new digital curriculum and co-designing modified clinical placements.

Ethical approval: Not required.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

doi: 10.1111/tct.13224

University Library

MINERVA ACCESS

A gateway to Melbourne's research publications

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Maini, A;Pistoll, C;Dutta, N;Thacker, N;Bhamjee, R;Mahoney, C;Thakerar, V;Kumar, S

Title:
Digitally converting undergraduate primary care

Date:
2020-08

Citation:
Maini, A., Pistoll, C., Dutta, N., Thacker, N., Bhamjee, R., Mahoney, C., Thakerar, V. & Kumar, S. (2020). Digitally converting undergraduate primary care. CLINICAL TEACHER, 17 (4), pp.440-442. https://doi.org/10.1111/tct.13224.

Persistent Link:
http://hdl.handle.net/11343/252512

License:
CC BY