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Championing Bedside Teaching by Contact Tracing During the COVID-19 Pandemic

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Dear Editor –

During the COVID19 pandemic, public health policies were created to reduce social interactions and protect society. Like many others, our institution removed medical students from clinical placements and moved all teaching online[1,2]. To then return students safely to clinical learning, we required a robust system of contact tracing. We enlisted the innovative inspiration of final year medical students (EOH, RA, JH) to develop a user-friendly system utilizing a quick response (QR) code that linked to a secured web-based form to document all clinical teaching interactions. This intervention afforded us the opportunity of gaining an objective insight into bedside teaching within our institution.

Four key data points were gathered on this form for all encounters: the student identification number, the clinician's name, the date, and length of the clinical teaching. This task could be completed in under 30 seconds. As forms were submitted, the data was stored in real time that could be accessed by the course administrative staff as needed for contact tracing purposes. Students were advised to spend less than 15 minutes with each patient and to follow all social distancing and infection control guidelines. This study received ethical exemption from the University College Dublin's Human Research Ethics Committee.

Between September and December 2020, 144 students completed a four-week rotation. There was 100% participation from the students using the QR code system to log 5,803 hours of clinical teaching in 3,453 encounters. The median hours of teaching per student was 32 hours (IQR 6-49.5 hours) with the median length of each clinical encounter at one hour (IQR 1-2hours). Median individual teaching hours were 18.5 (IQR 4-30 hours). There were 212 different clinicians logged as participating in clinical teaching. During the 16 weeks, there were no outbreaks of COVID-19 infection within the student or staff population. The contact tracing potential of the QR code system was thus never required.

The utilisation of the QR code system was our institution's pragmatic response to contact tracing. Despite the constraints of social distancing and reduced time on clinical placements, QR code data demonstrated that each student had exposure to every aspect of the speciality and a preservation of the bedside learning experience. As the father of bedside teaching Sir William Osler stated – "*medicine is learned at the bedside, not in the classroom*"[3]. We also identified of the full range of teaching encounters between learners and staff from all disciplines, including nursing, sonography, and other allied health professionals. The QR system also allowed us to formally recognize these educators and provide certificates of their teaching hours to be used for continuous professional development (CPD) points. For the doctors in training, this tool highlighted which trainees go above and beyond to contribute to clinical teaching of students. Finally, for the medical students who developed this tool as part of a Medical Education elective, this shows the value of innovation and of empowering those at the coal face of education to develop solutions that are student centred[4].

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References:

1. Baecher-Lind L, Fleming AC, Bhargava R, et al. Medical Education and Safety as Co-priorities in the Coronavirus Disease 2019 (COVID-19) Era: We Can Do Both. Obstet Gynecol. 2020;136(4):830-834.
2. Gordon M, Patricio M, Horne L, et al. Developments in medical education in response to the COVID-19 pandemic: A rapid BEME systematic review: BEME Guide No. 63. Med Teach. 2020;42(11):1202-1215.
3. Peters M, Ten Cate O. Bedside teaching in medical education: a literature review. Perspect Med Educ. 2014;3(2):76-88.
4. Hicks EB, Kirwan JT, O'Brien CT, Higgins MF. Innovating medical education-Bringing the clinical environment online. Med Educ. 2021 Nov;55(11):1320-1321