Title
ICU bootcamp: using online micro lectures to teach critical care

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Response (QR) code to our paper forms that linked directly to an online form with the same content. Scant research exists in implementing QR codes in medical education, and none exists regarding EM education.

Educational Objectives: Our goals were to increase the number of evaluations completed per student, make student evaluations more user-friendly, easier to translate into grade forms and Standardized Letters of Evaluation, and increase the timeliness of evaluation submission for student feedback.

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Curricular Design: Our paper evaluation forms were updated with a QR code at the end of 2018. At the start of each 2019 rotation, we posted the student names, pictures, and the QR code around the department in addition to encouraging students to hand out paper evaluation forms with the QR code on shift. We encouraged them to use the evaluation method they preferred. We calculated the number of evaluations completed per student per 4-week block in 2018, and then again in 2019 after introducing the QR code.

Impact: The addition of a QR code was associated with an increase in our per-student evaluation average from 6.8 to 8.8, 43% of which used the QR code. This 29% increase in evaluations compared to last year is worth the addition of this tool and was well received and well utilized by our department. We anticipate this method could be used to generate evaluations in graduate as well as undergraduate medical education.

20 ICU Bootcamp: Using Online Micro Lectures to Teach Critical Care

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Objectives: Our objectives are to provide out of classroom online educational videos for residents prior to their ICU rotations, to teach core critical care education and fundamental medical knowledge underlying common medications and disease processes, and to teach evidence-based medicine.

Abstract: Residents are required to work in the ICU setting during their first year of residency. The ability to learn fundamental critical care concepts outside the classroom prior to ICU rotations builds residents' confidence and allows them to perform clinically with a stronger knowledge base. Currently, critical care online education targeted specifically to PGY1 level residents is sparse and lacking. We sought to fill this gap in graduate medical education with our innovative online video course.

Our Program Director, two Critical Care trained Emergency Medicine faculty, and one PGY4 Emergency Medicine resident identified gaps in the critical care education and sought to address them. We developed these objectives: provide all PGY1 residents exposure to critical care concepts prior to ICU rotations; provide out of classroom learning and resources accessible at any time or place. Our course is a collection of video lectures that meet these goals. Each video is 5-10 minutes long and can be viewed at multiple speed options at the resident's convenience. We teach in a "chalk talk" style, drawing out disease or drug mechanisms to help learners clearly visualize concepts. Videos are presented in a stepwise fashion, so prior concepts can be built upon later. We include evidence-based medicine by reviewing literature within lectures. Topics covered in our PGY-1 course include: diabetic ketoacidosis, vasopressor selection, shock, sepsis, arterial blood gas analysis, sedative selection, ventilator overview, non-invasive ventilation, and ARDS.

Our innovative education provides learners with an easy and effective way to learn critical care outside the classroom and hospital to prepare specifically for their role in the ICU as PGY1 residents. To date, there is no specific targeted online curriculum available for residents to prepare them for their critical care rotations. We have implemented our idea by posting videos online on YouTube.com and our website, icubootcamp.io.

21 Impactful Mentoring: a Novel Multi-Modality Short-Burst Approach to Mentoring Visiting Sub-Interns

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Background: As educators, we must also embrace the importance of mentorship to students to support professional development, clinical excellence, wellness and scholarship. The sub-internship in emergency medicine is uniquely positioned to impact students from a wide range of schools over a short amount of time when students are entering a period of accelerated personal and professional growth while preparing for residency.

Objectives: We believe that impactful, efficacious mentoring can be successfully implemented within the one month sub-internship rotation. To analyze current mentorship practices in our sub-internship and develop and implement a high-impact, easily accessible mentorship system for our visiting students.

Design: A novel mentoring structure was created using a review of primary literature and group consensus from leaders in sub-intern education in our department. We developed and implemented a three-pronged system aimed at maximizing impact, availability and convenience (figure). Clinical advisers are education faculty tasked with mid-rotation performance feedback based upon shift evaluation data. Each student-adviser pair also has a shift together for hands-on mentoring. Niche mentors are self-identified faculty who were paired with students based upon entry survey data. These faculty provide advice for