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How to Run a (Quick Response) Code: Increasing and Streamlining Medical Student Evaluations

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EM residencies in two very different clinical settings which allowed them each to learn about the others' setting while working together as colleagues and collaborators. Such a partnership serves as a role model for other EM residencies that want to make Global EM opportunities more broadly accessible.

### 17 Heads Up! A Novel Activity for Resident Conference

Fujimoto J, Roepke C, Chen E / UCSF Fresno; Lewis Katz School of Medicine at Temple University

**Background:** As medical education increasingly incorporates adult learning theory and small group activities in resident conference in lieu of lectures, program leadership are tasked with both finding faculty time to lead small group exercises, in addition to developing curriculum for the sessions.

**Educational Objectives:** We created a "Heads Up!" style game to teach core content topics in Emergency Medicine (EM). We aimed to design a resident conference activity that is both engaging and educational to prepare for the upcoming in-training exam.

After review of the pre-conference materials, learners will apply their knowledge of Dermatology and Infectious Disease by giving each other clues in the game.

(We created this game focusing on the topics of Derm and ID, so our learning objective reflect this specific content.)

**Curricular Design:** In this flipped classroom activity, a designated resident facilitator selected FOAM resources for learners to review in preparation. The facilitator created digital cards featuring a visual diagnosis using the "Studies" app.

At conference, residents were split into groups of approximately 10 each. One resident (Player 1) was it instructed to start gameplay by holding an iPad on his/her forehead, displaying the image to the group, held so that he/ she is unable to see the image. The other residents in the group gave Player 1 clues to prompt correct identification of disease. Once the correct diagnosis was guessed by Player 1, the facilitator asked the whole group another question related to disease. The player who answered correctly became Player 1.

**Impact:** Residents were asked to fill out a survey after the activity. Eleven of 30 participating residents completed the survey. One hundred percent of survey responses rated the activity as "informative and engaging." One resident called the activity an "excellent review." Another stated "I loved the heads up game!!"

This game was a well-received, engaging tool to teach core content EM in resident conference. With movement towards small group learning in lieu of lecture format, it is difficult to find activities that are valuable, but not resource-intensive. This activity strikes that balance and could be incorporated at any EM residency.

## 18 HIGH STAKES: Teaching Medical Students to Recognise and Manage Common Emergencies in Namibia

Nagji A, Bigham B, Hunter C, Bana R, Theune S, Jazuli F, Shaikh S / McMaster University, University of Namibia

Learning Objective: To develop a five-day acute resuscitation course for senior medical students in sub-Saharan Africa covering emergencies in surgery, internal medicine, obstetrics, gynaecology, psychiatry, paediatrics, and crisis communication.

Abstract: The University of Namibia Medical school (UNAM) & McMaster University have a longstanding partnership for curricular co-development. UNAM did not have a formal emergency medicine curriculum for medical students. We conducted a needs assessment by reviewing the literature for causes of morbidity and mortality that are amenable to emergency care in Namibia and engaged local consultants and department heads to develop a consensus curriculum that focused around a 1 week 'High Stakes' course for 5th year Namibian medical students. Topics include: trauma, altered mental status, dyspnea, shock, snake bite and dangerous fever. Forty-nine students attended. Each participant was exposed to 10 hours of lecture, 8 skill stations, 12 small group sessions, and 32 low-fidelity simulations. Students were exposed to content with spaced repetition: lecture, clinical cases then simulations which gradually integrated concepts and increased in complexity over the week. We used focus groups and surveys to understand impact. Twenty-seven completed the survey and 14 attended focus groups. All rated the course highly and stated it would change their behavior. Some cited they saved lives while working evening shifts in the hospital after just a few days of attending the course. The course has now been vertically integrated into the curriculum with additional priming lectures added in previous years, follow up OSCE stations for assessment and a 6th year resuscitation course that builds on content learned. The course will be repeated in January 2020 with the goal of building a standardized, portable curriculum applicable to other schools in sub-saharan Africa.

# How to Run a (Quick Response) Code: Increasing and Streamlining Medical Student Evaluations

Koning M, Cheng A / MetroHealth Medical Center, Department of Emergency Medicine, Case Western Reserve University School of Medicine

**Introduction:** Obtaining timely, accurate, and evaluator-friendly feedback for students is a vital part of medical education. Paper evaluations are easy to use, but can be lost, illegible, or turned in after feedback could have been impactful or grades due. To combat this, we added a Quick

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.

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.

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

Yamane D, Siddiqui S, Kazzi M / The George Washington University

**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

Bralow L, Cloyd T, Makker T, St. George J / New York Presbyterian Hospital; Columbia University

**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