Table 1. Residents' Perceived Skill Level Before and After Airway Course on a 10-Point Scale (1=lowest, 10=highest); n=16.

Airway Category	Pre-course mean ± SD	Post-course mean ± SD	p-value
Bag Valve Mask Ventilation	6.13 ± 2.25	8.44 ± 1.67	=0.0025
Adult Endotracheal Intubation	4.69 ± 2.21	7.69 ± 1.25	<0.0001
Pediatric Endotracheal Intubation	2.80 ± 1.42	6.81 ± 1.64	<0.0001
Use of a Bougie	2.94 ± 1.69	7.25 ± 1.34	<0.0001
Use of an Extraglottic Device	3.38 ± 1.89	7.31 ± 1.70	<0.0001
Cricothyrotomy	1.88 ± 0.96	6.56 ± 1.71	<0.0001

pediatric endotracheal intubation, use of a bougie, use of an extraglottic device, and cricothyrotomy (Table 1). Emergency medicine residents appear to benefit from a highly integrated, comprehensive airway training session, as a supplement to intubation experiences in the emergency department. The implementation of this curriculum ensures standardization of airway training for all residents.

55 Rural Emergency Medicine: A New Elective for Real World Experience

Kinchen D, Eastin C, Eastin T, Seupaul R /White County Medical Center, Little Rock, AR; University of Arkansas for Medical Sciences, Little Rock, AR

Background: In the state of Arkansas, there are approximately 150 board certified Emergency Medicine (EM) physicians (MDs). Of those, only 25% practice in towns of less than 50,000 people and only 15% are practicing in communities with less than 25,000 people. Of the 73 hospitals in the state of Arkansas, > 40 of them do not have a board certified EM physician on staff in the emergency department (ED). This is an alarming statistic in a state where access to tertiary care may be several hours away. Having trained EM MDs in these rural communities, would be an invaluable resource. The decision to create and develop an EM rural rotation strategically exposes EM residents to the practice of EM in resource limited communities and facilitates recruitment of highly trained board eligible clinicians to these medically underserved areas.

Educational Objectives:

- Develop skill and expertise in the management of:
    - Critically-ill & critically-injured adult and pediatric patients in an environment with limited resources.
    - Various toxicological, environmental, and traumatic emergencies unique to rural communities.
- Learn to manage the flow of patients as a solo practitioner with limited support staff.
- Develop communication skills and cultural awareness necessary to respectfully and effectively interact with patients, families, and other health care providers in the area.
- Develop an understanding of the local EMS system, services provided by the rural site facility, and need to transfer patients to higher levels of care including EMTALA compliance issues.

Curricular Design: PGY-3 EM residents are offered the opportunity to select the rural rotation as their senior elective. Rural site selection is based on targeted needs that ensure an optimal educational experience. Housing, travel, and resident salaries are supported by grant funds from the Arkansas Department of Health. Residents are required to work 120 clinical hours for the month with an equal assortment of days, nights, and weekend shifts directly supervised by a board certified EM MD. To ensure residents meet educational program requirements, teleconferencing, asynchronous resources, and on-site grand round opportunities are available.

Impact/Effectiveness: Feedback from residents who have completed the rural rotation has been positive. They report having more autonomy and a better understanding of the difficulties that exist when practicing in rural locales. They also felt the rural rotation offered more insight into what they are likely to experience once they have completed residency and are practicing in their own. Of the four residents who have completed the rotation, one has committed to join the ED staff at the rural site upon completion of residency. With this being a primary goal, we consider the creation of this opportunity to be a great success.

56 Scientific Speaker Apprenticeship Program

Phillips A, Diller D, Garmel G/Stanford University, Stanford, CA; Oregon Health Sciences University, Portland, OR; Kaiser Permanente and Stanford University, Stanford, CA

Background: Formal apprenticeship has long been part of medicine, yet no formal apprenticeship program currently exists to prepare physician leaders to present at scientific conferences.

Educational Objectives:

1. Understand the central components of quality presentation techniques.

2. Create the introduction to a formal presentation using the quality components discussed.
3. Deliver the introduction to a formal presentation using the tips provided by the lecture and your mentor.

Curricular Design: We created a formal apprenticeship program at CORD-EM for senior residents that consisted of 1) an interactive preparatory lesson with a nationally recognized lecturer, 2) targeted article list, 3) 1-1 mentorship by an established, veteran speaker, and 4) an opportunity to co-present with their mentor at the 2015 CORD-EM conference resident track by giving a five-minute topic introduction. We explored stakeholder opinions with surveys and a focus group.

Impact/Effectiveness: The participating 5 residents and 9 faculty mentors were uniformly supportive of the program, unanimously reporting that they would recommend it to their colleagues. The preparatory lesson and mentorship were both important components that contributed equally to creating and delivering presentations (Fisher's exact .200 and 1, respectively).

Importantly, Likert and narrative responses supported residents taking larger roles in the presentation. Thematic analysis (?=.745) revealed that faculty thought the residents augmented their presentations.

Despite the extensive curriculum, the residents reported most appreciating an opportunity to speak at a national conference. This finding may suggest that it is difficult to enter the national lecture circuit, and a formal apprenticeship program is needed to facilitate the introduction of promising junior physicians to the lecture circuit sooner than traditionally feasible.

57 Simulation and Standardized Patient Encounters as a Method to Assess Residents in Emergency Stabilization (PC1) Milestones Routinely Identified as Difficult to Evaluate in the Clinical Setting

King A, Calcara D, Liddil J, Greenberger S, Panchal A, McGrath J, Green B, Khandelwal S/Ohio State University, Columbus, OH

Background: The Accreditation Council for Graduate Medical Education (ACGME) defines 23 milestones with associated sub-competencies along a continuum for which residents are evaluated throughout their residency training. The unpredictability of clinical practice results in significant variation in the ability to assess resident achievement of certain sub-competencies and milestones. Simulation is a key component of emergency medicine resident education and should be utilized in resident assessment of milestones which are difficult to routinely evaluate in the clinical setting.

Educational Objectives:

1. Develop unique simulation cases and standardized patient encounters designed to assess participating residents in specific milestone sub-competencies identified as difficult to routinely assess in the clinical setting.
2. Acquire multiple data points to ensure resident achievement in the defined sub-competencies in order to provide more accurate feedback to our learners.

Curricular Design: A simulation case involving a salicylate overdose and subsequent cardiac arrest was specifically designed to assess participating residents in the emergency stabilization (PC1) milestone. The level 3 milestone, evaluates the validity of a DNR order, was identified as difficult to routinely assess in other arenas. During the simulation encounter, the patient develops respiratory failure and decompensates. The residents are presented with a current valid DNR comfort care order; however, the patient's daughter urges the team to intubate the patient stating that the DNR was an error and was meant to only be considered if she was "terminally ill." Residents must then assimilate and interpret the data to determine whether or not to intubate.

Impact/Effectiveness: Targeted simulations can be successfully designed to acquire multiple data points to ensure resident achievement in defined difficult to assess milestones in order to provide more accurate feedback to residents. The level 3 PC1 milestone sub-competency, evaluates the validity of a DNR order, was identified as difficult to routinely assess in the clinical arena. Our case provides education faculty the means to ensure accurate resident achievement of this particular level 3 milestone. Resident feedback regarding this simulation and opportunity for assessment was overwhelmingly positive.

58 Simulation and Standardized Patient Encounters as a Method to Assess Residents in Patient Centered Communication (ICS1) Milestones Routinely Identified as Difficult to Evaluate in the Clinical Setting

King A, Calcara D, Liddil J, Greenberger S, Panchal A, McGrath J, Grenn B, Khandelwal S/Ohio State University, Columbus, OH

Background: The Accreditation Council for Graduate Medical Education (ACGME) defines 23 milestones with associated sub-competencies along a continuum for which residents are evaluated throughout their residency training. The unpredictability of clinical practice results in significant variation in the ability to assess resident achievement of certain sub-competencies and milestones. Simulation is a key component of emergency medicine resident education and should be utilized in resident assessment of milestones which are difficult to routinely evaluate in the clinical setting.

Educational Objectives:

1. Develop unique simulation cases and standardized patient encounters designed to assess participating residents in specific milestone sub-competencies