perform (scored 0 or 1). Intra-class correlation coefficients (ICC) were used to compare Milestone scoring between faculty and to assess correlation between resident self-assessment and faculty scoring. Faculty checklist inter-observer agreement was assessed using kappa statistics. Correlation between Milestone achievement and checklist performance were assessed using Spearman and Pearson correlation coefficients.

Results: The ICCs for inter-rater agreement between faculty for Milestone level were 0.12 and 0.15 for the cardiogenic shock and sepsis cases, respectively. The ICC comparing resident self-assessment with the average of faculty Milestone level scoring for each case was 0.00. The inter-rater agreement on checklist items for the cardiogenic shock and sepsis cases had kappa coefficients of 0.83 and 0.78, respectively. Pearson and Spearman correlation coefficients comparing Milestone scoring and checklist items in the cardiogenic shock case were 0.27 and 0.29; in the sepsis case, 0.085 and -0.021.

Conclusions: When compared to critical action checklists, use of Milestones lacks consistency between faculty raters for simulation-based competency assessment. Resident self-assessment shows no correlation with faculty assessments.

2 Proceedings from the CDEM Consensus Conference on Clinical Assessment of Medical Students in the ED: Introducing the NCAT-EM

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Background: Clinical assessment of medical students in the Emergency Department (ED) is a highly variable process with unique challenges. Currently, clerkship directors use institution-specific tools with unproven validity and reliability. Standardization of assessment practices and development of a common tool would benefit EM educators, students and patients.

Educational Objectives: The objective of the consensus conference was to derive guidelines and a common tool for clinical assessment of students in the ED.

Curricular Design: The conference was held in the CDEM track of the 2016 Council of Residency Directors in Emergency Medicine (CORD) Academic Assembly in Nashville, TN. All stakeholders in the clinical assessment process were invited. A total of 140 participants registered; approximately 60 participated in the first day and 70 in the second day of the conference. Themes underlying assessment, domains to include, and the structure of a national tool were discussed and voted on.These were (1) criterion- vs norm-referenced assessment, (2) learners at different levels, (3) translation of clinical assessment data into other products, (4) implementation and use of a national form, and (5) ensuring post-implementation reliability and validity. The second day of the conference determined consensus on domains of assessment to include on a national assessment form. For all questions not reaching consensus, a modified Delphi process was initiated after the conference to reconcile differences.The first day of the consensus conference was dedicated to developing consensus on high stakes themes. The second day of the conference and subsequent Delphi determined consensus on domains of assessment to include on a national assessment form. Once the domains were finalized, Delphi participants were invited to participate in three conference calls during which wording for the tool was finalized. (Figures 1 and 2).

Impact/Effectiveness: This consensus conference was the first of its kind for CDEM, or any clinical educator group of which we are aware. By standardizing assessment, educators can move toward more valid and reliable practices that facilitate high quality feedback and permit accurate assessment across multiple institutions. Future plans include pilot testing and further refinement of the new tool, research regarding its feasibility, reliability across users and institutions, and validity.

Clerkship Directors in Emergency Medicine National Clinical Assessment Tool

Student Name:	Date:
Assessor Name:	Shift/site:

	Pre-Entrustable	Mostly Entrustable	Fully Entrustable/ Milestone 1	Outstanding/ Milestone 2
Focused history and physical exam skills ☐ Unable to assess	Extraneous or insufficient information. May miss key physical findings or examine incorrectly.	Generally adequate information. Exam mostly adequate and correct. May not differentiate important from extraneous detail.	Appropriate information for clinical context. Exam complete and appropriately tailored. May include excess detail, but thorough and accurate.	Exceptional focused H&P, obtains all relevant information. Addresses chief complaint and urgent issues. Differentiates important from extraneous detail.
Ability to generate a prioritized differential diagnosis ☐ Unable to assess	Limited ability to filter, prioritize, and connect information to generate a basic differential based on clinical data and medical knowledge.	Generally able to filter and connect information to generate a basic differential based on clinical data and medical knowledge. Beginning to incorporate data and prioritize.	Reliably synthesizes data into a complete differential. Incorporates data. Prioritizes differential by likelihood.	Demonstrates exceptional differential diagnosis and data interpretation. Uses all available information to develop a prioritized differential focusing on life-threats.
Ability to formulate plan (diagnostic, therapeutic, disposition) ☐ Unable to assess	Difficulty applying knowledge to formulate plans or does not offer plan.	Usually able to apply knowledge to formulate plans, though plans may be incomplete/incorrect in some details.	Reliably able to apply knowledge to formulate plans that are complete, appropriate, and tailored to patient needs/desires.	Exceptional ability to apply knowledge to formulate outstanding patient-centered plans.
Observation, monitoring and follow-up ☐ Unable to assess	May not re-evaluate patients or follow up results in a timely fashion.	Usually re-evaluates patients and follows up results, though may need prompting. Beginning to integrate new data into ongoing plan.	Reliably re-evaluates patients and follows up results in a timely manner without prompting. Integrates basic data into ongoing plan, though may need help. Completes tasks despite distraction.	Exceptional re-evaluation and follow up skills. Proactive. Integrates complex results into ongoing plan. Able to handle multiple patients simultaneously.
Emergency recognition and management ☐ Unable to assess	May not recognize or respond to abnormal vital signs or patient deterioration. Delays or fails to seek help. Unable to recommend stabilization interventions.	Recognizes and responds to most abnormal vital signs but may miss subtle changes. Promptly seeks help. Recommends and/or initiates some basic stabilization interventions.	Reliably recognizes and responds to all vital sign abnormalities and trends. Promptly seeks help. Recommends and/or initiates all basic and some advanced stabilization interventions.	Exceptionally attentive to vital sign abnormalities and patient deterioration. Promptly seeks help. Recommends and/or initiates basic and advanced interventions appropriately.

	Pre-Entrustable	Mostly Entrustable	Fully Entrustable/ Milestone 1	Outstanding/ Milestone 2
Patient- and team-centered communication ☐ Unable to assess	Communication with patients and/or team is unidirectional or not tailored to circumstances. May not read or respond to others' emotions well. May not always attend to patient comfort or preferences. May not always integrate well into team, may not recognize value of team contributions	Communication with patients and/or team is bidirectional and usually tailored to circumstances. Generally reads and responds to others' emotions well. Usually attentive to patient comfort and preferences. Usually integrates well into team, may not fully understand team roles or contributions	Communication with patients and/or team is bidirectional and reliably tailored to circumstances. Skillful in reading and responding to others' emotions. Reliably sensitive to patient perspective and preferences. Integrates well into team and recognizes value of team members	Demonstrates exceptional communication skills with patients and/or team. Effectively reads and regulates complex emotional situations and conflicts. Always sensitive to patient perspective. Highly regarded by patients and team

Professionalism: Specific Attribute/Behavior	Concerns? Yes	Concerns? No	Please describe specific behaviors observed
Compassion, sensitivity, or respect towards patients			
Respect or collegiality towards team members			
Receptivity to constructive feedback			
Honesty or ethical conduct			
Dependability, accountability, or responsibility			
Initiative, diligence, or work ethic			
Punctuality, attendance, or preparation for duty			
Appropriate dress or grooming			
Other (please describe)			

Global assessment: compared to other students with a similar level of experience, this student's performance today was:

Lower 1/3	Middle 1/3	Top 1/3	Exceptional (top 10%)

Please comment on this student's performance today:

3 ROAR: Resident Ovation and Appreciation Rewards, on the Path to Wellness in Emergency Medicine

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Background: Residency is challenging: physically, emotionally, and mentally. Numerous studies cite burnout rates amongst residents as high as 76%. Research also demonstrates that physicians who are primed to feel emotionally positive are more effective, ultimately providing higher-quality patient care. With this goal in mind, development of a wellness curriculum for residents could potentially mitigate burnout during training, promote practices that build personal and professional resiliency, and lead to a long and fulfilling career.

Educational Objectives: Drawing on research recognizing the benefits of expressing gratitude, we have developed the Resident Ovation and Appreciation Rewards, or "ROAR," pilot program. We devised a system of routine resident recognition by peers, attendings and other ED staff for the, "small but meaningful" things we do every day that often go unrecognized. Our goal was to support the development of a culture of gratitude within our department in our efforts to improve wellness.

Curricular Design: Prior to implementing the ROAR program, we administered an anonymous 5-point survey to our PGY 1-3 EM residents to obtain baseline data on their sense of wellness. We then re-surveyed these same residents at 6-months and 1 year to evaluate the impact of ROAR.

We placed blank ROAR forms throughout our department and also created a web-based version of the form. Completed forms were collated, tabulated and presented to the individual residents each month. For each ROAR written or received, residents earned credits for domestic services, such as meal delivery and home cleaning.

Impact/Effectiveness: The departmental response to ROAR has been tremendous, as approximately 370 ROARs have been written in the first year of the program. Our preliminary survey results, based on two classes of residents, reveal a 9.7% improvement in self-reported overall wellness scores from pre-ROAR to 1-year post-intervention. Surveyed residents also noted an 8.3% increase in the positive effect of ROARs compared to their initial expectations. Based on the preliminary results, we plan to continue this program as well as explore other similar well-being initiatives.

Curricular Innovations Oral Presentations

1 Cricothyrotomy: An Inexpensive Training Model

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Background: Cricothyrotomy is a rarely used procedure that requires operator competence in critical situations. Trainees are rarely exposed to this procedure in the clinical setting, which necessitates simulated practice to prevent a potentially negative impact on patient care. Tightening residency budgets often make the use of expensive, commercially-available models cost-prohibitive. Here, we present a re-usable, inexpensive task trainer to address this gap in medical training.

Educational Objectives:

- To present an inexpensive task trainer for the education and practice of cricothyrotomy
- To compare the effectiveness of teaching with this constructed model against sheep trachea

Curricular Design: Ten task trainers were constructed from a Styrofoam head, ribbed garden hose with a cut hole for the cricothyroid space, electrical tape as the cricothyroid membrane, zip-ties to signify the laryngeal prominence and cricoid cartilage, and foam sheets with Tegaderm to represent the subcutaneous layers (Fig. 1). Twenty second-year medical students were given a 10 minute lecture on the standard, surgical cricothyrotomy and then randomly divided into two groups for practice on either the constructed model or the sheep trachea. After 10-15 minutes of practice, students were given a pristine airway of the same model type and evaluated on their ability to correctly perform a cricothyrotomy using a procedural checklist.