learning scenario designed to teach and assess closed-loop communication when caring for a pulseless patient. All students completed pre- and post-intervention surveys prompting them to define an EPA and report their comfort performing EPA 10 functions.

**Results:** Descriptive statistics were collected for each item. Wilcoxon rank-sum tests were used to test for a significant difference in pre- and post-intervention responses for each item. 147/147 responses were collected (100% response rate). Students reported improvement in comfort in all nine EPA 10 related functions (Figure). Free text comments revealed that learners enjoyed the simulation experience, felt safe in the training environment, and reported increased awareness of their roles and limitations as providers.

**Conclusions:** Novice medical students who completed simulated clinical cases reported increased comfort with functions directly related to entrustment for EPA 10. This training was feasible to implement and well-received by learners.

**Figure.** Bar chart of pre- and post-training responses by item (listed below).

1. As a medical student, I feel comfortable being a first responder in my community.
2. I can be trusted to determine when someone is sick and needs additional medical care immediately.
3. I know how to recognize abnormal vital signs.
4. I know how to apply basic life support principles.
5. I have a strategy for assessing an unconscious patient.
6. I can apply the elements of closed-loop communication as a member of a medical team.
7. I feel comfortable asking for help (calling 911 or activating a rapid response team or a code team) when a patient needs more care than I can offer.
8. When assessing a trauma patient, I know how to complete a primary survey.
9. I can define the components of the AMPLEx history.

**54 TeamSTEPPS in Clinical Simulation Cases**

**Cao K, Lawson L, Brewer K / East Carolina University Brody School of Medicine, Vidant Medical Center, Greenville, NC**

**Background:** Teamwork and communication issues have been described as the most common contributing factor to medical errors and adverse events. Despite this, few medical or nursing schools incorporate formal interprofessional team training into the curriculum. Nursing and Medicine Faculty collaborated to design a Transition to Practice simulation curriculum for senior medical and nursing students focused on interprofessional teamwork and communication skills using a modified TeamSTEPPS program.

**Objectives:** This study attempted to determine if there was an improvement in self-assessment and trained expert assessment of students’ teamwork behavior from pre and post TeamSTEPPS clinical simulation cases.

**Methods:** Medical and nursing students in Pre and Post intervention groups were compared, but all students received the identical educational intervention on the day between simulated cases. Using the first group of students was used as the control group prior to the educational intervention. Using a validated TeamSTEPPS teamwork assessment, teamwork skills were assessed by students and trained faculty. Statistics used Chi Square Analysis with significance defined as p<0.05.

**Results:** 76 medical students participated in the study. Trained faculty assessment demonstrated significant improvement in the teamwork subscales of mutual support (p=0.009) and communication (p=0.021). When comparing post test of students vs faculty assessment, faculty saw significant improvement in communication (p=0.05).

**Conclusions:** TeamSTEPPS training significantly improved faculty assessment of teamwork skills in the communication and mutual support subscales that could be useful to improve teamwork and patient care. However, students in the post educational intervention group did not demonstrate higher self-assessment scores compared to the pre-intervention group. Limitations include multiple faculty assessors and unbalanced student teams that may skew assessment.

**55 The CORD-EM Speaker Evaluation Form**

**Phillips A, Diller D, Williams S, Park Y, Fisher J, Biese K, Ufberg J / Stanford University, Stanford, CA; Oregon Health Sciences University, Portland, OR; University of Illinois at Chicago, Chicago, IL; Maricopa Medical Center, Phoenix, AZ; University of North Carolina, Chapel Hill, NC; Temple University, Philadelphia, PA**

**Background:** No formal, validated speaker evaluation form currently exists to help conference planners make future decisions on speakers.

**Objectives:** Create a concise, effective evaluation form to be filled out by audience members to aid conference planners.
Methods: We evaluated two forms, 1) a gold standard, 8 question evaluation form used to rate speakers in classroom and competition settings (the “Competent Speaker” evaluation form), and 2) the CORD-EM form, a novel, 3 question speaker evaluation form created for the CORD-EM 2015 national conference. The Competent Speaker form was analyzed with two evaluators; the CORD-EM form was analyzed with three evaluators but randomized to select only 2 evaluators’ ratings to make results more generalizable to a generic audience evaluating the speaker.

Results: The Competent Speaker Form with 22 total evaluations was only moderately internally consistent (Cronbach’s alpha .509) and had poor inter-rater reliability (intra-class correlation, ICC, .540), despite 1.5 hours of evaluator training. In contrast, the 46 total evaluations of the CORD-EM form found the novel form to have exceptional internal reliability (Cronbach’s alpha .923) with an acceptable inter-rater reliability (ICC .617). Validity evidence was strong for both forms.

Conclusions: The CORD-EM speaker evaluation form is the first form with strong reliability and validity evidence to our knowledge specifically designed to help conference planners. Future research will examine if its exceptionally short length improves audience response rates for speaker evaluations.

The Impact of an Emergency Department-Based Critical Care Unit on the Procedural Training Experience for Residents

Stull M, Hopson L, Bassin B, Heidemann L, Hartley S, Tochman S, Gunnerson K / University of Michigan Medical School, Ann Arbor, MI

Background: Clinical innovation can enhance operational metrics and patient outcomes; however, impacts on education are often not assessed. A new Emergency Critical Care Center (EC3) opened in a large University ED with a goal to provide seamless transition of care for critically ill patients from the ED to ICU.

Objectives: We aimed to quantify the changes in educational experience for EM and Internal Medicine (IM) trainees as a result so future iterations at other institutions could consider effects on the educational milieu.

Methods: A retrospective review of critical care procedures performed prior to and after the implementation of the EC3 at a single institution. Data was collected from procedure notes and billing records of the ED including EC3 and Medical ICU (MICU). Data from the first quarter of the year prior to the implementation was compared to the same quarter after the EC3 opened. In addition, EM and IM trainees were anonymously surveyed about their perceptions of the unit’s effects on their training environment.

Results: Senior EM trainees (63% response rate) reported increased (50%) or unchanged (40%) comfort in caring for critically ill patients; However, IM trainees (79.1% response rate) felt it had a negative impact on their comfort level (64%). Comments revealed significant anxiety among both groups of trainees on the unit’s potential impact on their learning environment. Procedural experiences are summarized in Table 1 with Intubations, Non-Invasive Positive Pressure Ventilation (NIPPV), and Central Venous Lines (CVL) performed in the ED showing substantial increases after opening of EC3. MICU procedures showed decreases in endotracheal intubations (-21.7%) and arterial lines (-15.9%) while CVLs remained stable.

Conclusions: Implementation of the EC3 results in significant trainee anxiety about its effect on learning despite overall favorable impressions from EM trainees. EM trainees are exposed to more invasive procedures; whereas IM trainees in the MICU may experience small but significant decreases in procedural opportunities. Institutions considering an ED-ICU should carefully plan for potential changes in the educational environment including procedural training for all trainees. Further work will delineate changes in case mix and management opportunities for learners.

Table. Critical care procedures for quarter 1 of 2014 (pre-EC3) and 2015 (post-EC3) for both ED and Medical ICU.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>2014 Q1 ED (pre)</th>
<th>2015 Q1 ED (post)</th>
<th>ED Change (NChange)</th>
<th>2014 Q1 ICU (Pre)</th>
<th>2015 Q1 ICU (Post)</th>
<th>ICU Change (NChange)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intubation</td>
<td>71</td>
<td>101</td>
<td>30 (42.3%)</td>
<td>23</td>
<td>18</td>
<td>-5 (21.7%)</td>
</tr>
<tr>
<td>NIPPV</td>
<td>31</td>
<td>47</td>
<td>16 (51.6%)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Arterial lines</td>
<td>31</td>
<td>47</td>
<td>16 (51.6%)</td>
<td>69</td>
<td>58</td>
<td>-11 (-15.9%)</td>
</tr>
<tr>
<td>CVL</td>
<td>16</td>
<td>25</td>
<td>9 (56.3%)</td>
<td>50</td>
<td>51</td>
<td>1 (2.0%)</td>
</tr>
<tr>
<td>Paracentesis</td>
<td>57</td>
<td>51</td>
<td>-6 (-10.5%)</td>
<td>10</td>
<td>9</td>
<td>-1 (-10%)</td>
</tr>
<tr>
<td>Pericardiocentesis</td>
<td>1</td>
<td>0</td>
<td>-1 (-100%)</td>
<td>0</td>
<td>0</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Thoracentesis</td>
<td>7</td>
<td>9</td>
<td>2 (28.6%)</td>
<td>8</td>
<td>3</td>
<td>-5 (-62.5%)</td>
</tr>
</tbody>
</table>

Trends in NRMP Data from 2007-2014 for US Seniors Matching into Emergency Medicine

Gunalda J, Hartman N, Newmyer A, Lefebvre C, Hiestand B, Askew K, Manthey D / Wake Forest Baptist Medical Center, Winston-Salem, NC

Background: Since 1978, the NRMP has published data demonstrating characteristics of applicants that have matched into their preferred specialty in the NRMP main residency match. There is limited information about trends within this published data for those students matching into emergency medicine (EM).

Objectives: To investigate and describe trends in USMLE Step 1 and Step 2 scores (compared to the national means), number of contiguous programs ranked and AOA membership