

later. We believe this simulation can provide lasting working knowledge and comfort with mass casualty triage and can be easily reproduced on a regular basis, making it a useful addition to an emergency residency mass casualty curriculum.



Figure 2.

#### 4 Skill Retention After Completion of a Proficiency-Based Curriculum to Teach Cricothyroidotomy

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**Background:** When designing a curriculum for teaching procedures in an emergency medicine (EM) residency, it is important to provide adequate learning opportunities for residents to become proficient in highly important but rarely performed procedures. Prior methods using a proficiency-based training (PBT) curriculum have evaluated knowledge retention of surgical skills among medical students and surgical residents. Determination of the optimal interval for retraining of rarely performed skills among EM residents is not clearly defined.

**Educational Objectives:** This project is designed to use a PBT curriculum to teach cricothyroidotomy. Further, it is designed to determine the time interval that competence in this procedural skill is retained after a single PBT session. This method of teaching was chosen as it has previously been demonstrated to be effective in teaching and retention of more common skills, and is easily replicated in most EM training programs.

**Curricular Design:** Residents were asked to perform a cricothyroidotomy on a model. Each participant then underwent a teaching session in which he/she watched a video of a cricothyroidotomy and the proctor performed the

procedure on a model explaining each of 12 critical actions. The resident performed the procedure in front of the proctor with direct feedback provided. The resident was asked to practice the procedure until he/she performed two procedures in a row fulfilling all critical actions. He/she then performed the procedure in front of the proctor who decided if all critical actions were met and completed in less than 45 seconds. If the participant did not, he/she was allowed to practice and retest until all actions were completed in less than 45 seconds.

**Impact/Effectiveness:** This project contributes to the advancement of knowledge in effective curricular design for procedural education in EM residencies. Each participant's confidence level, number of critical actions completed and time to completion was recorded prior to the teaching session. Half the participants retested at 6 months and half will retest at 12 months. Among the 6 month participants, the confidence level increased from an average of 3.7 to 5.7/10. The average number of critical actions performed increased from 7.7 to 8.6/12. After a single demonstration of the correct procedure and one chance to retest, the number of critical actions performed increased to 11.5/12.

#### Lightning Oral Presentations

#### 1 Do Emergency Medicine Residency Graduates Feel Prepared To Manage Closed Fractures After Training?

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**Background:** Fractures comprise 3% of all Emergency Department visits. Although Emergency Physicians may be responsible for managing most of the initial care of these patients, many report lack of proficiency and comfort with these skills.

**Objectives:** Our primary outcome was to assess how prepared recent EM residency graduates felt managing closed fractures. Secondary objectives identified whether residency training or independent practice contributed most to the current level of comfort with these procedures, and which fractures were most commonly reduced without orthopedic consultation.