**Conclusions:** We developed a hybrid obese cricothyrotomy task trainer. This is a unique and valuable task trainer as the need to be facile with this procedure in this population is paramount. In future iterations, modification of the thickness of the subcutaneous layer can vary the difficulty of the task trainer highlighting its potential for health professional education.

## 17 Do Attending EPs Change Their Head CT Ordering Practices After Reviewing Their Head CT Utilization Data?

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**Background:** CMS proposed OP-15 as an efficiency measure of whether head CT (HCT) scans ordered in the ED were indicated . We instituted a modified OP-15 as a quality assurance (QA) effort.

**Objectives:** Did HCT ordering decrease after Emergency Physicians (EPs) reviewed data on their imaging practice, and was any observed change correlated with a change in the rate of missed diagnosis or death?

**Methods:** This was an observational retrospective study conducted at a tertiary referral center comparing attending EP's rates of HCT during pre-intervention (PI) (April-Aug 2012), post-education (PE) (Dec 2013-March 2014), and post-review periods (PR) (April -Aug 2014). For each phase of the study we collected the most recent ten headache visits seen by each EP. In April 2013 we educated EP's on appropriate HCT ordering through a series of lectures, discussions and emails. Over Jan-Feb 2014 all EPs individually reviewed their HCT ordering metrics during annual performance reviews. In the summer of 2016 we queried the EMR for all patients sampled during the QA effort and reviewed all notes from ED, Primary Care, Neurology, Neurosurgery, and Radiology for the 21.5 month periods following each index ED visit to determine whether: significant intracranial conditions not known during the initial visit were later diagnosed or if death from any cause occurred. We excluded transfer patients and those with a history of ventriculoperitoneal shunt.

**Results:** We reviewed a total of 598 medical records and observed a head CT rate of 36% in both the PI and PE periods vs 26% in the PR period ($p = 0.036$). We observed a total of 12 deaths (3 in PI, 5 in PE, and 4 in PR) and 29 intracranial conditions diagnosed after the index ED visit. An attending EP reviewed each of these charts and found that only six of the subsequently diagnosed intracranial conditions may have been diagnosable at the index visit (2 in PI, 3 in PE and 1 in PR). No deaths appeared related to missed diagnoses. There were no statistically significant differences in death or missed diagnosis between periods.

**Conclusions:** We did not observe a difference in physician head CT ordering practices after educational intervention, but after all physicians reviewed their individual performance data we observed a decrease in head CT utilization of 10%. This was not associated with a change in rate of missed diagnosis or death.

**Table 1.** Outcome rates by epoch.

| Epoch (number of patients) | Pre-intervention (183) | Post-education (215) | Post-review (200) |
|---|---|---|---|
| CT ordering rate percentage | 36% | 36% | 26% |
| Death after ED visit (%) | 3 (1.6%) | 5 (2.3%) | 4 (2.0%) |
| Missed diagnosis (%) | 2 (1.1%) | 3 (1.4%) | 1 (<0.5%) |

## 18 Does USMLE Step 1 & 2 Scores Predict Success On ITE and ABEM Qualifying Exam - A Review of an Emergency Medicine Residency Program from its Inception.

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**Background:** Over the years, Emergency Medicine has become a very competitive specialty with regards to the match process. This has lead to program directors viewing more and more applications for the same limited residency positions. Given this daunting task of reviewing hundreds of applicants in order to select only the best fit for the program, many in residency administration have used applicant's standardized scores as a screening process to choose which applicants they will interview. The belief is that if an applicant is successful on these standardized exams they should be successful on exams during their residency (Inservice Training Exam), as well as their post-graduate exams (ABEM Qualifying exam). Minimal literature has suggested only mild to moderate correlation1.

**Objectives:** Our goal was to see if this accepted preconceived notion was based in any truth. We attempted to do this by looking at USMLE scores, ITE scores and success on ABEM Qualifying Exam in an Emergency Medicine Residency over a 20 year span of time. The qualifying examination is a criterion-referenced examination. Therefore, anyone scoring 75 or higher passes the examination. This score was determined by ABEM by looking at the relationship between the ABEM ITE scores from the final year of residency and the ABEM Qualifying examination performance2.

**Methods:** We collected scores of USMLE Step1 & 2, ITE score from the PGY -3 yr and whether or not the resident successfully passed the ABEM Certification Exam on the 1st attempt from our archives of all residents who have graduated from our three year EM residency over the last 20 years. We compared the mean scores of each of the groups based on whether or not they passed the ABEM Qualifying exam, as well as whether or not they scored above a 75 on their graduating year ITE. We compared the two groups using the t-test to asses for significance