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23 Effect of a Pediatric Critical Care Bootcamp on the Knowledge and Confidence of Emergency Medicine Interns

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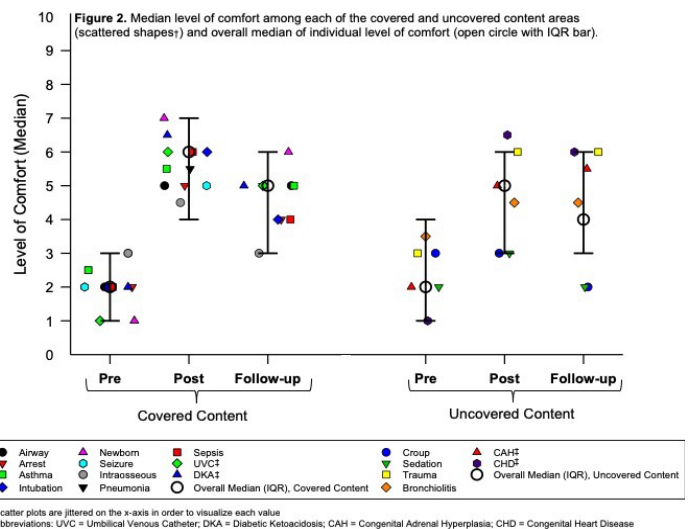
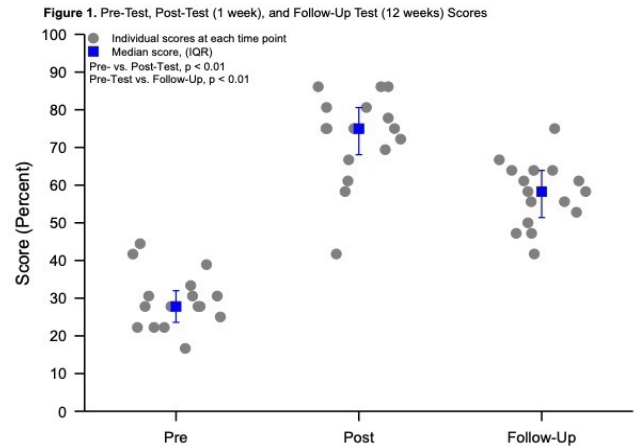
Background: Emergency medicine (EM) residents may not receive adequate pediatric training, particularly in the care of critically ill children. EM residency programs must develop novel and efficient educational tools to provide residents competence and confidence in the care of critically ill pediatric patients.

Objectives: We hypothesized that following completion of a single-day, intensive pediatric critical care bootcamp, EM interns would demonstrate improved knowledge and increased confidence in caring for critically ill children.

Methods: This was a prospective pre-test/post-test cohort study. We sent a survey to senior EM residents and recent graduates to identify areas of educational need; the most-requested topics were respiratory equipment, newborn resuscitation, cardiac arrest, sepsis, diabetic ketoacidosis, status asthmaticus and status epilepticus. A multidisciplinary group designed a simulation-based curriculum. The bootcamp was five hours long: a 30-minute lecture on neonatal resuscitation; three neonatal resuscitation simulation stations; five high-fidelity simulations covering the identified topics above; and an airway station. A test of 23 fill-in-the-blank questions and 17 questions on confidence of caring for critically ill children (scale 1-10), including both content covered and not covered in the bootcamp, was given prior to the bootcamp (pre-test), one week after (post-test), and 12 weeks after (follow-up test).

Results: Sixteen of 17 interns were included in the study, and all 16 completed the three tests. Post-test median scores showed significant improvement from pre-test medians (27.8 [interquartile range (IQR) 23.6-32.0] vs 75.0 [IQR 68.1-80.6], $p < 0.01$) and follow-up median scores remained significantly different from pre-test scores (58.3 [IQR 51.4-63.9], $p < 0.01$). There was a significant increase in the comfort levels associated with caring for critically ill pediatric patients, both for topics covered in the bootcamp, as well as for topics that were not covered (Figure 2).

Conclusion: We saw significant improvements in both the knowledge and confidence of EM interns in the care of critically ill pediatric patients following a single-day intensive curriculum. These gains persisted through the follow-up test, suggesting retention. Interestingly, confidence levels increased even for topics not covered in the curriculum.



† Scatter plots are jittered on the x-axis in order to visualize each value
‡ Abbreviations: UVC = Umbilical Venous Catheter; DKA = Diabetic Ketoacidosis; CAH = Congenital Adrenal Hyperplasia; CHD = Congenital Heart Disease

24 Implementation of an Educational Dashboard with a Financial Incentive Improves Faculty Participation in Residency Evaluations

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Background: The ACGME requires all emergency medicine (EM) training programs to evaluate resident performance and also requires core faculty to attend didactic conference. Assuring faculty participation in these activities can be challenging. Previously, our institution had neither a formal tracking program nor a financial incentive for faculty participation in these activities. In 2018 we initiated an Educational Dashboard, which tracked and published all full-time university faculty conference attendance and participation