

# Pediatric Emergency Medicine Physicians Are at Risk for Deterioration of Procedural Skills

*Over a 1-year period, 61% of PEM faculty at a tertiary care pediatric emergency department did not perform any critical procedure.*

Investigators retrospectively quantified the number of critical procedures performed by pediatric emergency medicine (PEM) faculty and fellows on children presenting to a tertiary care pediatric emergency department (ED) with approximately 90,000 annual visits.

Over a 1-year period, 261 critical procedures were performed on 194 children (0.2% of visits). These were orotracheal intubation (147), intraosseous line placement (41), pharmacologic cardioversion (23), tube thoracostomy (18), central venous line placement (15), needle thoracostomy (9), electrocardioversion (6), defibrillation (1), and pericardiocentesis (1).

Of 41 PEM faculty, 61% did not perform any critical procedure, while 98% supervised at least one; 63% did not perform a single orotracheal intubation, while 88% supervised one. Ten PEM fellows performed 42 critical procedures, with 40% of fellows performing one or no orotracheal intubations. No fellow performed a central venous line placement, needle thoracostomy, or pericardiocentesis. Only half the fellows performed an intraosseous line placement, and just 30% performed a tube thoracostomy. Non-emergency medicine specialists performed 27% of procedures, including 73% of central venous line placements, 50% of tube thoracostomies, and 29% of intubations.

**Comment:** It is time for a careful analysis of how to achieve and maintain competence in critical pediatric procedures. Options include simulation and real-time experience in non-ED settings, such as the operating room or intensive care unit. Pediatric emergency medicine specialists must be able to perform all necessary procedures, and training programs must ensure that training opportunities are not lost to trainees in other specialties, especially those who are not required to master the procedures for their own future practice. It is our responsibility to assure and maintain competency, and with that responsibility comes needed accountability.

— [Katherine Bakes, MD](#)

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