



To describe the current approach to initial training, ongoing skill maintenance, and assessment of competence in central venous catheter placement by pediatric critical care medicine fellows, a subset of trainees in whom this skill is required” Boyer et al (2019).

Abstract:

OBJECTIVES: To describe the current approach to initial training, ongoing skill maintenance, and assessment of competence in central venous catheter placement by pediatric critical care medicine fellows, a subset of trainees in whom this skill is required.

DESIGN: Cross-sectional internet-based survey with deliberate sampling.

SETTING: United States pediatric critical care medicine fellowship programs.

SUBJECTS: Pediatric critical care medicine program directors of Accreditation Council for Graduate Medical Education-accredited fellowship programs.

INTERVENTIONS: None.

MEASUREMENTS AND MAIN RESULTS: A working group of the Education in Pediatric Intensive Care Investigators research collaborative conducted a national study to assess the degree of standardization of training and competence assessment of central venous catheter

placement across pediatric critical care medicine fellowship programs. After piloting, the survey was sent to all program directors (n = 67) of Accreditation Council for Graduate Medical Education-accredited pediatric critical care medicine programs between July 2017 and September 2017. The response rate was 85% (57/67). Although 98% of programs provide formalized central venous catheter placement training for first-year fellows, only 42% of programs provide ongoing maintenance training as part of fellowship. Over half (55%) of programs use a global assessment tool and 33% use a checklist-based tool when evaluating fellow central venous catheter placement competence under direct supervision. Only two programs (4%) currently use an assessment tool previously published and validated by the Education in Pediatric Intensive Care group. A majority (82%) of responding program directors believe that a standardized approach to assessment of central venous catheter competency across programs is important.

CONCLUSIONS: Despite national mandates for skill competence by many accrediting bodies, no standardized system currently exists across programs for assessing central venous catheter placement. Most pediatric critical care medicine programs use a global assessment and decisions around the ability of a fellow to place a central venous catheter under indirect supervision are largely based upon subjective assessment of performance. Further investigation is needed to determine if this finding is consistent in other specialties/subspecialties, if utilization of standardized assessment methods can improve program directors' abilities to ensure trainee competence in central venous catheter insertion in the setting of variable training approaches, and if these findings are consistent with other procedures across critical care medicine training programs, adult and pediatric.

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Reference:

Boyer, D.L., Zurca, A.D., Mason, K., Mink, R., Petrillo, T., Schuette, J., Tcharmtchi, M.H., Winkler, M., Fleming, G.M. and Turner, D.A. (2019) Assessing Competence in Central Venous Catheter Placement by Pediatric Critical Care Fellows: A National Survey Study. *Critical Care Medicine*. May 24th. doi: 10.1097/CCM.0000000000003821. .

