

Ready or Not, Here They Come: Internal Medicine Interns' Experience and Perceived Competency in Critical Care

Purpose: Critical care rotations are core training requirements during Internal Medicine (IM) residency. Prior Delphi consensus has described the level of competency in core critical care topics expected of interns on the first day of residency. However, as critical care rotations are not required within most medical schools, whether interns possess these desired knowledge competencies is unknown.

Objectives & Methods: We sought to assess incoming IM interns' critical care experience and perceived level of competency in twenty highly recommended critical care topics. During the first week of orientation, interns completed self-assessment surveys to rate their competency in each content area on a four-point Likert scale (1 = I have no prior exposure nor experience, 2 = I have some prior practice and exposure but have not managed under supervision, 3 = I can manage under supervision, 4 = I can manage independently). Mean competency assessment scores were compared between interns with, and without, prior critical care experience using a paired t-test.

Results: Fifty-two interns (70%) completed the survey, representing 32 different medical schools. Forty (77%) incoming interns completed a critical care rotation during medical school. Only 18 (35%) interns were required to complete a critical care rotation during medical school. Thirty-six (69%) interns completed more than three weeks of a critical care rotation prior to residency. Overall, mean self-assessed competency scores were below the Delphi-consensus recommendation in 12 of 20 recommended topics. Mean self-assessed competency scores were below consensus recommendation in 18 of 20 recommended topics for interns without prior critical care experience. Compared to interns with prior critical care experience, interns without prior critical care experience reported significantly lower competency levels in 7 of 20 recommended topics, including: acute respiratory distress syndrome, mechanical ventilation, respiratory failure, hemorrhagic shock, and invasive monitoring (Table, $p < 0.05$ for all topics).

Conclusions: IM interns are entering residency with perceived competency levels below consensus recommendation in a majority of highly recommended critical care topics. This self-assessed competency gap is greatest amongst interns without prior critical care experience. Although it is unknown whether self-assessed competency correlates with objective performance during a critical care rotation, there is an apparent need for more critical care education in this cohort. A just-in-time curriculum delivered prior to a critical care rotation could bridge this gap.