Ready Or Not, Here They Come: Internal Medicine Interns' Experience And Perceived Competency In Critical Care

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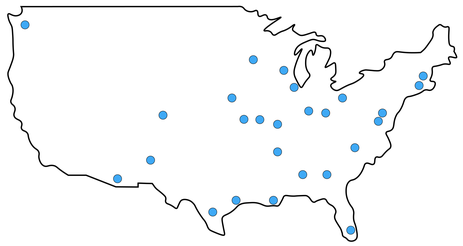
Background

- As a core entrustable professional activity, graduating medical students should recognize patients requiring urgent or emergent care and initiate evaluation and management.
- Although the Intensive Care Unit (ICU) is a rich environment to develop these skills, only 1/3 of medical schools require an ICU rotation. Therefore, many interns begin residency training without prior critical care experience.
- Core critical care content within undergraduate education exists, but whether interns starting residency are confident in these areas is unknown.

Objectives

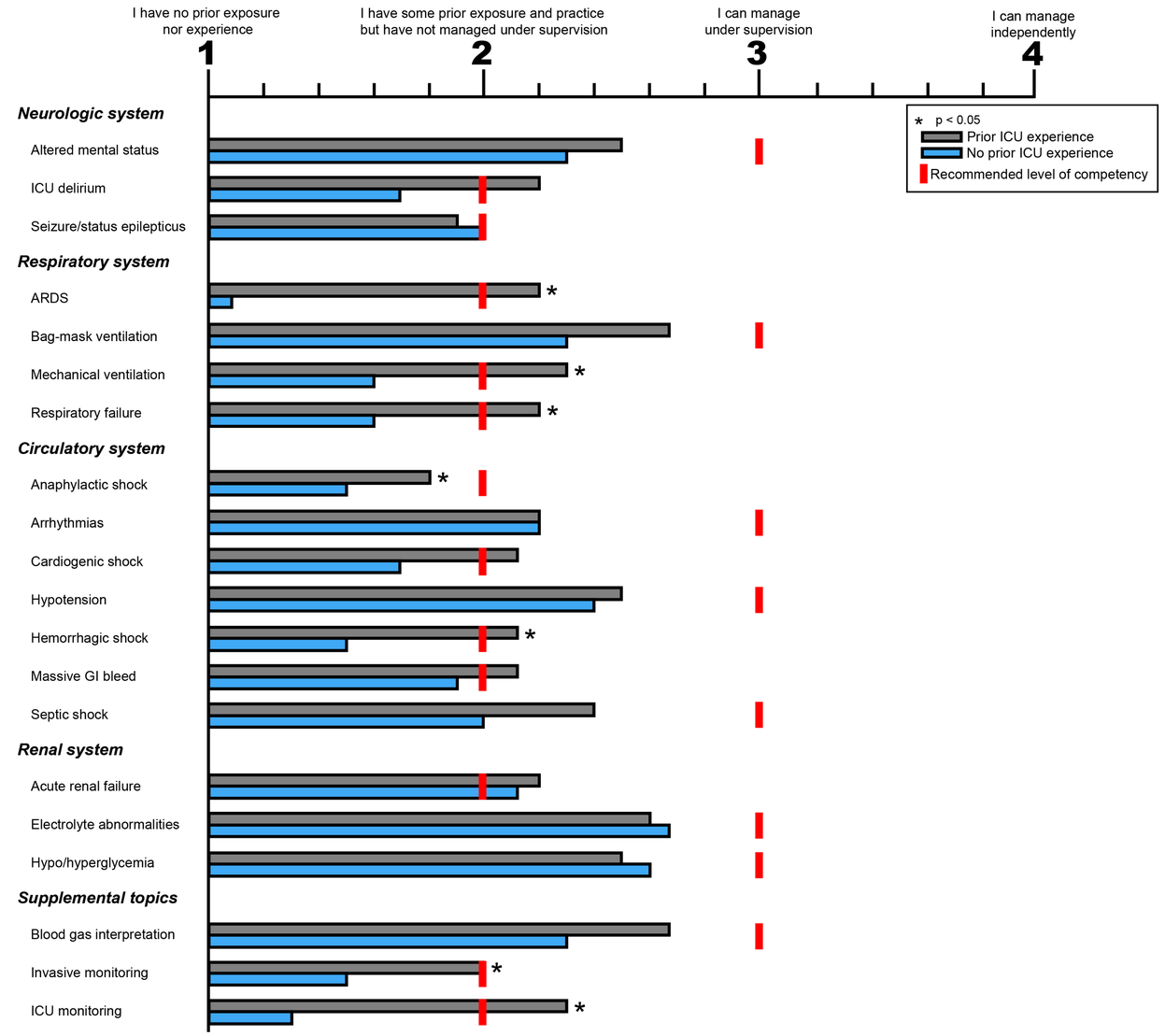
- To determine the perceived level of competency in core critical care content amongst incoming Internal Medicine (IM) interns.
- To examine the relationship between prior critical care experience and perceived level of competency in core critical care content.

Results



- 52 IM interns (70%) completed the survey
- Interns represented 32 different medical schools
- 40/52 (77%) completed an ICU rotation
- 18/52 (35%) were required to complete an ICU rotation

Table: Mean Self-Assessed Competency Scores in Recommended Critical Care Topics (N = 52)



Competency assessed on four-point Likert scale (responses listed at top of table). Grey and blue bars represent mean values. Red bars represent Delphi consensus-recommened level of competency for each critical care topic[1].

[1] Smith AG, Brainard JC, Campbell KA. Development of an Undergraduate Medical Education Critical Care Content Outline Utilizing the Delphi Method. Crit Care Med. 2020 Jan;48(1):98-103

Conclusions

- IM interns are entering residency with perceived competency levels below consensus recommendation.
- Interns without prior critical care experience have self-assessed competency scores below consensus recommendations in 18/20 topics.
- Compared to interns with prior critical care experience, interns without prior experience reported significantly lower competency levels in the following topics:
  - Acute respiratory distress syndrome
  - Mechanical ventilation
  - Respiratory failure
  - Anaphylactic shock
  - Hemorrhagic shock
  - Invasive monitoring
  - ICU monitoring

Future Directions

- As learners who complete critical care rotations during medical school have higher perceived competency in core content, these learning experiences should be expanded.
- Alternatively, design and implementation of "just-in-time" digital learning resources could bridge identified knowledge gaps.
- Objective competency assessment is needed to further understand these findings.