

Examination of Entering Residents' Self-Reported Confidence and Supervision Needs Performing AAMC Entrustable Professional Activities

Background: The transition into graduate medical education training is widely recognized as 1 of the most stressful times for physicians. A potential contributor toward resident stress may be related to their real and perceived abilities performing clinical duties. In 2014, the Association of American Medical Colleges (AAMC) published a document titled *Core Entrustable Professional Activities for Entering Residency*. This list of entrustable professional activities (EPAs) addresses what residents should be able to clinically perform independently at the start of residency training. To date, there is limited published information on the examination of EPAs as a tool to help determine resident readiness for training.

Objective: We sought to evaluate entering first-year residents' self-reported confidence and supervision needs performing the 13 Core EPAs for Entering Residency.

Methods: This study was conducted using residents from training hospitals within a Midwest medical education consortium. During 2 academic years, we surveyed interns in 7 residency programs at the start of residency training (ie, 2015–2016 and 2017–2018). Study outcomes were based on the construct *confident* or *not confident* and supervision needed *yes* or *no* based on collapsed 5-point Likert type scales. Data were presented with descriptive statistics along with Spearman rank correlations and simple logistic regression. This study received Institutional Review Board approval.

Results: All 92 (100%) entering first-year residents in both study years completed the confidence component of the survey. The 46 (100%) interns in 2017–

2018 also completed the supervision questions on the survey. Gender was equally balanced across respondents and they represented the following programs: family medicine ($n = 28$), internal medicine ($n = 24$), transitional year ($n = 16$), pediatrics ($n = 14$), and general surgery ($n = 10$). The most common activities residents reported confidence for were “performing history and physical examination” and “collaborating on interprofessional team,” representing 96% and 83%, respectively. Few residents reported confidence in “enter/discuss orders and prescriptions,” “performing general procedures,” “give/receive patient handovers,” and “identifying system failures and contribute to safety improvement,” representing 16%, 27%, 32%, and 42%, respectively. Reported resident need for supervision performing EPAs was highly correlated with their reported confidence levels. The 2 activities most commonly reported as not needing supervision were “performing history and physical examination” and “collaborating on interprofessional team,” representing 72% and 59%, respectively. Residents confident in the latter activity had a 33 (95% CI 1.4–758.0) times greater odds of reporting no need for supervision in performing the activity. Essentially no residents reported being able to “recognize urgent/emergent care and initiate evaluation/management” and “enter/discuss orders and prescription” or “performing general procedures” without supervision.

Conclusions: It is important for residency programs to understand entering residents' level of confidence performing EPAs, and to provide assistance and supervision to those who do not feel confident. Recognizing potential concerns related to low confidence or a perceived need for increased supervision may help reduce anxiety and improve resident well-being.

Hayden L. Smith, PhD

Medical Researcher, UnityPoint Health

Steven R. Craig, MD

Director, Transitional Year Residency Program, UnityPoint Health

William J. Yost, MD

Vice President of Medical Education, UnityPoint Health