Crossing the Entrustment Chasm: Do We Trust Graduating Fellows to Practice without Supervision?

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The regulation of medical education began in earnest in the post–World War II era (1). Professional organizations identified a need to move beyond a presumption of competence at the end of a prespecified time in training. Stewards of medical education have since rapidly and broadly adopted competency-based evaluation methods (2, 3). Early iterations of competency-based evaluation were criticized as distilling the art of medicine into checklists. Such observations were adjudged inadequate to conclude whether a practitioner demonstrated the ability to perform the complex and diverse skills required for practice in each field (4–6). Entrustable Professional Activities (EPAs) subsequently emerged as a tool to fill this gap by describing how various competencies coalesce into effective and independent performance of a given activity (7).

EPAs were developed for general pediatrics and each subspecialty (8). An EPA score of 4 indicates the subject is "trusted to execute [the task] with indirect supervision but may require discussion of information for a few

complex cases," whereas an EPA of 5 indicates the practitioner is "trusted to execute without supervision." Program directors (PDs) have been invited to pilot these EPAs, but they are not mandatory and there is no minimum standard for graduation eligibility. In this issue of ATS Scholar, Weiss and colleagues explore the potential gap between the minimum level of supervision PDs require to graduate their fellows and the minimum level of entrustment they expect of attending physicians (9). This potential gap, whether crevice or chasm, could expose a weakness in the transition from a supervised, coaching-based environment into independent practice. As part of a larger study of pediatric

As part of a larger study of pediatric subspecialties, the authors posed three questions to pediatric pulmonology PDs for each of five subspecialty EPAs: 1) what is the minimum level of performance you feel is necessary to graduate, 2) if a fellow did not reach that level, would you still allow them to graduate, and 3) what is the minimum level of performance you would

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ATS Scholar Vol 2, Iss 3, pp 289–292, 2021 Copyright © 2021 by the American Thoracic Society DOI: 10.34197/ats-scholar.2021-0099ED expect of a practicing subspecialist for a "safe and effective outcome?" The authors went on to calculate a minimum tolerable level to graduate using the combined input from questions 1 and 2. For the subset of PDs who indicated in question 2 they were willing to graduate a fellow who did not reach their expectation established in question 1, the authors calculated a presumed minimum threshold as one level lower than the response to question 1. Taken together, the authors established the overall minimum standard for each EPA as the level of supervision at which no more than 20% of PDs would accept a lower standard.

Forty-six of the 54 pediatric pulmonology PDs in the United States completed the instrument. Participants received the survey up to five times via the automated system in addition to as many as three personal reminders from study staff. Participating PDs had a median of 5 years of directorship experience and 96% had at least a basic understanding of the EPAs when completing the survey. These two factors were ultimately not associated with perceptions of minimum levels of supervision.

Most respondents selected a level below 5 for the minimum expected performance on all EPAs. The lowest bar was set for "Communicate a New Diagnosis," where 46% of PDs would permit graduation of trainees performing at level 3 (indirect supervision required for both simple and complex cases) or below. Using the methodology described above to infer a minimum tolerable threshold for graduation, the median minimum level for graduation was 3 for all EPAs. When PDs were asked to describe their expectations for entrustment of practicing subspecialists, their median minimum standard was 4 for all EPAs other than "Perform Procedures"

where the expectation was level 5. The gap between the minimum tolerable performance for graduates and that expected of practicing subspecialists was statistically significant.

The authors conclude that most pediatric pulmonology PDs did not expect graduating fellows to be capable of safe and effective unsupervised practice, an observation that is seemingly at odds with the expectations of national stakeholder organizations. The high response rate suggests these results are representative of the perceptions of the broader pediatric pulmonology PD community, though one might speculate whether the sheer volume of reminders (as many as eight individual contacts) may have influenced responses. Nonetheless, the findings here are consistent with similar residency and fellowship studies (10, 11). The methodology used to calculate an individual PD's minimum tolerable standard for graduation (preferred level minus one for a subset of respondents) is inherently speculative. Perhaps such PDs would be willing to graduate fellows two or more levels below their "preferred" benchmark. However, this critique would only increase the magnitude of the gap between what PDs would tolerate and what they expect of practicing subspecialists.

These findings may represent flaws in how the EPAs are written and used. EPAs require a faculty member to make judgments rather than observations. In a medical culture whose pendulum is swinging toward oversupervision, it would be hard to judge what a trainee can do if they never have the opportunity to prove it. The authors also rightly point out that supervision is a subjective term; does supervision connote simple oversight and availability of mentors or a more formal and intensive process of observation,

feedback, and coaching? A more troubling interpretation is that we may be operating under an outdated notion that the end of training should imply readiness for completely unsupervised practice.

Perhaps we can no longer expect newly practicing physicians to function without any degree of supervision. Conversations about trainee competence are inevitably intertwined with the debate over duty hours. In seeking a "safe and effective outcome" for patients, we must grapple with the complex balance between our trainees' well-being and their volume of experiential learning. In 2016, three decades after the death of Libby Zion sparked a national examination of training physician duty hours, the Flexibility in Duty Hour Requirements for Surgical Trainees (FIRST) trial randomized 118 surgical programs into flexible versus standard (restricted) duty hours (12). The results, with flexible hours demonstrating noninferiority in patient outcomes and no significant difference in resident satisfaction, have sparked no small amount of controversy. There is no clear threshold of clinical duty hours that guarantees competence, but restricting hours without extending the overall period in training has a direct impact on total clinical volume. The

standard-duty-hours residents in FIRST saw 10% fewer patients than those in the flexible-hours programs. Should residents work more net hours? Should training be extended to compensate for restricted weekly hours? If true independence at graduation is the proper aim, we must question whether the current volume of patient care experience is adequate to reach this goal in 3 years or less.

Moreover, if a new subspecialist cannot be trusted to practice without supervision, we should critically examine whether newly minted subspecialists should act as supervisors themselves. PDs are responsible for evaluating and approving prospective faculty members for participation in residency and fellowship education. It would behoove department and division leadership to partner with PDs and faculty development leaders to create a formalized onboarding program that includes peer observation and mentorship. We stakeholders must develop and implement strategies to close the gap between tolerable performance of graduating trainees and expectations for safe and effective independent practice.

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