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Letter to Editor (Pages: 727-729)

Entrustable Professional Activities (EPAs): A Novel Framework in Medical Education

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Dear Editor-in-chief

The goal of medical training is to ensure that the physicians, residents, and specialists who graduate can provide high-quality, safe care (with limited or no supervision). Competency-Based Medical Education (CBME), which has gained much importance recently, aims at reducing "false positive" decisions by graduating trainees in unsupervised practice (1, 2). CBME is accepted all over the world but is associated with challenges such as overly analytical and detailed frameworks, rather abstract and general competencies, and difficulty in assessment for clinical teachers (3, 4).

Problems in the workplace-based assessment of learners include generosity error (too high scores-failure to fail), halo (generalizing from observing a single feature), lack of reliability (not being reproducible across occasions or raters), unclear (and often non-existent) standards, observer/rater differences, and ratings relating either to proficiency, personal development, effort, or reference group performance. Therefore, it is necessary to achieve assessments that match responsibilities in patient care, preferably with a holistic, non-tick-box approach and integration, not separation, of competencies, which are, at the same time, practically feasible (5). Thus, the first step in the implementation of CBME is to determine the capabilities of the students (6).

Collectively, the competencies (ACGME or CanMEDS) constitute a framework that describes the qualities of professionals. Such a framework provides generalized descriptions to guide learners, their supervisors, and institutions in teaching and assessment (7, 8). It is important to note that competency-based education targets standardized levels of proficiency to guarantee that all learners have sufficient proficiency at the completion of training (3, 6, 8-11). Competency is a characteristic of learned knowledge derived from knowledge, skills, attitude, experience, and individual ability, and is difficult to evaluate as it is abstract and general (4).

Today, more emphasis is placed on Entrustable professional activities (EPAs). EPAs, proposed by Olle ten Cate in 2005, are observable, measurable, and work-based professional practices that can be entrusted to a sufficiently competent learner or professional (3). These activities are independently executable, observable, and measurable in their process and outcome and, therefore, suitable for entrustment decisions. They represent the main activities of a profession, and graduates of a specialized field are expected to handle it independently and within a certain time frame (12). This way, EPAs are not an alternative for competencies but a means to translate them into clinical practice (13). EPA is an acronym for: *E*ntrustable (acts that require trust, by colleagues, patients, and the public), *P*rofessional (confined to occupations with extraordinary qualifications and rights), and *A*ctivities (tasks that must be done) (6). EPA is a valid assessment tool in graduate medical education (GME) in countries such as the USA, Canada, and Australia. The Canadian medical education

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directives for specialists (CanMEDS) framework defines seven core-competency areas in GME that can be mapped to EPAs (7). In 2014, the association of American medical colleges (AAMC) published a list of 13 core EPAs that all medical students should be able to perform before starting residency (14).

The relationship between EPAs and competencies has been explained in the literature (6). EPAs are units of work, while competencies are abilities of individuals. A defining marker of an EPA is that its performance requires integration of competencies, usually across domains (15). While the relationship between EPAs and competencies is relatively well-defined in the literature, the relationship between EPAs and milestones is not. A milestone is a behavioral descriptor that marks a level of performance for a given competency (6, 15).

The EPAs provide the clinical context for the competencies. As such, each EPA can be mapped to the competencies that are critical to making an entrustment decision. Each competency, then, has milestones associated with it that represent behavioral markers of increasing levels of performance. Thus, an EPA is directly related to the milestones for those competencies that are critical to entrustment decisions for that EPA (4, 6). The relationships among EPAs, competencies, and milestones are illustrated in **Figure 1**.

In brief; EPAs break medical practice down in units that can be overseen, assessed, monitored, documented and certified. EPAs aimed to operationalize competency-based medical education through a stepwise and safe engagement of trainees in clinical practice – with a progressive (bounded) autonomy, as well as becoming competent and Passing the threshold that allows for sufficient trust in the trainee to act unsupervised (3, 4, 6). The EPA descriptions and the tables of competencies and milestones should serve as the basis for curriculum development. Schools intending to pilot these EPAs will need to address curriculum and assessment. In short; EPAs are specific, observable tasks of daily work, EPAs contain multiple competencies: knowledge, skills and attitudes, and a trainee's competence is measured by the level of autonomy to perform a task (13, 16-18). We need EPAs because while competencies are descriptors of a person, EPAs are descriptors of the work to be performed. The traditional evaluation of whether a task was performed well or poorly is a very subjective assessment by a supervisor (12, 13).

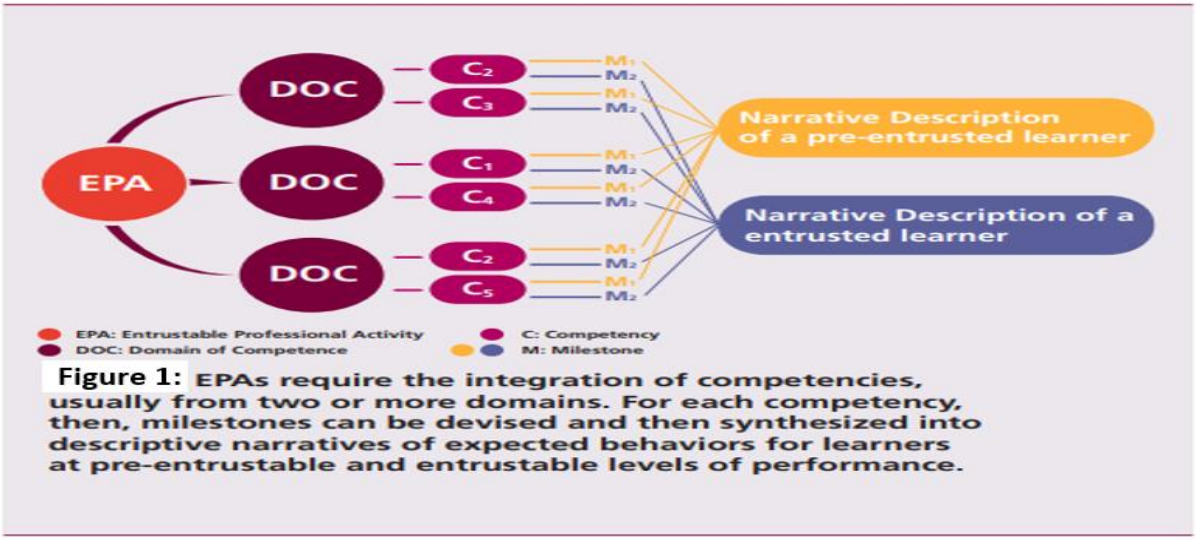

Figure 1: EPAs require the integration of competencies, usually from two or more domains. For each competency, then, milestones can be devised and then synthesized into descriptive narratives of expected behaviors for learners at pre-entrustable and entrustable levels of performance.

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