

AM Last Page: What Entrustable Professional Activities Add to a Competency-Based Curriculum

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Definition and rationale. Entrustable professional activities (EPAs) are tasks or responsibilities that faculty entrust to a trainee to execute, unsupervised, once he or she has obtained adequate competence. EPAs are executable within a given time frame; observable and measurable; and suitable for focused entrustment decisions.¹ EPAs are units of work (e.g., anesthetic care of an uncomplicated patient), while competencies describe people's abilities (e.g., knowledge, professional attitude, communication skill). Units of work and abilities of persons can be viewed as two dimensions of a grid. Competencies remain theoretical if not grounded in practice.

Competency domains →	Medical knowledge	Patient care	Interpersonal skills & communication	Professionalism	Practice-based learning & improvement	Systems-based practice
EPA examples ↓						
Consulting new ambulatory patients	●	●	●		●	
Providing first treatment of mild traumas		●	●			
Leading an inpatient ward	●	●	●	●		●
Initiating cardio-pulmonary resuscitation	●	●				
Discussing medical errors with patients			●	●	●	●

Multiple competencies are at stake with most activities. The dots show the most relevant competency-domains for each example EPA. EPAs link competencies to work. EPAs can serve as the primary focus of competency-based training: Supervisors can observe trainees executing an EPA, but through a lens of competencies.

Supervision. Mastery of an EPA is marked by a formal entrustment decision for unsupervised practice. It is competency-based, rather than time-based, and different trainees in different settings reach a particular EPA at different times. Clinical oversight is sufficient once the entrustment decision is made, after an earlier decrease of supervision. Each level of supervision reflects different authorization to act. Level 4 is the privilege to work unsupervised and should be documented (e.g., as Statement of Awarded Responsibility [STAR]).²

Graded supervision allows for...

1. Observing the activity
2. Acting with direct supervision present in the room
3. Acting with supervision available within minutes
4. Acting unsupervised (i.e., under clinical oversight)
5. Providing supervision to juniors

- a. Title
- b. Description
- c. Link with the competency framework
- d. Required knowledge, skills and attitudes
- e. Information sources to assess progress
- f. Conditions for level 4 supervision
- g. Method to arrive at a justified entrustment decision for this EPA

EPA design. EPAs should be chosen and elaborated carefully to create maximum clarity; they should refer to a "job to be done," and they should not be too detailed. Clarity is served with a two page text. A *title* should be supplemented with a *description* of what is included and its limitations. The most relevant *competencies* (e.g., see grid above) should guide the entrustment decision process. Trainees should know what *knowledge and skills* are expected of them to be awarded a STAR, and specific *information sources* should guide assessment and the decision to entrust trainees to *act unsupervised*. An elaborated EPA can serve as a mini-curriculum for the trainee.^{3,4} See reference 3 for a worked example.

A curriculum with EPAs. A manageable number of EPAs for all trainees in a full postgraduate program is 20 to 30. Each EPA includes more detailed activities (see EPA design). EPAs can serve as building blocks for portfolios. Time-in-training to attain level 4 (unsupervised practice) can be adapted upon monitoring of the trainee, marking the shift to a competency-based approach.⁵⁻⁷ Current examples of curricula with EPAs are available for pediatrics, internal medicine, family medicine and psychiatry.^{5,8-10}

Portfolio of: Trainee Jones	PGY1		PGY2		PGY3		PGY4	
EPA a	1	2	2	2	3	4	4	5
EPA b	1	1	2	2	2	3	3	4
EPA c	2	2	3	4	5	5	5	5
EPA d	2	3	4	4	4	4	5	5

References:

1. ten Cate O. Entrustability of professional activities and competency-based training. *Medical education*. 2005;39:1176–1177.
2. ten Cate O, Scheele F. Competency-based postgraduate training: Can we bridge the gap between theory and clinical practice? *Academic Medicine*. 2007;82:542–547.
3. ten Cate O, Young JQ. The patient handover as an entrustable professional activity. *BMJ Quality & Safety*. 2012;21:9–12.
4. ten Cate O. Nuts and bolt of entrustable professional activities. *Journal of graduate medical education*. 2013;5:157–158.
5. Jones MD Jr., Rosenberg AA, Gilhooly JT, Carraccio CL. Perspective: Competencies, outcomes, and controversy—Linking professional activities to competencies to improve resident education and practice. *Acad Med*. 2011;86:161–165.
6. Mulder H, Ten Cate O, Daalder R, Berkvens J. Building a competency-based workplace curriculum around entrustable professional activities: The case of physician assistant training. *Medical teacher*. 2010 Jan;32(10):e453–e459.
7. Schumacher DJ, Bria C, Frohna JG. The quest toward unsupervised practice: Promoting autonomy, not independence. *JAMA*. 2013;310:2613–2614.
8. Hauer KE, Kohlwes J, Cornett P, et al. Identifying entrustable professional activities in internal medicine training. *Journal of Graduate Medical Education*. 2013;5:54–59.
9. Shaughnessy AF, Sparks J, Cohen-Osher M, et al. Entrustable Professional Activities in Family Medicine. *Journal of Graduate Medical Education*. 2013;5:112–118.
10. Boyce P, Spratt C, Davies M, McEvoy P. Using entrustable professional activities to guide curriculum development in psychiatry training. *BMC Medical Education*. 2011;11:96.

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