EDITORIAL

From Competencies to Clinical Work: Entrustable Professional Activities as a Global Language for Undergraduate Medical Education

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INTRODUCTION

Entrustable professional activities (EPAs) are the activities that are based on the concepts of 'trust' and 'professionalism' as the name suggest 'entrustable' and 'professional'[1]. Medicine is a profession that requires high standards of professionalism which is an aspect of humanism or humanistic dimension. The patient-centred care reflects patients as partners with combined power in decision-making and clinical responsibility for individual care with respecting their values[2]. However, core-professionalism values such as altruism, responsibility, accountability, excellence, respect for others, integrity are unique and universally applicable to all professions[3].

The EPAs have rapidly gained global attraction since 2005 by focusing assessment on realistic clinical responsibilities[4]. Undergraduate medical programs routinely certify "competence", yet clinical workplaces still face a practical question at graduation: what work can this new doctor be trusted to do, and with what supervision? EPAs were created to make that question explicit by translating outcomes into observable units of work plus a supervision decision[4,5].

What an EPA is

Entrustable professional activities (EPAs) represent activities with responsibilities that can be fully entrusted to trainees once they have demonstrated the necessary competence to perform them without direct supervision[6]. An EPA is a unit of professional practice such as taking history, writing discharge summary etc. that can be entrusted to a learner once they have shown sufficient capability with necessary competence to perform it safely in an unsupervised condition[7,8]. The key tasks are designed to be entrusted to a resident once they demonstrate sufficient readiness, moving from direct supervision towards independence. EPA translate competencies like knowledge, skills, and attitudes into real-world clinical responsibilities. For example, a junior obstetrics resident may be entrusted to manage an uncomplicated vaginal delivery. A clinical ward resident is expected to perform the evaluation and initial management of a deteriorating patient, which involves rapid assessment and implementing stabilizing interventions[9].

How EPA Differs from a Competence Based Medical Education

Competence means ability to do or perform something well or successfully. Competence Based Medical Education (CBME) outlines the competence in the design of curricula,

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implementation, and assessment of medical training program[10]. It describes qualities of the persons' knowledge, skills, and attitudes and their abilities in performing task successfully by integrating knowledge, skills and behaviours. Assessment of competence is an important aspect of curricula to (i) satisfy national requirements, (ii) maintain professionalism and (iii) ensure that graduates are prepared for independent clinical practice[11,12]. It is also an important aspect of certification of physician licensure[11,13,14]. The EPAs are fundamental aspects of assessing CBME, acting as specific, observable clinical tasks that bridge intangible competencies to real-world practice. In EPAs, a supervisor assesses a learners' readiness for independence by evaluating the level of trust needed for them to perform these tasks, ranging from direct supervision to full autonomy[4,9]. Competencies are descriptors of trainees; EPAs are descriptors of workplace performance of trainees[15,16]. The EPA requires multiple competencies that must be applied in an integrative fashion. For example, a simple task as "taking a patients' history" combines several domains of competence such as professionalism, communication skills and also medical knowledge and expertise [9,16].

Why EPAs matter now in a global undergraduate curriculum

The implementation of EPAs is an essential component of CBME that supports the development of capable and confident healthcare practitioners [17]. While the concept of EPA is global and there is a demand for transparent outcomes at transition points of trainees, the specific activities defined as EPAs are often tailored to national healthcare systems, cultural contexts, and local patient populations. The Association of American Medical Colleges (AAMC) has published a list of 13 Core EPA for entering residency that medical school graduates might be expected to perform, without direct supervision, on the first day of residency[18,19,20]. A 2024 BMJ Global Health study highlights the necessity of aligning EPA expectations with local service conditions and available supervision, rather than imposing imported assumptions[21]. Table-1 shows the 13 Core EPAs published by AAMC for entering residency[18,19,20].

CORE EPAs FOR ENTERING RESIDENCY

Tabel 1: The 13 Core EPAs for Entering Residency.

No.	Core EPAs for Entering Residency
1	Gather a history and perform a physical examination
2	Prioritize a differential diagnosis following a clinical encounter
3	Recommend and interpret common diagnostic and screening tests
4	Enter and discuss orders/prescriptions
5	Document a clinical encounter in the patient record
6	Provide an oral presentation of a clinical encounter
7	Form clinical questions and retrieve evidence to advance patient care
8	Give or receive a patient handover to transition care responsibility
9	Collaborate as a member of an interprofessional team
10	Recognize a patient requiring urgent or emergent care and initiate evaluation and management
11	Obtain informed consent for tests and/or procedures
12	Perform general procedures of a physician
13	Identify system failures and contribute to a culture of safety and improvement

RECOMMENDED GUIDELINES FOR A FULL EPA DESCRIPTION

The Association for Medical Education in Europe (AMEE) provides support curricular leaders looking to adopt new EPAs, or revise and define established EPAs for competency-based education[7]. The AMEE guidance recommends a structured guide elaborated in eight sections in a full EPA description including: (1) EPA title; (2) specification and limitations; (3) potential risks in case of failure; (4) most relevant competency domains; (5) required knowledge, skills, attitudes and experiences to allow for summative entrustment; (6) information sources to assess progress and support summative entrustment; (7) entrustment/supervision level expected at which stage of training; and (8) time period to expiration if not practiced[7]. Table-2 shows the recommended structured guideline in eight sections with full description of each section[7,22].

Table-2: Recommended Structured Eight Guideline Sections with Full EPA Description

	Section	Full EPA Description
1	EPA Title	The title of activity should read as a generalized activity, and be concise, recognizable, and reflects an actual work unit (e.g., Performing admission history and physical exam).
2	Specification and limitations	Define what the activity involves; and any specific restrictions on responsibility is there. (e.g., only for hemodynamically stable patients).
3	Potential risks in case of failure	All entrustment tasks bear risks; briefly outline potential negative outcomes if the activity fails.
4	Relevant competency domains	Specify the foundational competencies such as knowledge, skills, attitudes, professionalism, communication skills etc., that are required to execute the activity safely and effectively.
5	Required knowledge, skills, and attitudes (KSAs)	A specification of the prerequisites a learner must demonstrate before a summative entrustment decision can be made.
6	Information sources to assess progress and support summative entrustment	Entrustment decision, particularly summative entrustment decision should be based on multiple sources of information.
7	Supervision level scale and entrustment decisions at which stage of training	There are five levels for entrustment decision at which stages of training need to be specified. **Level-1:** the learner is allowed to be present and observe, not to enact an EPA. **Level-2:** the learner is allowed to execute the EPA with direct, pro-active supervision, present in the room. **Level-3:** the learner is allowed to carry out the EPA without a supervisor in the room, but quickly available if needed, i.e., with indirect, reactive, supervision. **Level-4:** the learner is allowed to work unsupervised. **Level 5:** the learner is allowed to provide supervision to more junior learners.
8	Time period to expiration if not practiced	A clause indicating that the entrustment decision may need to be re-evaluated if the learner does not practice the activity for a long period.

Supervision Scales and Entrustment Decision

The most generic five entrustment-supervision level scale are shown in section-7 of table-2. Entrustment decisions in EPAs are typically determined using this entrustment-supervision scale, which are frameworks used in medical education to assess a learners' competence and readiness for independence in specific professional activities. From the perspective of clinical training, autonomy can be described in terms of a required level of supervision.

Entrustment decision-making in EPA is indeed a complex process that relies on multiple interacting factors such as trainee characteristics, the supervisor characteristics, their relationship, the professional task, and the clinical environment [23,24]. The trainees' knowledge, skills, experience, carefulness, and professionalism and supervisors' own expertise and supervisory skill together with the level of trust established in their professional relationship all play a significant role in entrustment decision making [23]. The task itself can carry different levels of risk and complexity together with the clinical environmental factors such as patient acuity, resource availability, the level of urgency, and the workload of the clinical team can all modify the level of supervision needed at any given time [23]. In addition, intended supervision levels must remain consistent with local regulatory scope-of-practice and institutional policy (e.g., where legal or policy constraints limit what trainees/new graduates may do even when they are capable).

CHALLENGES FACED BY FACULTY IN IMPLEMENTING EPA AND SOLUTIONS

Faculty faces multiple challenges including reluctance to adopt EPAs and preference for traditional assessment methods[25]. This is mostly due to unfamiliarity of faculty with the concept of EPA and its importance in curriculum. Therefore, faculty development program by arranging workshops and training programs is necessary for the implementation of EPA. Key focus on detailing the scope and merits of EPAs, the assessment methods to be used for the EPAs, delivering feedback etc. will increase the competence of the faculties[26]. Faculty development will engage faculty to reflect on their individual entrustment strategies and on how these might influence trainees' learning and the supervisor-trainee relationship[24]. Furthermore, time constraints are

important issue for the faculty. It is a challenge for the educators due to time for direct observation, providing real-time feedback, nourishing educational confidence. Therefore, it is necessary to integrate the EPA-related activities as a part of the existing curriculum without assigning separate timeframe. Moreover, adequate resources are vital and support from the institute is very much needed in this respect for implementation of EPA[26]. There is a recognition that teachers assess students' competence to evaluate performance of students while teachers' competence in various teaching, assessment, and supervisory practices is overlooked[6]. Faculty training in EPAs equips educators to effectively implement CBME by focusing on tangible tasks and fostering a culture of trust and continuous feedback, thereby developing competent professionals. It enables faculty to learn to define, observe, and assess EPAs within their workflow. Training helps faculty in assessment and feedback. A supportive, safe working and learning climate, systematic faculty development, and meaningful feedback dialogues as well as mutually agreed on expectations and discussions on entrustment are required for successful EPA[24].

CONCLUSION

Decision-making in EPA is a complex process that relies on many cooperating factors such as trainee characteristics, the supervisor characteristics, the clinical environment, and the professional task. Competencies are descriptors of trainees and EPAs are descriptors of workplace performance of trainees. Time is a challenge for the educators for direct observation, providing real-time feedback and nourishing educational confidence. Hence, integration of the EPAs as a part of the existing curriculum without assigning separate timeframe is recommended. Adequate institutional resource support and faculty training is very much needed for implementation of EPAs. Faculty training in EPAs equips them to effectively implement CBME by defining, observing, performing and assessing EPAs within their workflow. EPAs provide a structured, practical approach to assess competency-based education. When implemented well, they ensure that graduates are ready for clinical responsibility and patient care from day one of residency.

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REFERENCES

1. Sattar K, Yusoff MSB. Professionalism through entrustable professional activities: ABC of this imperative and inevitable approach. Education in Medicine Journal 2020;12(3):21–29. https://doi.org/10.21315/eimj2020.12.3.3.

2. Yousuf R, Alsharkawy A, Salam MM, Akter S, Pasha M, Begum H, et al. The Key to Communication Skills in the Patient-Physician Relationship. International Journal of Human and Health Sciences 2024;08(04):305-309. doi: http://dx.doi.org/10.31344/ijhhs.v8i4.727.

3. Salam A, Begum H, Zakaria H, Allaw BAQ, Han T, Algantri KR, et al. Core Values of Professionalism among Fresh Medical Graduates in a Malaysian Private University. International Journal of Human and Health Sciences 2021;05(04):463-472. doi: http://dx.doi.org/10.31344/ijhhs.v5i4.358.

4. ten Cate O. Entrustability of professional activities and competency-based training. Med Educ. 2005;39(12):1176-11777.

5. Chen HC, van den Broek WE, ten Cate O. The case for use of entrustable professional activities in undergraduate medical education. Acad Med. 2015;90(4):431-436. doi: 10.1097/ACM.0000000000000586.

6. Bakar NA, Roslan NS, Haq MAU, Yusoff MSB. Elements of entrustable professional activities for dental educators: a scoping review. BMC Med Educ. 2025;25(1481):1-13. https://doi.org/10.1186/s12909-025-07888-z

7. ten Cate O, Taylor DR. The recommended description of an entrustable professional activity: AMEE Guide No. 140. Med Teac. 2021;43(10):1106–1114. https://doi.org/10.1080/0142159X.2020.1838465.

8. ten Cate O, Chen HC, Hoff RG, Peters H, Bok H, van der Schaaf M. Curriculum development for the workplace using Entrustable Professional Activities (EPAs): AMEE Guide No. 99. Med Teach. 2015;37(11):983-1002. doi: 10.3109/0142159X.2015.1060308.

9. ten Cate O. A primer on entrustable professional activities. Korean J Med Educ. 2018 ;30(1):1-10. doi: 10.3946/kjme.2018.76.

10. Wang YF, Lee YH, Lee YK, Lee CW. Implementation of entrustable professional activities in emergency medicine: perspectives from clinical instructors. Int J Med Educ. 2025; 16:121-127; doi: 10.5116/ijme.6876.5de2.

11. Salam A, Zainuddin Z, Latiff AA, Ng SP, Soelaiman IN, Mohamad N, Moktar N. Assessment of Medical Graduates Competencies. Ann Acad Med Singap. 2008;37(9):814-816.

12. Rolland S, Hobson R, Hanwell S. Clinical competency exercises: some student perception. Eur J Dent Educ. 2007;11:184-191.

13. Heffron MG, Simspon D, Kochar MS. Competency-based physician education, recertification, and licensure. WMJ. 2007;106: 215-218.

14. Yip HK, Smales RJ, Newsome PRH, Chu FCS, Chow TW. Competency based education in a clinical course in conservative dentistry. Br Dent J. 2001;191: 517-522. https://doi.org/10.1038/sj.bdj.4801221

15. Holzhausen Y, Maaz A, März M, Sehy V, Peters H. Exploring the introduction of entrustment rating scales in an existing objective structured clinical examination. BMC Med Educ. 2019;19: 319. https://doi.org/10.1186/s12909-019-1736-2

16. ten Cate O. Nuts and Bolts of Entrustable Professional Activities. Journal of Graduate Med Educ. 2013; 5(1):157-158. dou: http://dx.doi.org/10.4300/JGME-D-12-00380.1.

17. Thaman RG. Shifting from Competencies to Entrustable Professional Activities (EPAs). AMEI's Curr Trends Diagn Treat. 2023;7(2):29-30. 10.5005/jp-journals-10055-0172.

18. AAMC. Core Entrustable Professional Activities for Entering Residency: Faculty and Learners' Guide. Version 1.0. Association of American Medical Colleges. 2014. Available at:store.aamc.org/downloadable/download/sample/sample_id/66/ .

19. Lomis K, Amiel JM, Ryan MS, Esposito K, Green M,Stagnaro-Green A. AAMC Core EPAs for Entering Residency Pilot Team. Implementing an Entrustable Professional Activities Framework in Undergraduate Medical Education: Early Lessons From the AAMC Core Entrustable Professional Activities for Entering Residency Pilot. Acad Med. 2017;92(6):765-770. doi: 10.1097/ACM.0000000000001543.

20. Obeso V, Brown D, Aiyer M, Barron B, Bull J, Carter T, et al. eds. Core Entrustable Professional Activities for Entering Residency: Toolkits for the 13 Core Entrustable Professional Activities for Entering Residency. Washington, DC: Association of American Medical Colleges; 2017.aamc.org/initiatives/coreepas/publicationsandpresentations.

21. ten Cate O, Nel D, Hennus MP, Peters S, Romao GS. For which entrustable professional activities must medical students be prepared if unsupervised patient care without further training is an expectation? An international Global South study. BMJ Glob Health 2024;9: e016090. doi:10.1136/ bmjgh-2024-016090.

22. ten Cate O, Schwartz A, Chen HC. Assessing Trainees and Making Entrustment Decisions: On the Nature and Use of Entrustment-Supervision Scales. Acad Med. 2020;95(11):1662-1669. doi: 10.1097/ACM.0000000000003427.

23. Conroy M, McCallister J, Gustin J. Entrustment Decision Making in the Intensive Care Unit: It's About More Than the Learner. ATS Sch. 2023;5(1):53-70. doi: 10.34197/ats-scholar.2023-0060OC.

24. de Jonge LPJWM, Govaerts MJB, Timmerman AA, Muris JWM, Kramer AWM, Van der Vleuten CPM. Supervisors' approaches to the early entrustment of clinical tasks: an observational study in general practice. BMJ Open 2022;12: e055471. doi:10.1136/bmjopen-2021-055471.

25. Shrivastava SR, Gade S, Vagha S. Effective implementation of entrustable professional activities in medical colleges: Faculty perspective. J Sci Soc 2024; 51:498-500.

26. Shrivastava SR, Gade S, Vagha S. Overcoming challenges to ensure effective integration of entrustable professional activities in the medical curriculum. J Educ Health Promot. 2025; 14:72. doi: 10.4103/jehp.jehp_791_24.