

To Trust or Not to Trust? An Introduction to Entrustable Professional Activities

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As clinical teachers, we look for ways to inspire medical students to reach for excellence in their practice of medicine. Entrustable professional activities, or EPAs, can help us do just this. This article, next in the Council on Medical Student Education in Pediatrics series on clinical teaching, provides an introduction to EPAs. Clinical teachers have always made decisions about which tasks to entrust to medical students and EPAs bring that important experience and judgment into a framework that organizes students' learning. EPAs have been conceptualized and written for residents, fellows, physician assistants, and, more recently, medical students.

WHAT ARE ENTRUSTABLE PROFESSIONAL ACTIVITIES?

Entrustable professional activities (EPAs) provide a framework for describing what medical students are expected to be able to do before graduation from medical school. They break down the work of a doctor into tasks, such as taking a history, forming a differential diagnosis, or recognizing a sick patient and initiating treatment. The word "entrustable" is part of this framework because most physicians, when working with a learner, have asked themselves, consciously or unconsciously, "Do

I trust this learner to do that?" And, only if the answer is "yes" do they allow the learner to do the task. So, although EPAs sound new (and potentially confusing), they are built on a foundation that physicians have intuitively used. After working with a student, for instance, and watching him or her conduct histories and physical examinations, a physician will decide whether to trust the student to conduct future histories and physical examinations on his or her own. This decision will be based on several factors, including the accuracy of the information the student has provided in the past, how well the student recognizes his or her limitations, the complexity of the patient, the circumstances of the family, the nature of the task, and time constraints.¹ It really all comes down to whether the physician can affirmatively answer the question, "Do I trust the learner to do this?"

EPAs help the clinician make this everyday judgment about whether to trust a student with a specific task by stating the task explicitly.^{2,3} A group of medical educators from across the United States and Canada has agreed on a set of 13 "core EPAs" (see Table 1) that all medical students should be entrusted to do by the time they graduate from medical school, with a supervisor nearby to help when needed.⁴ These core EPAs include key aspects of



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patient care and key components of working in a system of care.

ENTRUSTMENT AND SUPERVISION

“Entrustment” is assessed by deciding how much supervision a student needs to perform a particular professional activity when caring for patients. When an aspect of work is new for a student, the clinician may want the student to observe before practicing on his or her own. When students begin to practice on their own, the clinical teacher decides how much supervision they need. The clinician may stay in the room, watching everything they do. As they gain competence, they are trusted to practice with a clinician nearby who later double-checks what the student has done; then, after further practice and teaching, the clinician may double-check only key findings. The amount of supervision needed defines the level of entrustment.¹⁰

HOW ARE ENTRUSTMENT DECISIONS MADE?

How does a physician decide to trust a medical student to do something? This decision is often informed by many factors, such as the patient’s acuity, the nature of the task, and the skill of the student. The following 5 factors describe the things that influence a physician’s decision to trust a resident with a task. Physicians most likely consider many of the same things when deciding if a student can be trusted to perform a task.¹¹

- The learner. Are they reliable? Truthful? Aware of their own limitations? What has been observed about their skill and competence?¹²
- The supervisor. The clinical teacher’s own temperament and experience as a preceptor plays a role. Some teachers find it easy to trust each new student, unless the student does something that makes the clinician wary, whereas others

wait for each student to prove his or her trustworthiness in each new situation.

- The context. The clinical environment influences entrustment decisions, too. In a fast-paced clinical environment with few resources and many competing tasks, a student may be allowed less independence than in a less-intense setting.
- The task. The complexity of the patient’s needs affects the level of supervision a student will need. Does the patient have a complex or unusual diagnosis, a complicated social situation, or many interrelated needs? Or does the patient have an urgent need? If so, a learner may need more supervision than he or she would if the learner was seeing a patient with a common, simple, single issue, or a patient with a common chronic condition that is well-managed.¹
- The relationship between the learner and the supervisor. The relationship between the student and the clinical teacher also influences decisions about trust and supervision. Some learners spend only a few hours or days with a teacher, whereas other teachers and learners work together for several weeks or even longer. If they have developed shared expectations in the context of a working relationship, this can help to facilitate trust.

TEACHING AND ASSESSMENT BASED ON EPAS

Table 1 lists each of the 13 core EPAs⁴ and provides examples from our experience of how to teach and assess each of these in a busy clinical setting.

What might a physician be asked to write on a form that uses EPAs to assess medical students? Instead of deciding if a student passes or fails

or “meets expectations” (which is often an abstract concept), a clinical teacher will be asked to make a decision that has clinical meaning; that is, can the student be entrusted or not to perform a certain task. The teacher will document what a student can do based on observations, direct supervision, feedback, and teaching. Teachers will be asked to justify their decisions with written examples of what the student did or did not do and how the student responded to feedback and progressed during the clinical experience.

The observations and assessments that the clinical teacher makes about a student become evidence of the student’s progress. The teacher gathers evidence by observing the student in clinical encounters, coaching the student around presentations, and asking for the student’s self-reflection after clinical encounters. The teacher provides evidence to the clerkship director by writing short examples of the student’s performance that explain the teacher’s judgment¹³ and by choosing from a list of options that state how much supervision was needed. Although making judgments about students is a familiar task for many preceptors, it is often something that is done intuitively, without deliberate decision-making. Making these judgments deliberate and explicit provides the evidence that the clerkship director needs to reach conclusions about how the student has performed during the clerkship and also provides clear feedback for the student to guide efforts to improve.

CONCLUSIONS

EPAs provide a framework for describing the work that doctors do and the skills that medical students must acquire before graduation from medical school. This framework assists medical students because it clearly outlines what is expected, it allows students to focus on specific skills, and it demonstrates that one

TABLE 1 Ways to Teach and Assess EPAs

EPA ⁴	Ways to Teach	Ways to Assess: Is This Student Entrustable?
EPA 1: Gather a history and perform a physical examination	<ul style="list-style-type: none"> • Ask student to observe you performing parts of a physical examination • Ask student to observe you asking questions • Direct student to open-access resources for taking a history and performing a physical examination, such as the Council on Medical Student Education in Pediatrics physical examination video⁵ • Ask student to take patient's vital signs and conduct all or part of the physical examination (and then double-check) • Role play taking history with student 	<ul style="list-style-type: none"> • Ask "What are the most important questions for this patient today? Why?" • Watch student perform components of the history and physical examination or confirm findings that were not observed • Ask "What are the most critical things to examine on this patient today? Why?" • Ask "What findings on physical examination rule in and rule out the working diagnosis?" • Ask patient and family if student asked questions in a logical, nonjudgmental, empathetic way • Ask patient and family if student examined patient in a way that promoted the patient's comfort • Ask patient and family if the student explained what he or she was doing
EPA 2: Prioritize a differential diagnosis following a clinical encounter	<ul style="list-style-type: none"> • Explain why you think a patient has a particular diagnosis • Explain what features on history and physical examination make that diagnosis most likely • Explain which other diagnoses need to be considered and relate them to features on the history and physical examination 	<ul style="list-style-type: none"> • Ask student what the most likely diagnosis is and what features on history and physical examination led him or her to make that conclusion • Ask student what the alternate diagnoses are and what features on history and physical examination make those important to consider
EPA 3: Recommend and interpret common diagnostic and screening tests	<ul style="list-style-type: none"> • Explain why you are ordering tests • Explain how you are interpreting tests • Role model how to communicate effectively with patients and families and other members of the health care team about diagnostic and screening tests 	<ul style="list-style-type: none"> • Ask student to interpret results from diagnostic tests • Ask students to explain how their approach to the patient would change if the test results were different • Ask student to explain the utility of the test • Ask student to explain how the test will be done and what the results may mean to a family
EPA 4: Enter and discuss orders and prescriptions	<ul style="list-style-type: none"> • Explain how to write orders • Detail the key components of a prescription • Let the student watch you document orders and prescriptions • Direct the student to a resource about how to write orders and prescriptions⁶ 	<ul style="list-style-type: none"> • Observe student explaining test results to a family • Review orders that student has documented • Review prescription that student has documented • Ask student to modify order and prescriptions for different clinical scenarios (eg, write on blank paper; vary the age, weight of patient, severity of illness, allergy history)
EPA 5: Document a clinical encounter in the patient record	<ul style="list-style-type: none"> • Provide a framework of what should be included in each of the following types of notes: admission note, progress note, procedure note, multidisciplinary meeting note, on-call note, discharge note 	<ul style="list-style-type: none"> • Ask student to write admission note, progress note, procedure note, on-call note, multidisciplinary meeting note, discharge note in chart (if the student is not allowed to write in the chart, have the student write each of these notes for each patient on paper that is subsequently shredded) • Review the note for clarity, completeness, and documented understanding of the patient's issues and plans
EPA 6: Provide an oral presentation of a clinical encounter	<ul style="list-style-type: none"> • Provide a framework of what should be included in an effective oral presentation⁷ • Ask the student to listen to one of your presentations (and see how well you followed the framework) 	<ul style="list-style-type: none"> • Observe the student presenting a case on rounds or after a clinical encounter • Provide detailed, specific, feedback
EPA 7: Form clinical questions and retrieve evidence to advance patient care	<ul style="list-style-type: none"> • Model asking clinical questions and finding answers in the medical literature • Direct the student to resources at the university library 	<ul style="list-style-type: none"> • Ask the student to form a clinical question about one of his or her patients • Ask the student to review the medical literature to answer that question • Review the student's search strategy and conclusions
EPA 8: Give or receive a patient handover to transition care responsibility	<ul style="list-style-type: none"> • Provide a framework of what should be included in handover (such as IPASS)⁸ • Demonstrate how to effectively hand over a patient 	<ul style="list-style-type: none"> • Watch the student give a patient handover • Do a "mock" handover; ask the student to present a short handover presentation to you • Assess the handover with an IPASS rating form • Ask "What does the next team need to know about this patient? What problems might evolve for this patient in the next 12 hours? How would you like the next team to manage those?"
EPA 9: Collaborate as a member of an interprofessional team	<ul style="list-style-type: none"> • If there are students from other professions (nursing students, pharmacy students, respiratory therapy students) at your site, consider arranging an interprofessional teaching session • Explain why you are engaging in an interprofessional team to provide patient care • Role model excellent and respectful communication 	<ul style="list-style-type: none"> • Ask nurses and allied health personnel for feedback about the student • Ask student to document an interdisciplinary meeting • Observe student interacting with members of interprofessional team • Ask student what the role of each member of the team is and what skills each person brings • Ask student to consult with an interprofessional team member (eg, pharmacist, therapist, lactation consultant, nurse) to gather specific insights/information about a patient

TABLE 1 Continued

EPA ⁴	Ways to Teach	Ways to Assess: Is This Student Entrustable?
EPA 10: Recognize a patient requiring urgent or emergent care and initiate evaluation and management	<ul style="list-style-type: none"> • Have student take Neonatal Resuscitation Program, Pediatric Advanced Life Support courses • Explain what it is about a particular patient that makes you know the patient is sick (eg, vitals, appearance) 	<ul style="list-style-type: none"> • Ask student, “Is this patient sick or not sick? How do you know?” • Ask the student what the priorities are in management • Observe the student in a real or simulated scenario dealing with a sick patient
EPA 11: Obtain informed consent for tests and/or procedures	<ul style="list-style-type: none"> • Provide a framework of what should be included in such conversations⁹ • Ask the student to observe you obtaining informed consent 	<ul style="list-style-type: none"> • Observe the student obtaining consent • Ask the student about the risks and benefits of tests and procedures • Role play with the student
EPA 12: Perform general procedures of a physician (eg, basic cardiopulmonary resuscitation, bag and mask ventilation, venipuncture, inserting an intravenous line)	<ul style="list-style-type: none"> • Allow student to observe you perform procedures • Think out loud while demonstrating a procedure to explain the steps, the equipment, the indications and contraindications for the procedure • Use models for student to practice technical skills 	<ul style="list-style-type: none"> • Observe the student perform the procedure on a model • Ask the student how the procedure would be performed differently for different patients (“What would you do differently if this patient was 1 week old? 3 years old? 15 years old? If the patient’s weight was different? If the patient was acutely unwell?”)
EPA 13: Identify system failures and contribute to a culture of safety and improvement	<ul style="list-style-type: none"> • Overtly discuss how you deal with system errors • Ask interprofessional team members to identify system errors they see and discuss them with the student • Encourage student to attend, and reflect on, morbidity and mortality–type conference 	<ul style="list-style-type: none"> • Ask the student to identify a system failure • Observe the student disclosing an adverse outcome (to a patient and family or to yourself as part of a role play)

IPASS, Illness severity, Patient summary, Action list, Situation awareness and contingency planning, Synthesis by receiver.

can be doing well in one area and still have room to grow in another. Also, this framework can assist practicing physicians in teaching because it details what medical students need to be able to do. Instead of helping someone become a “good doctor,” clinical teachers can focus their teaching, supervision, and feedback on helping students attain very specific skills, which will, ultimately, help their students become fine physicians.

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ABBREVIATION

EPAs: entrustable professional activities

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