CHAPTER 10

Clarifying terminologies related to entrustable professional activities and entrustment decision-making

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Abstract

Entrustable professional activities (EPAs) and entrustment decision-making have become common language in competency-based education in the health professions. Since its introduction, several other related concepts have been introduced, which has made it more complex to get an overview of the domain. This chapter sets out to discuss OPAs (observable practice activities), EPA specifications, nested EPAs, core EPAs versus elective EPAs, transdisciplinary EPAs, Practice Activities as used by the WHO, retrospective versus prospective entrustment–supervision scales, STARs (statements of awarded responsibility), microcredentials, and hospital privileging. The concepts are defined and elaborated with examples.

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Introduction

Despite the wide uptake of the concept of entrustable professional activities (EPAs) in many health professions education programs, and the seemingly simple and intuitive nature of the concept (an activity one would trust a trainee or professional to do), translating it into practice has been less straightforward and has led to questions about what an EPA is and how one can use it. In addition, the language around EPAs has expanded with the addition of new, related concepts. This chapter aims to help the reader see the forest for the trees' by explaining several of these related concepts and providing guidance on how to use them in health professions education. We distinguish between concepts directly related to EPAs and those related to entrustment decision-making. This chapter is not exhaustive and every chapter in this book uses and explains language for a good understanding of its content. The terminologies here stand out, as publications in the literature using these do not always provide clear explanations.

Terminology related to entrustable professional activities

EPAs are units of clinical practice that, as a whole, can be entrusted to a professional, or someone in training for that profession.[1,2] Not all daily activities of a clinician are suitable for professional entrustment (e.g., 'Creating a personal development plan'), if they are not contributions to patient care. EPAs are 'entrustable,' i.e., a decision of entrustment can be made to transfer the responsibility for the activity,[3] either ad hoc or more permanently after a summative entrustment decision. EPAs can be rather broad responsibilities, such as 'Serving on an outpatient diabetes clinic' for a resident in internal medicine or 'Perioperative care for the critically ill surgery patient' for one in surgery. Clearly, such broad EPAs can be described in more detail, and can include smaller activities (e.g., 'Obtaining informed consent'). Here is where alternative terms for units of practice arise.

OPAs, or observable practice activities

Warm and colleagues introduced the idea of multiple small and specific *observable practice activities* (OPAs), to be measured over time, leading to entrustment decisions mapped to Milestones (which, with a capital M, are significant points in the development of competencies, required in the USA to be reported semi-annually to the Accreditation Committee for Graduate Medical Education, ACGME) and to EPAs, showing developmental progression.[4] OPAs and EPAs differ in two distinct ways: in their granularity (OPAs are usually small and many) and in their suitability for a summative entrustment decision. In addition, Warm proposes distinguishing 'process OPAs' (example: 'Minimize unnecessary care including tests') from 'content OPAs' (example: 'Manage ventilator changes in the ICU').[4] Both examples would be less suitable for an EPA. The first cannot easily be envisioned as a unit of practice that can be entrusted (with direct, indirect, or no supervision). The second example would only qualify as an EPA that an ICU doctor would be hired for or scheduled to do if it were combined with other OPAs. While OPAs are not applied in many programs, the literature describes some other rationales for OPAs, such as the wish to specify established EPAs in more detail, and the wish to link observable activities to Milestones,[5] the required reporting format of the ACGME in the US.[6,7]

The emphasis in assessment of OPAs is on observation. Their purpose is twofold. The first is to assess learners' competence regarding activities that require 'discrete collections of knowledge, skills, and attitudes that can be observed and entrusted,'[8] rather than to grant an actual qualification, with a summative entrustment decision. The other purpose is to collect information that can be mapped over time to inform larger assessment collection efforts for progress or entrustment decisions (such as Milestones or EPAs).

Major decisions about granting entrustment with units of professional practice (STARs – see below) would be unwieldy if these would regard hundreds of small OPAs[8], and would lose the sense of holistic decisions. EPAs serve to provide steps toward increasingly autonomous practice in patient care, through grounded, summative entrustment decisions, shared by the educational team or competency committee of a program for each EPA. However, bundles of OPAs together can establish an EPA.[9] Here is where OPAs show overlap with the 'specification' section of an EPA description.[1]

EPA specification items as bundled small EPAs

EPA sets are frequently published and utilized in consensus processes solely based on their titles. Yet these titles rarely provide a comprehensive understanding of the qualifications and responsibilities granted to a trainee following a summative entrustment decision. It is essential for the trainee, clinical staff, interprofessional team, and others to understand well which responsibilities are included in an EPA qualification and which are not. Providing specifications and delineating limitations is a crucial aspect of defining an EPA.[1] The specification includes smaller components of this responsibility and can be listed in different ways. They could be the chronological steps of the EPA or the combined sub-activities that the EPA qualification encompasses. The specification describes the activity in necessary detail. It frequently happens that, when a new framework of EPAs is created—for instance with a nominal group technique—a long series of small activities is generated and subsequently reorganized into broader EPAs, each with component sub-activities, so items listed in the specification can often be regarded as small EPAs. Box 10.1 shows a very elaborate EPA—derived from an article under submission[10]—that was created after two nominal group procedures with experts. In many cases, specifications can be briefer: enough to inform relevant stakeholders, but not more. Our recommendation would be that developers who consider using OPAs to be small units of practice within an EPA think of writing these out as specifications of the EPAs.

In the full description of an EPA, not only is a specification included but also competency domains, knowledge, skills, attitudes (KSAs), and experiences, which are sometimes regarded

Box 10.1: EPA example.

Title	**Providing care to non-hospitalized adult patients with a known common chronic condition**
Specification	*This EPA implies qualification for:* • History taking and physical examination • Establishing and prioritizing differential diagnoses • Requesting and interpreting common diagnostic and screening tests • Providing treatment as appropriate, including writing prescription orders, for conditions at least including hypertension, diabetes, dyslipidemia, COPD, heart failure, asthma, anxiety, depression, hypothyroidism, GI disorders, osteoarthritis, and chronic skin, infectious (HIV), and renal and neurological diseases • Counseling patients (and families) about condition and treatment, especially around medication use • Evidence-based screening, considering age and risk factors • Educating patients regarding risk factor modification and preventive care • Documenting medical notes, referral letters, and clinical evolution • Conducting home or remote monitoring regarding chronic health problems or disabilities • Referring patients to other health care practitioners and specialists as appropriate *This EPA includes a qualification to attend to patients unsupervised in the following settings:* • Outpatient setting; patient-home setting; urban setting; rural setting

as a specification. This conceptualization is not correct, as competencies and KSAs are required features of the trainee before an entrustment decision can be made to allow them to practice the activity, and 'specification' is merely the activity explained, as a list of its components.

Nested EPAs

A concept in the EPA language, somewhat related to OPAs and specifications but still distinct, is the *nesting of smaller EPAs* within broader EPAs.[11] As trainees progress through the educational continuum, their responsibilities grow over time and EPAs become broader. Nested EPAs are a developmental concept. When a student is trusted with examining a patient for a specific reason (e.g., to measure blood pressure) and their report is no longer checked or questioned but accepted and incorporated in a medical record, then an entrustment decision has been made for a small EPA. However, further in training, that small EPA is no longer a useful entity because it becomes too small and should be incorporated (nested) within a full physical examination. Subsequently, measuring blood pressure becomes part of a full consultation, then full management of a patient and finally a whole clinic (Figure 10.1).[11] Nested EPAs can thus be defined as true EPAs (stand-alone contributions to patient care), to be entrusted often up to the level of indirect supervision, and to become part of a broader EPA at a later stage of training.

This way, the number of EPAs at a particular stage of training can be limited to the relevant activities for *that* stage. At the end of postgraduate and fellowship training it is no longer useful to talk about nesting, as the EPAs will reflect actual units of professional practice.

Nested EPAs have not been used frequently, but the Utrecht undergraduate medical program employs them. Five broad EPAs are defined for the final year, which includes an advanced 12-week clerkship, akin to a subinternship. 'The clinical consult' is one of the broad EPAs that includes a full history and physical examination. In prior years, specialty-specific basic history and physical examination EPAs have been defined for internal medicine, surgery, neurology, pediatrics, obstetrics/gynecology, and psychiatry, as these are not identical. Students are first trained and qualified

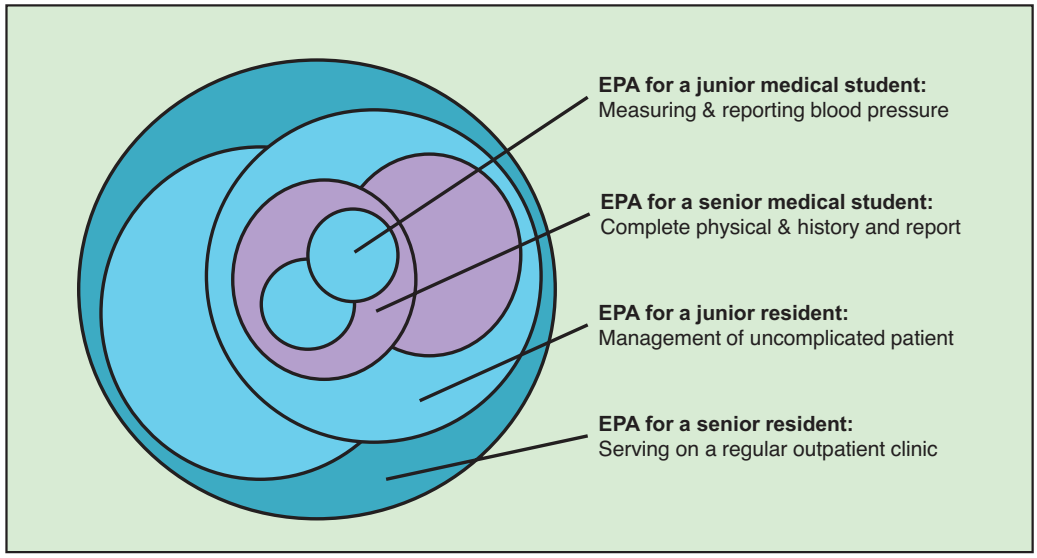

Figure 10.1: Examples of nested EPAs.

for specialty-specific clinical-consult EPAs, which are subsequently all considered to be nested in the overarching final-year EPA 'The Clinical Consult.'[12] Nested EPAs may also serve in postgraduate programs, such as when complex surgeries are broken down into components that can be entrusted to junior surgical residents. A nested surgical EPA (e.g., 'Open entry into the abdomen') can occur in multiple different types of surgical procedures.

Core EPAs and elective EPAs

Many programs have defined core EPAs.[13,14] Few, however, have defined elective EPAs. Core EPAs can be defined as EPAs that every graduate should be prepared to do. Training and summative entrustment for elective EPAs can be offered to trainees who develop faster than predicted and have the space and capacity to master additional, noncore EPAs. Offering elective EPAs is one way to respond to wishes of time-variability. Elective EPAs can, for example, be rare procedures, only trained and executed in specialized centers, offered to residents with a special interest.

If a curriculum focuses on the target of having trainees be ready for all core EPAs a half year before the end of training, then there is space for those who need more time, and training and qualification in elective EPAs can be offered to those who do not need more time. This requires flexibility[15,16] that not all jurisdictions can easily offer. Alternatively, elective EPAs are being used in Dutch postgraduate nursing training when a hospital offers training for employment in specific and restricted areas of care, without requiring full training in that specialty.[17,18]

Transdisciplinary and transprofessional EPAs

EPAs are generally designed for a program. That can be a general program, such as for undergraduate medical education,[13] for specific programs such as a pediatric ICU fellowship,[19] or even personalized, such as for physician assistant training.[20] However, EPAs do not need to apply to only one program or discipline, or even one health profession. Advanced trauma life support, for instance, can be regarded as an EPA for which several health care workers may be qualified, either as a core EPA in their program or as an elective EPA to be added.

Transdisciplinary EPAs (sometimes called 'common EPAs') apply to multiple disciplines, and transprofessional EPAs to multiple professions. The terminology originated during the comprehensive reorganization of postgraduate nursing education in the Netherlands in 2019–2022. This transition shifted from isolated educational programs to training focused on EPAs as foundational components (Figure 10.2). This shift aimed to create a more tailored career trajectory and to enhance responsiveness of the workforce to health care needs.[17] An example from this work is 'Providing care for adult patients with imminent risk for cardiac arrest' in the domain of emergency nursing. The national project offers a library of EPAs from which registered nurses can choose to advance their skills and meet their needs, all with appropriate restrictions and regulations.[18]

Figure 10.2 shows the example of the restructured Dutch postgraduate nursing programs, from fully parallel, siloed programs to a highly flexible model with hexagonal icons representing EPAs, which includes core EPAs and elective EPAs (darker and lighter hexagons, respectively), some of which are transdisciplinary (two-colored hexagons).

The WHO's practice activities

In 2022, the World Health Organization (WHO) launched a competency framework for non-medical-health professionals worldwide as a component of its universal health coverage aim[21], with a

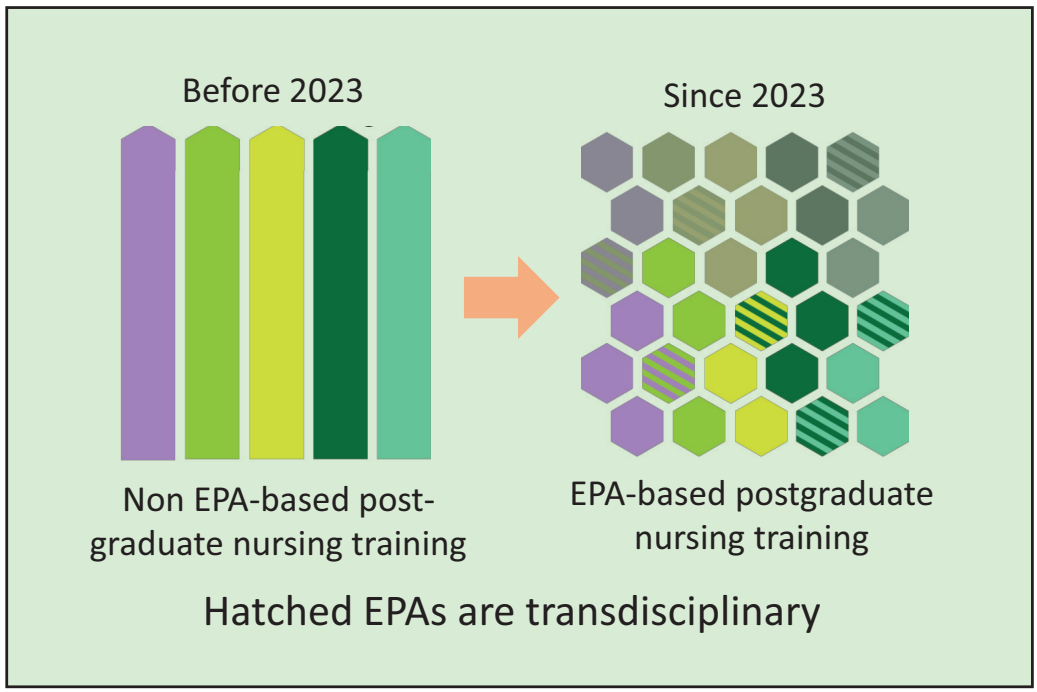

Figure 10.2: Transdisciplinary EPAs (graphics from the Dutch national CZO-Flex Level project).

competency model that has subsequently been adopted across the organization. The framework extensively elaborates on three key elements: KSAs, competencies, and the *practice activities* for which these are required. In principle, *practice activities* mirror and draw their inspiration from EPAs. However, to align with the language used by the International Labour Organization, a distinct terminology was adopted that reserves 'professional' for a narrower category of workers than the broad scope that the WHO's competency framework targets. Further, the framework offers a menu of different practice activities for the health and care team as a whole; they require specification to the occupational scope of practice, level of supervision (equivalent to the EPA scale), and context such as tools, specific health services, teams or language to be used for a specific curriculum.

Terminologies related to entrustment decision-making

EPAs derive their value from entrustment decision-making, i.e., the gradual transfer of responsibility to trainees for units of practice, either in the moment ('ad hoc') or summatively. Ad hoc decisions hold for the moment during daily practice in a teaching hospital. Summative decisions are more permanent; they require a serious evaluation of the trainee by an educational team or clinical competency committee, they must be grounded in sufficient observations, and they must follow the principles of programmatic assessment.[22] Summative entrustment decisions are not just decisions of trainee progress but deliberate decisions to entrust trainees with responsibilities they did not have before.

Retrospective versus prospective views on entrustment as assessment

In traditional approaches to assessment in education, what the student or trainee *has done* determines their score, be it in an examination or assignment or as observed performance, which

implies a retrospective evaluation. Entrustment decision-making evolves around estimation of readiness for future practice with less supervision, which is a prospective endeavor. Entrustment–supervision (ES) scales[23] focus on an estimated or recommended level of supervision for this trainee and this EPA. A retrospective ES scale reports how much help or supervision a trainee needed when observed; a prospective ES scale goes a step further and includes a recommended level of supervision for future cases.

Statement of awarded responsibility

A less frequently used but not unimportant concept is Statements of Awarded Responsibility (STARs).[24] A STAR is a formal acknowledgment that a trainee is ready *and* allowed to execute an EPA, basically autonomously but with distant supervision if still formally in training.[25] A STAR can be seen as a microcredential for an EPA after a summative entrustment decision; it has been suggested that they can be translated to digital badges.[26] STARs can populate a trainee's personal portfolio to reflect what they are qualified to do at any moment during training, and during practice after training.[27,28]

EPAs versus hospital privileges and microcredentials

EPAs for which trainees are qualified resemble the units of practice for which hospitals 'privilege' physicians, nurses, midwives, and other health professions. Privileges are the permissions granted to enter premises and provide clinical care in a hospital. Privileges can be determined by state laws or hospital accrediting bodies. They include admission and discharge of patients under a physician's name and allow physicians to perform specific procedures like surgery. Privileges must be awarded by the hospital where a health professional wants to practice. Privileging also regulates supervision of some health professions by others, as well as the supervision of trainees, often specified in levels of direct and indirect supervision, and the parallel with supervision levels for EPAs (or OPAs) is striking. See examples of 51 lists for various disciplines and professions at the University of California San Francisco Health System (https://medicalaffairs.ucsf.edu/privileges).

Microcredentials, embraced by the European Council to enhance flexible, life-long learning pathways,[29] are records of small-volume learning outcomes, assessed against transparent, well-defined criteria, to be offered in addition to diplomas. Norcini envisions microcredentials to be useful for the future of medical education[30] for specific areas of practice (also referred to as microcertifications or badges) and provides the example of a US university offering 215 microcredentials in licensure-related areas such as accounting, education, engineering, health care, and veterinary sciences, and references the American Board of Internal Medicine Foundation's Institute for Clinical Evaluation, which offers credentials in areas like electrocardiogram reading skills.[30] Microcredentialing aligns well with the concept of EPAs and may operationalize the permission to practice in new areas, after completion of postgraduate training.[31,32]

Summary

Table 10.1 summarizes the EPA-related concepts as discussed in this chapter.

Figure justifications

Figure 10.1 was adapted from ten Cate et al. 2015.[11] Figure 10.2 was derived from Dutch national CZO-Flex Level project (https://www.czoflexlevel.nl).

Table 10.1: EPA-related entrustment-related terminologies explained.

Concept	Definition	Example
EPAs	Entrustable professional activities are units of professional practice that can be entrusted to a trainee who has demonstrated to possess the competencies to execute the activity unsupervised	Run a diabetes clinic; perform an anesthesia induction
OPAs	Observable practice activities are specific, small observable activities, measured over time to inform entrustment decisions. They differ from EPAs in granularity and being less suitable for summative entrustment decisions	Manage ventilator changes in the ICU
Nested EPAs	Small EPAs to be entrusted to junior trainees (often up to the level of indirect supervision), to become part of a broader EPA at a later stage of training	Measure blood pressure, become part of a full physical examination, and then caring for patients on a unit
Core EPAs	EPAs that every graduate should be prepared to do for a given profession	Recommend and interpret common diagnostic and screening tests
Elective EPAs	EPAs offered to individuals who develop faster and have the capacity to master additional, noncore EPAs	Point of care ultrasound in family medicine
Transdisciplinary EPAs	EPAs that apply to multiple disciplines	Provide care for adult patients with imminent risk for cardiac arrest in emergency medicine, anesthesia, and intensive care medicine
Transprofessional EPAs	EPAs that apply to multiple professions	Colonoscopy by gastroenterologists and advanced nursing practitioners
WHO practice activities	Inspired by EPAs, activities for which knowledge, skills, and attitudes are required (launched by the World Health Organization)	Manage a vaccination program; coordinate transfer to another care environment
Retrospective ES scale	Scales that focus on how much support a trainee required during an observed performance	The trainee needed (a) show and tell (b) active help (c) passive help (d) no help ('supervision only')
Prospective ES scale	Scales that state how much supervision a trainee is recommended to receive in a future case	Based on my observations, I estimate that this trainee is ready (a) to only observe (b) to act with direct supervision (c) to act with indirect supervision (d) to act unsupervised, (e) to act as supervisor for juniors
STAR	Statement of awarded responsibility, a formal acknowledgment that a trainee is ready and allowed to execute an EPA autonomously while still formally under supervision	Attestation that a trainee is ready to provide postoperative care unsupervised (or any other EPA)
Hospital privileges	Permissions granted to provide clinical care in a hospital; akin to EPAs but determined by state laws or hospital accrediting bodies	Admission and discharge of patients, perform specific procedures like surgery
Microcredentials	Specific areas of practice entailing shorter educational experiences followed by assessments, aligned well with the concept of EPAs	Formalized acknowledgment for any core or elective EPA

Competing interests

The authors declare that they have no competing interests.

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