**TITLE:** Can we talk about trust? Exploring the relevance of "Entrustable Professional Activities" in dental education

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**Declining public trust in healthcare providers**

Trust is essential in healthcare: it fuels patient expectations and is a prerequisite for a health professional to partner with the patient and empower them to optimize their own health. Trust is the antidote to the power differential inherent in the patient-provider relationship. The patient must be

able to trust that the clinician is competent and committed to placing the patient's health above all else. The challenge—the public's trust in healthcare providers has declined dramatically in the past 50 years; approximately 75% of Americans in 1996 had great confidence in healthcare providers and in 2012 this has dropped to 34%.[1]

The lack of trust poses significant challenges to our profession, particularly as greater trust in healthcare professionals is associated with positive health outcomes: continuity of care, medication adherence, provider satisfaction, symptom improvement, and intention to follow prescribed care.[2,3] Overall, trustworthiness remains a critical element of person-centered care in dentistry[4,5]leading us to a series of critical questions. For example, how do we improve trust with patients to ensure optimal care?

First, we as health professionals must be worthy of their trust. Trustworthiness is multifaceted component of professional competence, and its development must be an explicit educational outcome of dental education, if we are to graduate effective health professionals. Second, as an outcome of the educational program, dental schools and their faculty must be trusted to deliver and assess overall competence and practice-readiness of our graduates, including technical skills, professional judgment, and trustworthiness. Third, we must consider how changes to healthcare environments (e.g., team-based care, value-based payments, and COVID-19) can impact how trust is fostered. Overall, trust in the health profession is a complex challenge that requires further discussion.

We argue a starting point can be to ask how confident we are that graduating learners are ready to practice without supervision. When dental faculty are asked, "Would you sit in your learner's chair?" there can be mixed feelings. Should we graduate learners for whom the answer is "no"? How do we ensure that our assessments of competency are predictive of future practice and that our assessments lead to the right decisions? If our perceptions of the competence and trustworthiness of our new graduates as oral healthcare providers can vary, what does that mean for patients? Moreover, what are the ramifications if other healthcare professionals lose trust in the dental profession?

To address these questions, we suggest examining how other professions navigate ensuring trust in learners to complete critical tasks related to the profession. The framework, known as

Entrustable Professional Activities (EPA), has become a cornerstone for assessment in medical education and an emerging standard in nursing, pharmacy, and veterinary education.[6-9] Dental education is in the early stages of exploring this promising model.[11,12]

**The EPA framework**

The EPA framework offers a bridge between competency frameworks and clinical practice.[10] To achieve this, EPAs are comprised of a series of clinical tasks learners are expected to perform. In this framework, each EPA statement is accompanied by a thorough description of the task, a list of the relevant knowledge, skills, and attitudes (KSAs), strategies to assess the skill, and when entrustment is expected to be reached throughout the curriculum. The EPA framework can also include milestones, which defined components of the EPA the learner should be able to perform, under a defined level of supervision during a specified time-period within their program. The goal is to have multiple, clearly defined assessments that accompany this framework to ensure entrustment decisions about a learner's ability is based on a series of cases and multiple measures instead of a singular instance.[6]

We argue the EPA framework offers a viable solution for garnering trust within the dental profession, especially if there was a national standard set of EPAs that the dental education system adopted.[11,12] Imagine an assessment structure instituted across schools that outlines specific expectations for learners upon graduation that is based upon the work that dentists do. This list of tasks may include "conduct a physical and oral examination adapted to the patient's situation" or "create, communicate, implement, and evaluation a plan of care". Each task on the list of EPAs outlines requirements to ensure readiness for practice.[6] The EPA framework has clear benefits: improving the quality of graduates, ensuring consistency across institutions, and affirming we can trust graduates with essential tasks of the profession.[13,14] An EPA framework developed in dental education with additional examples can be found elsewhere.[12]

You may wonder how this differs from our current approach. The Commission on Dental Accreditation (CODA) has outlined minimum standards and expectations for dental education

programs.[15] These structures, however, can be broad and difficult to assess consistently. In addition, some of the CODA standards function as competencies (e.g., person descriptors) and other are tasks (e.g., work descriptors). This duplicity in the use of the term "competency" creates challenges for assessment. We argue that some standards are functionally EPAs (e.g., Standard 2-24a) whereas others are more difficult to measure because they are a competency (e.g., professionalism, critical thinking)—this can lead to inconsistency and confusion. Schools can differ in their definitions and measures of "professionalism", "critical thinking", or "communication", simply because these are broad traits of the learner instead of discretely observable tasks.[16]

EPAs offer these observable tasks, thereby providing a tangible way to standardize the assessment of learners without replacing these expectations. In addition, research has shown that measuring competency through a single assessment, and/or without defining the level of supervision or help needed, is not necessarily predictive of workplace performance because an individual may appear "competent" but cannot perform the task effectively or independently.[17] Longitudinal assessments over time, using multiple measures, as well as multiple assessors can improve accuracy of assessment of competency and prediction of future performance. In addition, results from a systematic review showed current measurements of competency are often unreliable due to interdependency of competency domains.[18]

EPAs can offer a specific context to evaluate pertinent skill sets and greater consistency in assessment. For example, an EPA on conducting an oral examination requires knowledge (e.g., normal versus abnormal structures, indications of disease), skills (e.g., examination process, communication skills), and attitudes (e.g., humility, openness) that correspond—and can be mapped—to broad traits (e.g., competencies), such as professionalism. This can be visualized in Figure 1. EPA's also define the developmental stages, referred to as milestones, that must be achieved along the way to independent practice of these task. These milestones build to overall competency and, therefore, readiness for practice.

[*Insert Figure 1 here*]

The EPA framework does require a shift in assessment practices. To declare that a learner is ready to perform an EPA independently requires a holistic assessment process. This approach would use multiple workplace assessments across various contexts and time periods—the most important piece is an explicit assessment of the level of independence. In other words, did the learner require significant faculty intervention to complete a task or was the learner able to perform it without assistance.[19] This evaluation of independence requires the faculty member to decide to what extent the learner performed the task at this moment in time and is documented as part of the assessment. A committee of individuals should then review the collection of assessments to make summative entrustment decisions about the learner.[20]

**The movement towards EPAs**

We urge the profession to explore the EPA framework as a strategy to generate trust among ourselves, other professions, and our patients. The future of the profession is predicated on demonstrating value as a primary care discipline and will require generating trust. We suggest starting within the profession and our emerging practitioners. Trust in the graduate is an approach that leverages collaboration between dental education and the dental profession.

Moreover, a movement towards an EPA framework has expansive benefits. The shift in assessment allows us to evaluate a learners' readiness to perform essential workplace activities as opposed to an evaluation of individual competencies (e.g., person descriptors).[21] Assessment practices in dental education have been handicapped by a philosophy that has largely focused on numerical procedural requirements and quantitative scoring systems based on objective criteria, instead of an assessment of students' readiness for independent practice. These assessments may be overly reliant on quantitative measures rather than qualitative judgement and collective experience of the faculty who directly observe the trainee over time.[22] This can promote a climate of fear around assessment—learners are often too focused on grades, handicapping their growth towards competence.[23] Individual faculty also may avoid accurate high-stakes assessments especially if this means a negative outcome for the student and possible personal repercussions to the faculty. By introducing language that

involves trust, we can shift the conversation away from "assessment and control" [21] to a more authentic evaluation of what is needed in the workplace to render safe patient care.[21]

A more holistic approach that is growth-oriented supports learning especially when learners know their skills will be tracked over time, and formative feedback provided, and progression-decisions will not rely exclusively on one assessment. Another potential benefit is for residency directors and practitioners who hire new graduates. If all dental schools utilized a common framework for assessment of competency that is qualitative, tangible, and relevant to the workplace setting, this would help establish a common ground upon which to evaluate future residents or employees. Furthermore, directors and practitioners can be confident that new graduates can perform critical tasks independently, as this is explicitly assessed.

In summary, the EPA approach is synergistic with the current systems in dentistry and can be applied to contexts beyond predoctoral dental education. In medicine, the EPA framework originated in graduate medical education to ensure residents graduate with essential skills unique to their specialty—each advanced dental education program could seek a similar approach. Others are exploring how EPAs can outline core tasks to support research, leadership, and interprofessional care. EPAs are becoming a critical framework across the healthcare professions and health professions education. Furthermore, the EPA model is responsive to accommodating population health needs and changes in competencies over time.[24]

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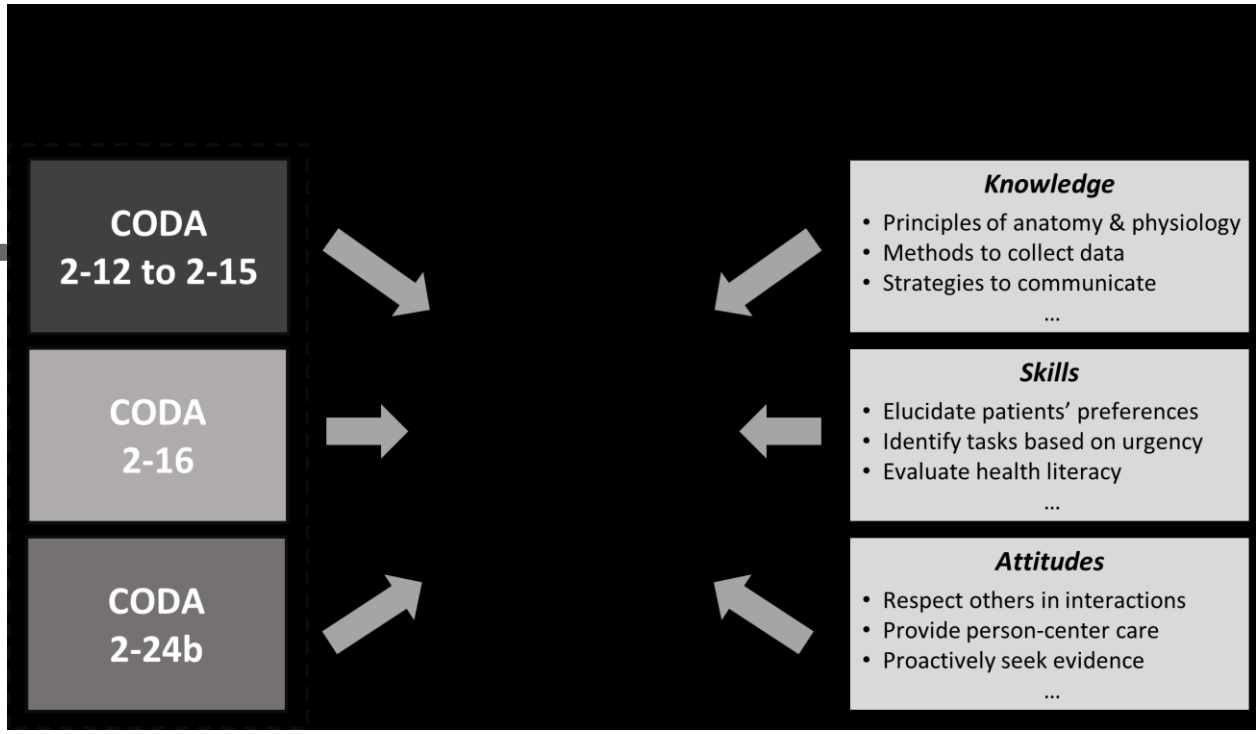


**Figure 1.** Sample relationship of EPAs to CODA and KSAs