Why education reform needs to be linked to faculty promotion and accreditation

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During this session we will discuss:

- Faculty promotion as it has evolved to include many types of scholarship
- What CEPAER is and its importance to accreditation and residency applications
- Relationship of CEPAER to educational reform, scholarship, and promotion



Academic medical centers have a tripartite mission to provide patient care, research and education

Pressures of clinical enterprise pushed new management

- Mission–Based Budgeting (MBB) grew out of budget crises
- Relative value units: RVUs for clinical work in academic medical centers
- Educational value units*: EVUs for education–related contributions, with increased recognition of the value of faculty development and education research

*See Regan et al.

Evolution of faculty promotion systems

- Importance of clinicians and educators
- Recognize each mission area equally
- Recognize scholarship beyond basic researchers' scholarship of discovery
- Focus on rigor, originality, significance of scholarship, regardless of area

Examples of Areas of Scholarship*

- Theoretical
- Basic experimental
- Clinical investigation
- Translational inquiry
- Educational activity, faculty development
- Public service activity
- Clinical practice improvement
- Integration or application

*See Feder et al. Evidence-Based Appointment and Promotion

Why Broaden Types of Scholarship?

- Retention of talented clinical faculty critical to academic medical centers
  - E.g., 50% clinical time means at least 50% less time to engage in basic research, need to have equitable promotion criteria
- Growing importance of quality improvement research, collaborative research, and translational research

Promotion in Translational Science

- By 2012, 1/3 of 60 major institutions with NIH CTSA Awards had changed promotion criteria to highlight the critical importance of team science in the advancement of scientific knowledge.*
- Universities are developing explicit criteria to evaluate team science and to document individual contributions in the collaboration.
- Guidance must be provided to peer reviewers and collaborators on evaluation of criteria

*Internal Tufts memo by Dr. Karen Freund, "Role of Team Science in Academic Appointment and Promotion", Sept 2012

Promotion in Education

- Recognition that Education as key mission was getting lost, need ways to acknowledge
- Evolution of "Clinician Educator Portfolios"
  - Documentation of all activities
  - Contributions to local, regional, national
- Educator "Academies" to foster excellence, provide support, promote innovation
  - Inclusive versus exclusive
  - AAMC Academies Collaborative
  - AMEE Academy of Medical Educators

Let's move to curriculum reform, CEPAER, and its connection to faculty promotion

Goal of medical education is to produce the next generation of competent, caring, independent practitioners to serve the public

Is there a gap between what you expect on day 1 of residency and a graduating student's actual performance?

“Every system is perfectly designed to get the results it gets”

~ Paul Bataldan, MD

"Core EPAs" are intended to lessen the "gap"

- "**C**ore **E**ntrustable **P**rofessional **A**ctivities (EPAs) for **E**ntering **R**esidency" as defined by the ACGME (Accreditation Council for Graduate Medical Education)
- Core EPAs common across specialties, with additional EPAs by specialty

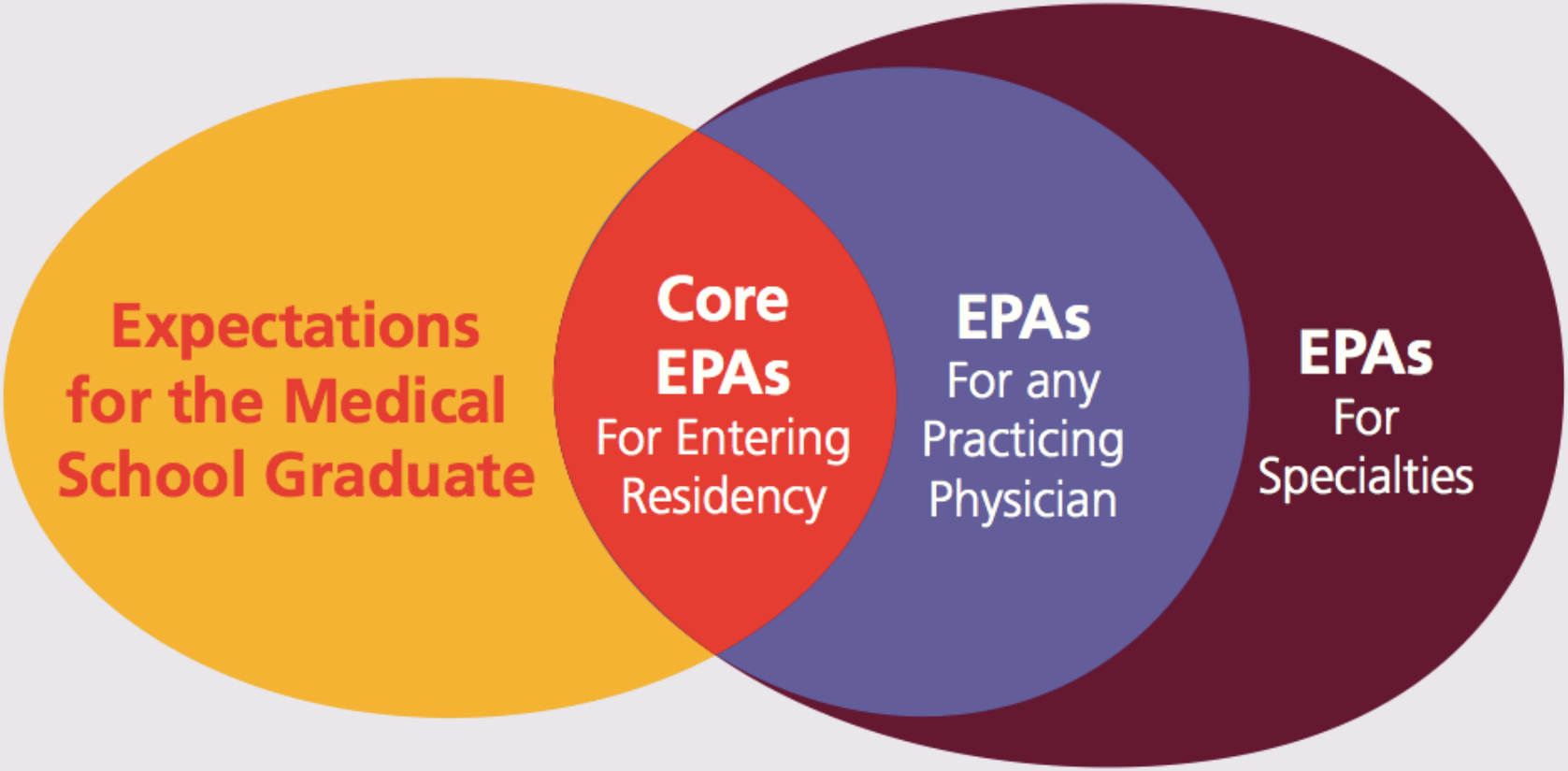


Figure 1. The relationships among the Core EPAs for Entering Residency to a medical school's graduation requirements, the EPAs for any physician, and specialty-specific EPAs

From AAMC Core EPAs for Entering Residency Curriculum Guide p. 4

Importance of **CEPAER**?

- Currently, 10 schools, selected by AAMC (Association of American Medical Colleges), are piloting the implementation of CEPAER
- Meanwhile, many other schools are implementing CEPAER on their own in anticipation of the future accreditation requirement
- International residents not meeting CEPAER will be at a major disadvantage vs. other residents
- Will eventually impact ECFMG Certification that requires accreditation of medical schools by 2023

What is the definition of EPA?

- **Entrustable Professional Activity (EPA)**:
  a discrete clinical activity that requires the use and integration of various competencies that typically involves some patient risk
- A supervisor must assess the learner's skills and allocate the level of responsibility that corresponds to the level of trust (entrustment) in the learner's performance—are you ***able to trust*** the learner to perform on their own?
- Example: Prioritize a differential diagnosis

Definitions continued

1. **Competent:** describes a global, general impression of the adequacy of KSA to practice independently
2. **Domain of Competence**: an aspect or category of competencies
3. **Competency:** a specific area of performance that can be described and measured
4. **Milestone:** a point along a continuum of progress while attaining a competency, usually specialty specific, often with formative assessment

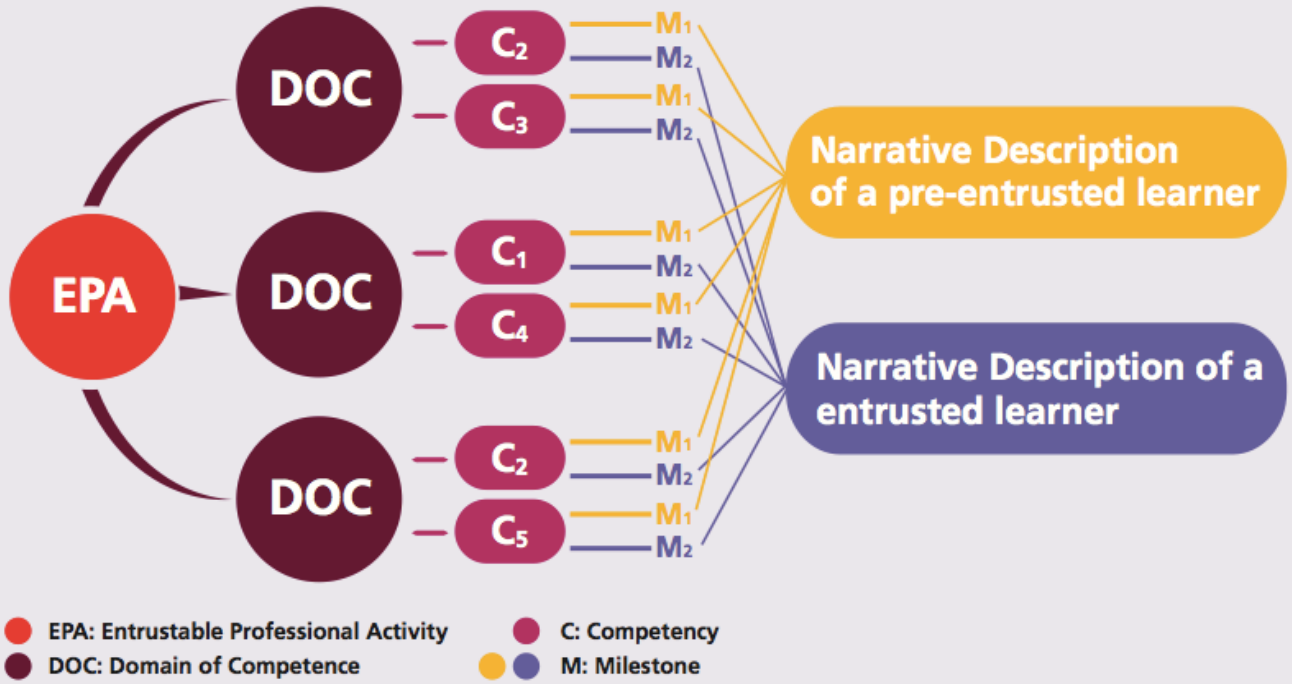


Figure 2. EPAs require the integration of competencies, usually from two or more domains. For each competency, then, milestones can be devised and then synthesized into descriptive narratives of expected behaviors for learners at pre-entrustable and entrustable levels of performance.

From AAMC Core EPAs for Entering Residency Curriculum Guide p. 5

Table 1. Comparison of the Benefits and Disadvantages of the Two Conceptual Frameworks Considered: Competencies and EPAs

	EPAs	Competencies
Benefits	• EPAs are "activities," which make sense to faculty, trainees, and the public • Represent the day-to-day work of the professional • Situate competencies and milestones in the clinical context in which we live • Make assessment more practical by clustering milestones into meaningful activities • Explicitly add the notions of trust and supervision into the assessment equation	• Competencies have been the basis for assessment in the GME space for a decade • In the aggregate, define the "good physician" • Have a reasonable body of evidence around assessment of the "traditional" domains (medical knowledge and patient care) • Have been used for establishing or developing milestones of performance for at least the GME years
Disadvantages	• Were relatively recently introduced in the literature • Have had little operationalization worldwide • Were designed originally for the residency-to-practice transition	• Are abstract • Are granular and therefore often not the way we think about or observe learners

From AAMC Core EPAs for Entering Residency Curriculum Guide p 9

EPA 3: Recommend and interpret common diagnostic and screening tests

Description of the activity	This EPA describes the essential ability of the day 1 resident to select and interpret common diagnostic and screening tests* using evidence-based and cost-effective principles as one approaches a patient in any setting.

Example

Functions

- Recommend first-line, cost-effective diagnostic evaluation for a patient with an acute or chronic common disorder or as part of routine health maintenance.
- Provide a rationale for the decision to order the test.
- Incorporate cost awareness and principles of cost-effectiveness and pre-test/post-test probability in developing diagnostic plans.
- Interpret the results of basic diagnostic studies (both lab and imaging); know common lab values (e.g., electrolytes).
- Understand the implications and urgency of an abnormal result and seek assistance for interpretation as needed.
- Elicit and take into account patient preferences in making recommendations.

***Common diagnostic and screening tests include the following:**

Plasma/serum/blood studies:

Arterial blood gases	Culture and sensitivity	HIV antibodies
Bilirubin	Electrolytes	HIV viral load
Cardiac enzymes	Glucose	Lipoproteins
Coagulation studies	Hepatic proteins	Renal function tests
CBC	HgbA1c	RPR

From AAMC Core EPAs for Entering Residency Curriculum Guide p. 19

What's the value of EPAs?

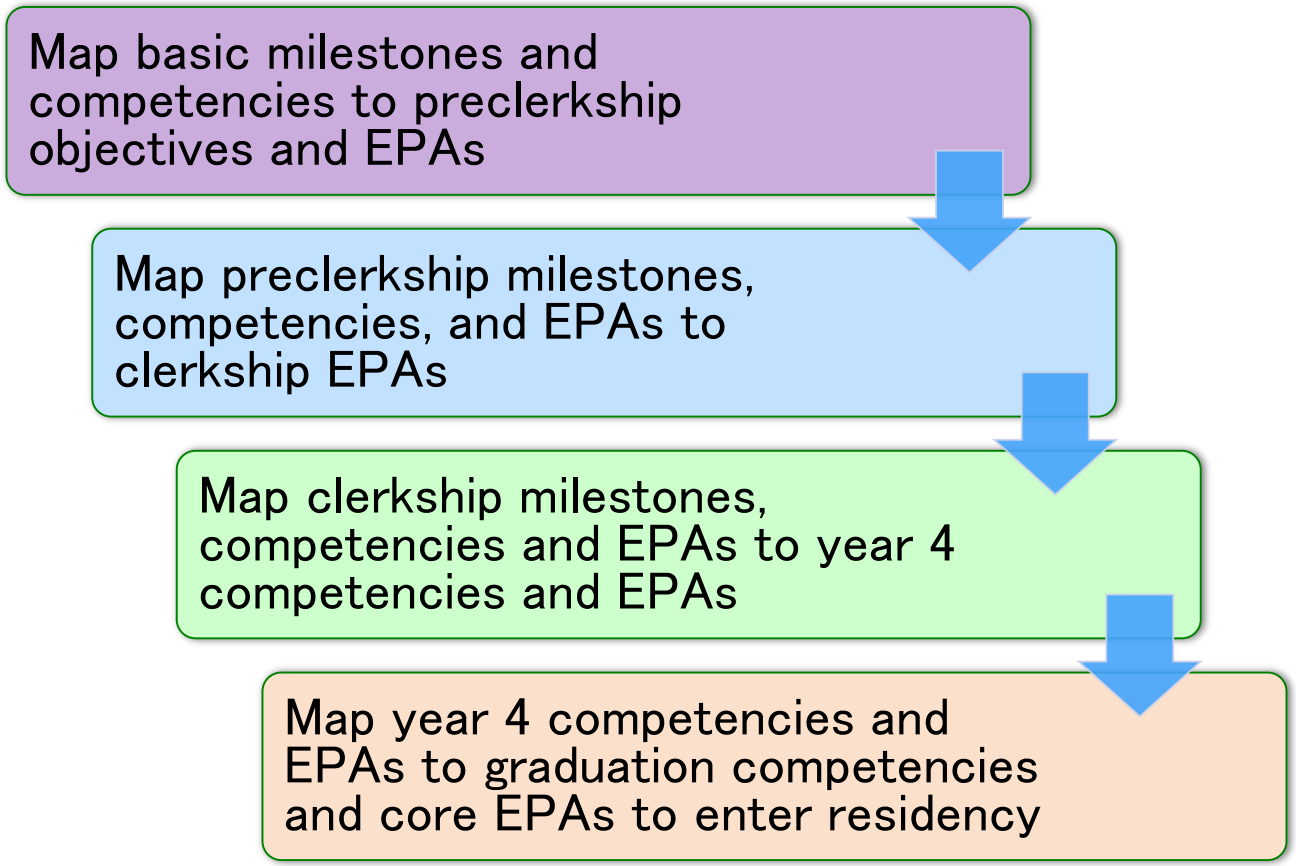
- Increased patient safety
- Residency programs will need less remediation in orientation "boot camps"
- Residents confident to participate in care from day one, and can be more active in tracking competencies each year
- Residency EPAs enable programs to be confident for graduates to enter practice
- Residents will be comparable to other medical school graduates

Identifying EPA's to implement

- Can use USA, Canada, other published EPAs as an initial working document
- Focus group of residents and faculty
  e.g., information gathering
- Curricular mapping within program
- Expert consultation
- Review by program directors and faculty
- Review by medical educators
- Review by international educators

From Chen et al. Developing Entrustable Professional Activities for Entry into Clerkship. Acad Med 2016;91:247–255.

Mapping student EPA's



Adapted from Chen et al. Developing Entrustable Professional Activities for Entry into Clerkship. Acad Med 2016;91:247–255.

Mapping EPA's for Residents

Map basic milestones and competencies of residents to program objectives

Map above milestones, competencies, and program objectives to your EPAs (as agreed upon from prior work)

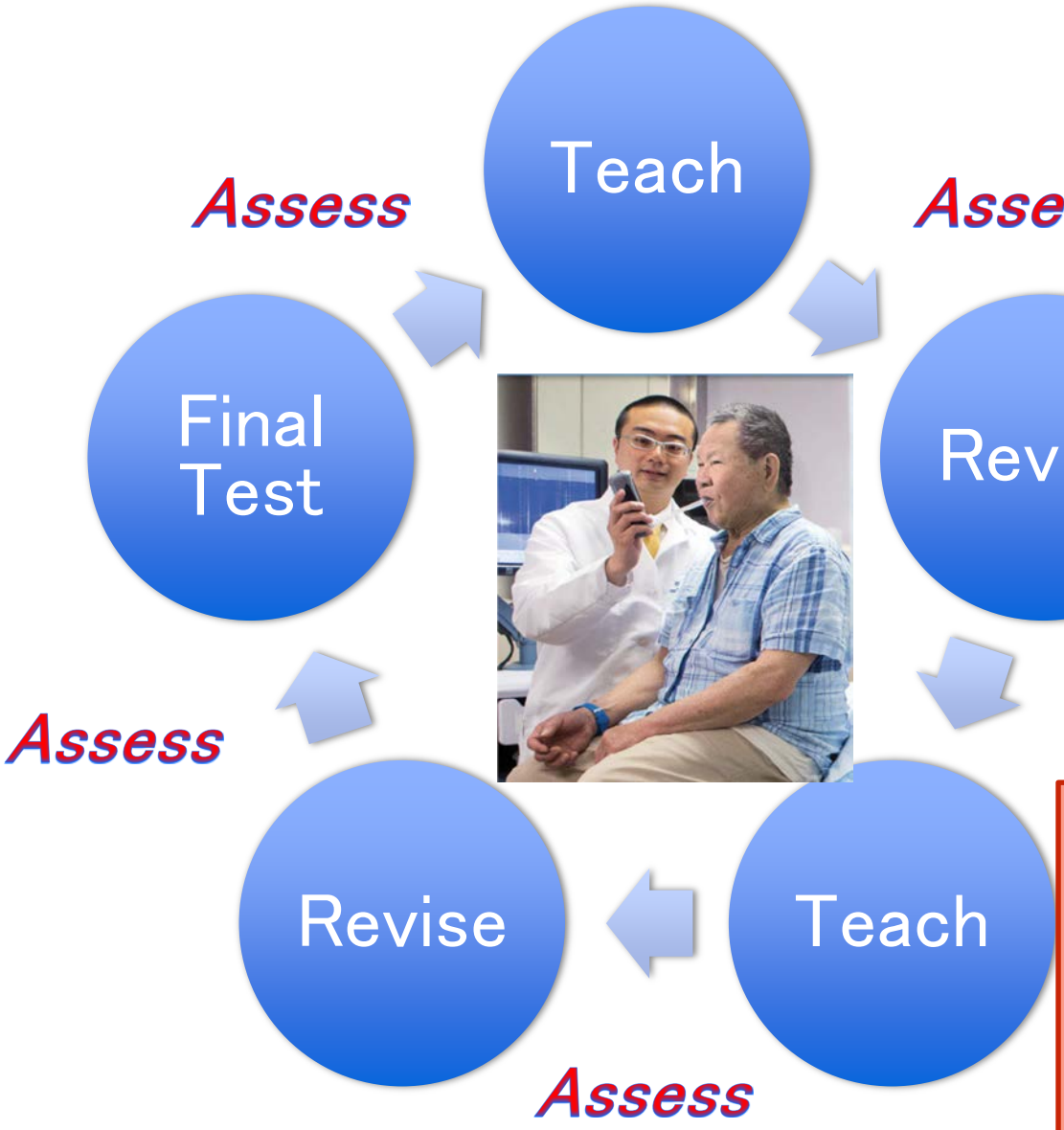
Map your EPAs back to published EPAs in USA, Canada, and other countries where you send residents

Adapted from Chen et al. Developing Entrustable Professional Activities for Entry into Clerkship. Acad Med 2016;91:247–255.

What is the importance of mapping EPAs?

- Mapping will aid in curriculum design and assessment that will provide evidence of comparability and quality

- That evidence will assist in the accreditation of your program necessary for your graduates to obtain ECFMG certification when applying for USA, Canadian and other residencies



Collect and use data to improve teaching

Program vs. National data

- Longitudinal data, iterative CQI
- Comparisons across programs (national view)
- Institutional/national decision making and policy
- Where to invest
- What interventions are most effective (institutional view)
- Track patient outcomes

Back to Faculty Promotion

- Changing training programs to include competencies and EPAs, with the ensuing major changes in assessment, data collection and analysis, is very hard work
- This work needs to be the major focus of a core of faculty with support from the school
- That work is recognized by associations and accreditation
- That work must be recognized through institutional promotion

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“We are what we repeatedly do. Excellence, then, is not an act, but a habit.”

~ Aristotle

Thank you

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