Entrustable Professional Activities (EPAs) for the Assessment of Early Medical Students

H. Carrie Chen MD MSEd[1], Margaret McNamara MD[1], Arianne Teherani PhD[1], Patricia O'Sullivan EdD[1], and Olle ten Cate PhD[2]

[1]University of California San Francisco School of Medicine; [2]University Medical Center Utrecht, Netherlands

University of California San Francisco

Purpose

- To describe the development and ensuring content validation of UME entrustable professional activities (EPAs) for the transition to clerkship

Background: Problem

- An increasing emphasis on early clinical experiences
- Preceptors continue to face challenges
  - Integrating pre-clerkship medical students into practices
  - Assessing students via competency frameworks
- Framing of competencies in context of workplace activities such as EPAs gives
  - More explicit guidance for student roles/ activities
  - Better alignment with how preceptors assess performance

Background: EPAs

- EPAs are:
  - Essential professional tasks entrusted to qualified learners
  - Observable and measurable
  - Lead to recognized output suitable for specific entrustment decisions
  - Require integration of specific knowledge, skills, attitudes
  - Reflects important competencies

Supervision scale used in EPAs

Level 1 – may observe; not allowed to practice activity
Level 2 – may practice under proactive full supervision
Level 3 – may practice under reactive supervision
Level 4 – may practice unsupervised
Level 5 – may supervise activity

- Approach to developing EPAs for entry into clerkships
  - Defined supervision level at Level 3: what would one trust a student to do alone in room with patient with supervisor outside room
  - Narrowed EPAs to smaller scope
  - Included full EPA descriptions beyond titles, to clarify limits and parameters to suit junior student
  - Collected validity evidence for construct and content representation*

*Linn RL. The standards for educational and psychological testing: Guidance in test development. In: American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. Standards for educational and psychological testing. Washington, DC: American Educational Research Association; 1999. p 27-38.

Methods: Five Phase Process

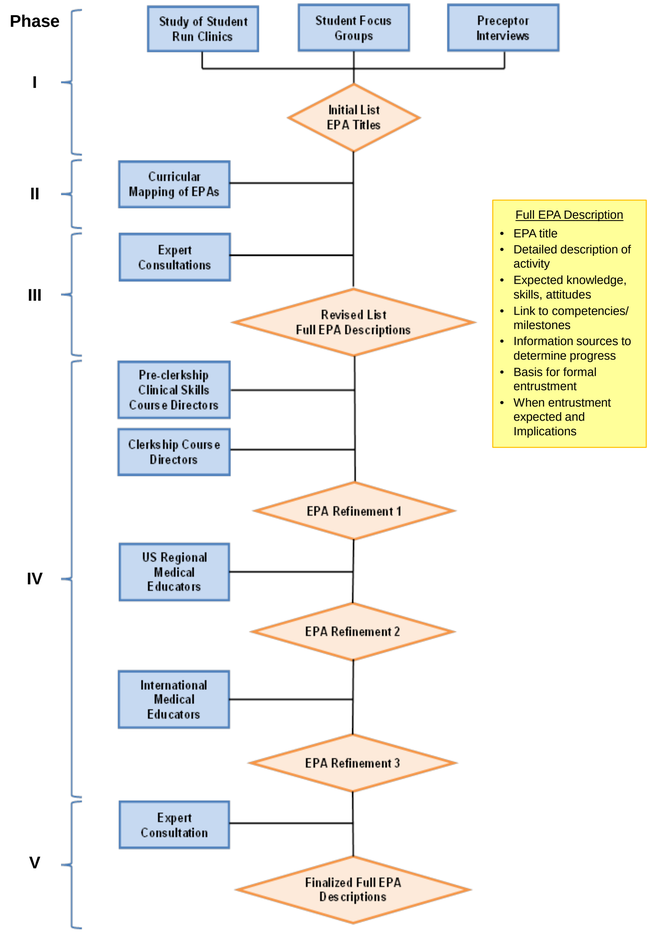
I. Identification of EPAs
- Determined student capabilities using 3 data sources
  - Study on student activities in our student-run clinics
  - Focus groups with pre-clerkship and clerkship students
  - Semi-structured interviews with pre-clerkship preceptors
- Triangulated data to develop list of EPA domains/ titles

II. Curricular Confirmation
- Mapped EPA domains to institutional expectations
  - Pre-clerkship curriculum objectives
  - Pre-clerkship clinical skills course competencies
  - School's graduation competencies
- Mapped for alignment to GME EPAs
  - AAMC EPAs for core entry into residency (CEPAER)
  - ABP EPAs for end of pediatric residency training
  - AAIM EPAs for end of internal medicine residency training

III. EPA Description & Expert Consultation
- Adjusted EPA domains/ titles based on curricular mapping
- Developed full EPA descriptions for each domain/ title
  - Using iterative process
  - In consultation with EPA expert (O ten Cate)

IV. Additional Evidence of Content Validity
- Collected via workshops
  - Pre-clerkship clinical skills course directors
  - Clerkship course directors
  - Regional medical education conference in US
  - International medical education conference in Canada with educators from US, Canada, Europe, and Asia
- Asked workshop participants
  - If descriptions too limiting or not limiting enough
  - If missing EPAs
- Refined EPAs using workshop feedback

V. Finalization With Expert Review
- Obtained feedback from expert consultant
- Edited language to focus on activity vs student
- Final EPAs sent back to pre-clerkship and clerkship course directors who approved titles and descriptions without additional edits



Results: Proposed Pre-Clerkship EPAs

- Gather information (via history and physical exam) from a medically stable patient with a common chief complaint
- Integrate information gathered about a patient to construct a reasoned and prioritized differential diagnosis as well as a preliminary plan for common chief complaints
- Communicate information relevant to a patient's care with other members of the health care team
- Share information about the patient's care, including diagnosis and management plan, with a patient in no significant physical or emotional distress
- Provide the health care team with resources to improve an individual patient's care or collective patient care

Discussion/ Conclusion

- Workshop participants
  - Agreed on level of supervision and tailored content accordingly
  - Able to come to consensus on expectations
    - Reasonable agreement despite greater variation among international schools
  - Recommended adding EPA for common procedures (not adopted for local institutional reasons)
- Workshop approach to content validation allowed rich discussion and fine tuning of EPA content
- EPA development and validation process
  - Promoted discussion between pre-clerkship and clerkship faculty
  - Created consensus on expectations for entry into clerkship
  - Generated valuable conversations about student engagement in authentic workplace activities and contributions to patient care
- Next steps
  - Finalized EPAs implemented Fall 2014
  - Additional validity evidence from use in student assessment

Acknowledgements

- UCSF pre-clerkship and clerkship course directors
- Workshop participants
  - 2014 Western Group on Educational Affairs Annual Meeting in Honolulu, Hawaii
  - 2014 Ottawa Conference in Ottawa, Canada

Work on this project was supported in part by the UCSF Academy of Medical Educators