Informing Entrustment Decisions: Designing Assessment Reports For Competence Committees Using Messick's Validity Framework

AUTHOR(S):
- Ryan Luther, University of Toronto, Canada (Presenter)
- Rodrigo Cavalcanti, University of Toronto, Canada
- Sylvia Heeneman, Maastricht University, Netherlands

ABSTRACT

Background: Assessment models for training doctors are transitioning toward competency-based medical education (CBME). In the Canadian context, entrustable professional activities (EPAs) were created to operationalize CanMEDS roles. EPAs are assessed through instruments which produce both quantitative and qualitative data. Entrustment decisions in CBME require group decision making by clinical competence committees (CCCs). However, the volume of raw assessment data may be too great for committees to review in its entirety for each entrustment decision. To facilitate interpretation, data must be collated, analyzed, and displayed in reports that facilitate decision-making. This study seeks to understand how assessment data can be reported to support CCCs in making valid entrustment decisions.

Summary of Work: Using a design-based research methodology, template assessment reports were developed using Messick's validity framework. Mock reports were created to represent well-performing, borderline, and poorly-performing residents. Through semi-structured individual interviews, reports were presented to 10 competence committee members from 2 training programs at the University of Toronto. Interviews sought to understand how CCC members interact with reports and identify which elements are used to support valid entrustment decisions. Data were analyzed using a framework analysis, using Messick’s validity framework as a guide.

Summary of Results: Template assessment reports designed using Messick's validity framework provide CCC members with evidence to support entrustment decisions. While analysis is ongoing, data from 2 interviews indicates that CCC members rely on contextual information to support entrustment decisions. They also ensure narrative comments are congruent with numerical scores. Detailed analyses from the complete dataset will be presented to provide insights into how CCC members interpret validity evidence and help inform design of more user-friendly and valid reports.

Discussion and Conclusions: Results from this study will be used to inform development of assessment reports and expand its use in other clinical training programs. Interview data will also contribute to understanding of how CCCs use validity evidence to support entrustment decisions.

Take-home Messages: The expanding volume of assessment data in CBME requires programs to aggregate data to support decision-making. It is important that aggregated reports provide adequate validity evidence, to optimize the quality of decisions.
Using Entrustable Professional Activities (EPA) in Emergency Medicine

AUTHOR(S):
- Michele Gawlinski, The University of Western Australia, Australia (Presenter)
- Ian Dey, South Metropolitan Health Service Fiona Stanley Hospital, Australia
- Greg Sweetman, South Metropolitan Health Service Fiona Stanley Hospital, Australia
- Erin Furness, South Metropolitan Health Service Fiona Stanley Fremantle Hospitals Group, Australia
- Denese Playford, The University of Western Australia, Australia

ABSTRACT

Background: Entrustable Professional Activities (EPA) describe units of clinical activity. Their value as descriptors of clinical care has gained widespread commitment across a range of medical specialties. EPA have been explicitly linked to competency frameworks. However there is considerably less information on outcomes associated with EPA as a form of work-based assessment. This study outlines preliminary findings for EPA assessment of trainees in Emergency Medicine. It tracks entrustment decisions from the first to fourth postgraduate year (PGY1-4), associating EPA scores from registrars and consultants across the EPA domains originally described in 2014 as those required for day one of residency.

Summary of Work: The EPA form was developed in consultation with Emergency Medicine clinical staff. Twelve core EPAs were selected and five entrustment levels identified as appropriate to the EM context, as guided by the work reported in the Association of American Medical Colleges documentation. 32 matched pairs of registrar and consultant data for the same trainee were obtained over one calendar year. Individual and total EPA scores were obtained for a total of 64 assessments.

Summary of Results: There was a significant increase in total EPA score from PGY1 to PGY4 (F=11.228, p<0.000). Each EPA domain developed at different rates over time, with relatively few being scored as ‘able to perform without supervision’ in PGY1. Assessments by registrars and consultant entrustment decisions were positively correlated (r = 0.4.06, p =0.023); there was no significant difference between their scores (t=0.237, p = 0.814); and descriptive comments provided useful behavioural comment tags for entrustment decisions.

Discussion and Conclusions: EPA scores increased with postgraduate year, with very few EPAs given total entrustment in PGY1 and some still in development by PGY3. These data provide insight into appropriate expectations at the commencement of clinical practice for Australian interns, and provide valuable training information.

Take-home Messages: Trainees demonstrate individual EPAs at different rates over time and relatively few EPAs were given total entrustment at day one of residency. Entrustment scores were consistent between registrar and consultant assessors, who also provided concordant behavioural tags for their decisions.
Formative Assessment and Coaching for 3 Core EPAs in an Internal Medicine Sub-Internship

AUTHOR(S):
- Eric Hsieh, Keck School of Medicine of USC, USA (Presenter)
- Sonia Lin, Keck School of Medicine of USC, USA
- Alan Liu, Keck School of Medicine of USC, USA
- Win May, Keck School of Medicine of USC, USA

ABSTRACT

Background: Graduate medical education (GME) programs use Entrustable Professional Activities (EPA) as a basis for competency-based assessment. Undergraduate medical education programs are beginning to use them to align with GME outcomes. Formative assessment in the EPAs and coaching can prepare learners to achieve the EPAs prior to graduation. The EPAs chosen are from the Core EPAS for entering residency. They are: 1. Gather a history and perform a physical examination (H&P) 2. Prioritize a differential diagnosis following a clinical encounter 3. Provide an oral presentation of a clinical encounter 4. Give or receive a patient handover to transition care responsibility. Providing a safe environment for learners to implement these EPAs, can increase competence and confidence of the learners, enhance patient safety, and increase residency program directors’ confidence in new interns.

Summary of Work: A 3 station Subinternship Objective Structured Clinical Examination will occur at USC and Loma Linda University. At station 1, learners will conduct a patient H&P and counsel patients. At Station 2, learners input the H&P electronically and speak to a “standardized” nurse about a cross coverage patient. At Station 3, learners present the case to an attending physician, including their differential diagnoses and treatment plan. Attendings dialogue with learners regarding clinical reasoning. Learners then “hand-off” the patient using the IPASS format and are evaluated.

Summary of Results: Learners receive extensive feedback and coaching from the faculty in Station 3 on three of the afore-mentioned EPAs - oral presentation skills, clinical reasoning and hand-off. Focus group discussions with students have demonstrated high ratings 4.85 (5 point Likert Scale) for this exercise and usefulness for GME.

Discussion and Conclusions: The busy environment of clinical care makes it difficult to assess EPAs for trainees in medical school. Adoption of EPAs by the ACGME as a standard for assessing trainees is crucial for a situation to be in place to assess a trainees EPA readiness. Our program institutes a formative way for this to occur that provides feedback via faculty to student interaction.

Take-home Messages: EPAs are important for entrustment decisions. Assessment of learner’s progress in achievement of EPAs through faculty-student interaction in a standardized setting provides information for determining readiness for graduation.
#8II - Posters - Curriculum: Entrustable Professional Activities (EPAs)

8II04 (3033)

WITHDRAWN
#8II - Posters - Curriculum: Entrustable Professional Activities (EPAs)

8II05 (560)

Date of Presentation: Tuesday, 27 August 2019

Time of Session: 1400-1530

Location of Presentation: Hall/Foyer F, Level 0

Evidence-based Competency in OSCE: An Analysis of the Relation between Entrustable Professional Activities Scale and OSCE Assessments

AUTHOR(S):

- Chih-Ming Hsu, Chiayi Chang Gung Memorial Hospital, Chang Gung Medical Education Research Centre (CG-MERC), Taiwan (Presenter)
- Chih-Cheng Hsieh, Chiayi Chang Gung Memorial Hospital, Taiwan
- Cheng-Ting Hsiao, Chiayi Chang Gung Memorial Hospital, Taiwan

ABSTRACT

Background: Medical knowledge evolves rapidly. Providing optimal medical care, healthcare professionals should integrate the latest scientific evidence and patient values with professional knowledge. Solving clinical problems with evidence-based medicine (EBM) is a key theme in medicine. Therefore, training and evaluating medical students' ability to apply evidence-based medicine is an important objective.

Summary of Work: Five experts developed the EBM OSCE, comprising five stations, of which two were unscored. Scored stations were: (1) medical history performance/PICO, (2) literature search/evaluation ability, (3) explanation of condition by literature. Fifteen PGYs participated (n=45 stations). Pearson's Correlation examined associations between OSCE checklist, global rating, and Entrustable Professional Activities (EPAs).

Summary of Results: The correlations among the three assessments were moderately/highly correlated: medical history performance and PICO establishment ($r=0.722^*/0.540^*/0.561^*$), literature search and evaluation ability ($r=0.915^*/0.941^*/0.899^*$) explanation of condition by literature ($r=0.883^*/0.879^*/0.909^*$). Three types of questions reached significance, which means the EPAs Scale of the EBM shows the same results as the OSCE.

Discussion and Conclusions: The OSCE checklist assessed two concepts: EBM and consultation skills. This might have confused evaluators administering the EPAs scale, confounding the EPAs scale-OSCE assessment relationship. Overall, the EPAs scale is comparable to an OSCE, given the intense preparation for OSCE, EPAs scale is a more accessible and convenient evaluation method.

Take-home Messages: EPAs Scale is a fast and easy way for clinical teachers to assess trainees' competency in evidence-based medicine when there is insufficient time for an OSCE. The scope of application for an EPAs scale in teaching can be further explored in the future.
Formative assessment with the entrustability scale in a postgraduate resident objective structured clinical exam

AUTHOR(S):
- Kuei Ting Tung, Far Eastern Memorial Hospital, Taiwan (Presenter)
- Wei Horng Jean, Far Eastern Memorial Hospital, Taiwan
- Huey Ling Chen, National Taiwan University Hospital, Taiwan
- Chih-Wei Yang, National Taiwan University Hospital, Taiwan
- Pei-Chun Lin, Far Eastern Memorial Hospital, Taiwan
- Yun Chen, Far Eastern Memorial Hospital, Taiwan

ABSTRACT

Background: The objective structure clinical exam (OSCE) has been widely applied for assessment of postgraduate training. Whilst checklist scores and global ratings are useful for summative assessment, their value for formative assessment and feedback in competency-based education are more limited. Increasingly, “entrustability scales” have been utilized to reflect a judgment of competence and progress that is clinical meaningful to both raters and trainees. We hypothesize that incorporating an entrustability scale would be more objective than the global rating and improve feedback.

Summary of Work: Forty-two first year postgraduate general medicine residents participated in an end-of-year OSCE. Two separate OSCEs were held, each consisting of five long stations (12 minutes) from different specialties assessing clinical skills. For each exam, two separate faculty raters assessed the residents with checklist scores. They were further assessed with either a global rating (Likert scale 1-5) or a modified entrustability scale (Score 1-5, level of supervision). The inter-rater reliability of these scores was analyzed with intra-class correlation (ICC). Raters were surveyed on their satisfaction with the global rating or entrustability scale.

Summary of Results: Entrustability scale scores were lowest in pediatric and obstetrics/gynecology exams, with average scores from 2 (proactive supervision with assistance when needed) to 3 (supervisor immediately available). Although variable, inter-rater reliability of the entrustability scale (ICC 0.995) was comparable to checklist scores (ICC -0.031-0.943) and global ratings (ICC -0.04-0.93). Good reliability (ICC >0.6) was found on half of the exams. When raters were surveyed comparing the entrustability scale to global rating, the entrustability scale was found to be more objective, easier to rate, better reflecting the checklist score, more useful to differentiate resident proficiency and more useful for feedback.

Discussion and Conclusions: The entrustability scale is useful measure of physician competence, is an objective measure and can be incorporated into the OSCE to assess postgraduate residents and provide feedback. Inter-rater reliability varied greatly, likely reflecting the need for further faculty training.

Take-home Messages: Entrustability scales reflect whether a postgraduate resident can perform important clinical skills independently. Incorporating this measurement into the OSCE if valuable for assessment and feedback.
# 8II - Posters - Curriculum: Entrustable Professional Activities (EPAs)

8II07 (1384)

**Date of Presentation:** Tuesday, 27 August 2019  
**Time of Session:** 1400-1530  
**Location of Presentation:** Hall/Foyer F, Level 0

The integration of on-line workplace assessment with entrustability scale to evaluate the milestones in ENT residents

**AUTHOR(S):**
- Chia-Der Lin, China Medical University & Hospital, Taiwan (Presenter)  
- Po-Chang Wu, China Medical University & Hospital, Taiwan  
- Xiao-Juan Lin, China Medical University & Hospital, Taiwan  
- Fremen Chih-Chen Chou, China Medical University & Hospital, Taiwan

**ABSTRACT**

**Background:** It is still a challenge to accurately evaluate the progression of clinical competency. Frequent trainee's observation may result in highly variable evaluations which are skewed by factors other than the student's actual performance. Entrustability scales, composed of distinct narrative descriptions, are more meaningful to clinical assessors. Many ad hoc entrustment decisions are crucial to the final summative judgement for the trainees. How to accumulate enough ad hoc entrustments may be important in the clinical assessment of residents' competency.

**Summary of Work:** According to the traditional milestone program of ENT residents in Taiwan ENT Society, the assessment items of entrustable professional activities (EPA) were established using modified Delphi's method by experienced senior assessors. An on-line workplace assessment with entrustability scale to evaluate the milestones in ENT residents was developed. The trainees could send out their EPAs to their assessors in their daily work through this system, while the assessors might evaluate the trainees and give their realtime feedbacks. Finally, the residency review committee summed up the residents' performance yearly.

**Summary of Results:** 12 EPAs (including 67 observable professional activities, OPAs) were established using modified Delphi's method by 11 experienced senior assessors. 10 Residents (from 1st year to 5th year resident) participated in this EPA survey of clinical competency from July, 2017 to December, 2018. All the residents could comply with the survey well. The scales of clinical performance were higher as the resident training proceeded. All the residents and assessor perceived the assessment as a convenient and feasible way without interrupting their clinical work.

**Discussion and Conclusions:** Our on-line workplace assessments with entrustability scales are situation dependent. It could provide many ad hoc entrustment decisions by different assessors in daily clinical settings, including wards, operative theaters or emergency. In addition, it could effectively promote mutual feedbacks between clinical teachers and trainees, especially in a busy clinical scenario. Significant advancement of overall clinical performance was observed in different training stages.

**Take-home Messages:** A delicate integration of on-line workplace assessments with entrustability scales could provide another useful and inspiring tool in authentic clinical settings.
Establishing consensus for entrustable professional activities (EPAs) assessment via interprofessional collaboration: a pilot faculty development program

AUTHOR(S):
- Jung Chieh Du, Department of Medical Education and Research, Taipei City Hospital, Taiwan (Presenter)
- Jason Jiun Shiou Lee, Department of Research and Medical Education, Taipei City Hospital, Taiwan
- Ting Fang Chiu, Department of Research and Medical Education, Taipei City Hospital, Taiwan
- Lin Yang Chi, Department of Research and Medical Education, Taipei City Hospital, Taiwan
- Yi Ning Liu, Department of Research and Medical Education, Taipei City Hospital, Taiwan
- Da Chen Chu, Department of Research and Medical Education, Taipei City Hospital, Taiwan

ABSTRACT

Background: Entrustable professional activities (EPAs) are the units of professional tasks which can be entrusted to a trainee once adequate competence has been reached. However, the assessment of EPAs usually still faces the lack of consensus between various medical specialties. Therefore, we've designed a faculty development program for reaching consensus of EPAs assessment via inter-professional collaboration.

Summary of Work: The Department of Research and Medical Education in Taipei City Hospital had held a faculty training workshop of EPAs assessment for PGY trainees since Dec, 2018. The workshop had two sessions, including practice and designing of EPAs assessment, respectively. All participants were divided into several groups for discussion and collaboration. At practice session, several videos of clinical scenarios such as PGY trainees doing patient interview or duty handover were displayed and every group could discuss and judge the level of supervision scales (total 5 levels) for EPAs according to PGY trainees' performance. At second session, each group was requested to choose one clinical task as EPA for PGY trainees and work together to design suitable evaluation items as its assessment.

Summary of Results: A total of 44 participants had joined this workshop, including medical doctors, nurse practitioners, pharmacists, and other paramedical staffs. As to practice of EPAs assessment, the percentage of five levels of supervision scales were 12.1% (level 1), 28.8% (level 2), 30.3% (level 3), 19.6% (level 4) and 9.1% (level 5), respectively. The result revealed that level 3 (practice with supervision on demand) was the easiest to reach group consensus, but level 5 (perform without supervision) was the hardest. As to designing of EPAs assessment, most groups had chosen specific interprofessional practice as topic, such as inter-disciplinary consultation or competence to conduct IPP conference.

Discussion and Conclusions: The purpose of this workshop focused on establishing consensus for EPAs assessment via interprofessional collaboration. Such teamwork made most participants know what items of EPAs that other specialists concerned, too. The feedback from most participants also appreciated this workshop arrangement.

Take-home Messages: This program not only helped for forming consensus of EPAs assessment, but also provided a nice model for interprofessional collaboration.
Using EPAs to assess readiness for post-graduate training

AUTHOR(S):
- Wayne Woloschuk, University of Calgary, Canada (Presenter)
- Sylvain Coderre, University of Calgary, Canada
- Kevin McLaughlin, University of Calgary, Canada

ABSTRACT

Background: The purpose of undergraduate medical education is to prepare students for residency. In an attempt to assess our graduates’ readiness for post-graduate training we requested feedback from resident program directors about the entrusted professional activities (EPA) of our medical school graduates.

Summary of Work: An assessment tool asking whether a resident is capable of performing 6 EPAs with entrustment at an indirect level of supervisions (Yes/No), whether the resident required remediation (Yes/No), plus an overall rating [1 (Much weaker than most) to 5 (Much stronger than most)] was developed. The form was sent to program directors to assess our MD graduates approximately 6 months into post-graduate training. Performance data on two recent classes (2017 and 2018) were collected. Students provided consent for our program to collect the data.

Summary of Results: Program directors returned performance data for 126/155 (81%) graduates of the class of 2017 and 95/145 (66%) graduates of the class of 2018. Entrustment (Yes) was reported for 221/221 residents on EPA1 (History & physical exam), 219/221 on EPA2 (Differential diagnosis), 221/221 on EPA3 (Investigations), 220/221 on EPA4 (Communicate results), 219/221 on EPA5 (Management plan) and 220/221 on EPA6 (Recognize urgent/emergent care). 1/221 (0.5%) resident required remediation. Overall, 125/220 (57%) residents were rated stronger than most residents in the program, 84/220 (38%) were rated as similar to most residents and 11/220 (5%) were rated as weaker than most residents in the program. One resident was rated U/A (Unable to assess).

Discussion and Conclusions: Assessing the readiness for residency of MD graduates using EPAs is feasible. Program directors, using 6 EPAs, reported the entrustment of nearly all of the assessed graduates who were approximately 6 months into post-graduate training. Because some EPAs are more advanced than others waiting until later in training to assess all 12 EPAs is necessary.

Take-home Messages: Requesting program director feedback on entrustment activities can be used as a gauge for undergraduate medical education programs to determine whether their graduates are adequately prepared for post-graduate training.
A systematic review on entrustable professional activities in clerkships during undergraduate medical education - preliminary results

AUTHOR(S):

- Severin Pinilla, University of Bern, Department of Psychiatry, Switzerland (Presenter)
- Eric Lenouvel, University of Bern, Department of Old Age Psychiatry, Switzerland
- Andrea Cantisani, University of Bern, Department of Psychiatry, Switzerland
- Werner Strik, University of Bern, Department of Psychiatry, Switzerland
- Christoph Nissen, University of Bern, Department of Psychiatry, Switzerland
- Sören Huwendiek, Institute for Medical Education (IML), Switzerland

ABSTRACT

Background: We conducted a systematic review in order to identify the available evidence in the field of designing clerkship curricula based on entrustable professional activities (EPAs) in undergraduate medical education (UME) (ten Cate et al. 2015). Further aims of the review were to clarify key strategies to implement EPA-based clerkship curricula and to examine the emerging evidence in the early phase of introducing EPAs in UME. The results are considered relevant for planning future research and clinical teaching activities in this medical education field.

Summary of Work: We searched PubMed, Embase, Cochrane Library, ERIC, PsycINFO, Scopus, Web of Science and all Ovid journals for articles reporting qualitative and quantitative research as well as conceptual and curriculum development reports on entrustable professional activities in clerkships during undergraduate medical education until 15th January 2019. We based our review method on the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) (Moher et al. 2009).

Summary of Results: 2,026 records were screened after database searching. A total of 27 articles were included in the systematic review. Three countries (Canada, USA, Switzerland) have developed discrete sets of EPAs for UME. The included articles investigated assessment strategies of EPAs, EPA-based curriculum development, and educational outcomes of EPA-based curricula. 30.7% of studies were specialty specific research reports.

Discussion and Conclusions: In addition to EPA-based curricula covering all years of medical school, several clinical specialties are starting to integrate EPAs in their clerkship curricula. Currently there are only preliminary data for few EPAs with regards to educational outcomes. However, there is a growing body of evidence indicating that EPAs can be effectively used for undergraduate medical education and serve as a basis for internationally comparable competency-based curricula.

Take-home Messages: There is limited but increasing evidence, that EPAs have a positive impact on educational outcomes in undergraduate medical education. Further research is needed to understand how educational resources should be allocated in order to develop efficient and effective EPA-based curricula spanning the learning trajectory from classroom to bedside in different specialties in undergraduate medical education.
Planning the introduction of Entrusted Professional Activities (EPAS) in undergraduate medical education

AUTHOR(S):
- Nêmora Barcellos, Universidade do Vale do Rio dos Sinos - Unisinos, Brasil (Presenter)
- Elson Romeu Farias, Unisinos, Brasil
- Cláudia Salles Stadlober, Unisinos, Brasil
- Maria Letícia Ikeda, Unisinos, Brasil

ABSTRACT

Background: EPAS were developed to articulate competencies needed by a medical professional into clinical practice, making them feasible [Ten Cate O. Med Educ. 2005; 39 (12): 1176-1177]. These are tasks or procedures, that can be entrusted to a graduate or resident after supervised training, for unattended execution. An EPA requires multi-skill proficiency and is a facilitator in evaluation, when compared to assessment based on isolated competencies [Ten Cate O, et al. AMEE Guide No. 99. Med Teach. 2015; 37 (11): 983-1002].

Summary of Work: In the new Unisinos Medical Course, EPAS will be introduced in the second semester and progressively in the following ones. Different evaluation methods, as well as the Unisinos alumni e-Portfolio, will support EPAS-related assessment and feedback.

Summary of Results: An example of competency matrix/EPAS is presented. It was developed for the activity of Individual-Community Interaction, in which the students go to the field, with teachers, and accompany families in the territory of a Family Health Strategy, during three semesters. 1. Develop attitudes for the care of health problems/CanMEDS 2.2/Collaborator/Nutrition counseling 2. Healthy lifestyles promotion, reconciling individual and community needs and promoting social transformations/CanMEDS 2.2/Collaborator/Guidance on household risks 3. Demonstrate ability to communicate and interact, working cooperatively in groups, respecting differences and acting as articulator/CanMEDS 5.1 and 5.2/Professional/Anthropometry and vital signs 4. Understand the importance of surveillance systems, and training for routinely feeding them and register on medical records into daily practice/CanMEDS 5.1 and 5.2/Communicator/Document clinical encounters with accuracy and accessible language

Discussion and Conclusions: Although numerous universities use EPAS with medical residents, their use in undergraduate education is still innovative. EPAS approach is related to the progressive development of skills within learning and the development of confidence, increasing effectiveness of the educational process, patient safety and quality of care. [H. Carrie Chen, et al. Academic Medicine, Vol. 90, No. 4 / April 2015]

Take-home Messages: Innovation is needed to ensure medical students’ interest and the effective incorporation of competencies in medical practice.
Evaluation of the use of mobile technology in competency-based assessment in undergraduate medical education

AUTHOR(S):
- Norah Duggan, Memorial University of Newfoundland Faculty of Medicine, Canada (Presenter)
- Heidi Coombs-Thorne, Memorial University, Canada
- Vernon Curran, Memorial University, Canada
- Diana Deacon, Memorial University, Canada
- Stephen Pennell, Memorial University, Canada
- Katherine Stringer, Memorial University, Canada

ABSTRACT

Background: In 2015, Memorial University became the first medical school in Canada to introduce EPAs into an undergraduate clerkship curriculum and to structure a formative assessment process around EPAs. This process was based on the concept of programmatic assessment consisting of cycles of training and longitudinal assessment. An electronic EPA clinic card was introduced that enabled preceptors to submit formative observational assessments of learner performance using mobile technology (e.g., mobile phones). This study evaluates validity, feasibility and educational effect of electronic clinic cards in the formative assessment of EPAs.

Summary of Work: Our study uses a mixed-methods triangulation approach encompassing: reliability and inter-rater analyses of EPA scores for N=80 students in the Core Experiences clerkship course; predictive validity analysis of EPA scores with summative discipline examination scores; student and faculty surveys; and faculty focus group to explore satisfaction with a mobile technology EPA-based assessment system.

Summary of Results: Survey results from students (response rate 21.3%) and preceptors (response rate 25.8%) indicate the electronic card was easy to access and use and was dependable. Both groups felt the electronic card process was less successful in facilitating effective coaching feedback between learners and preceptors. Preceptors responded that more faculty development was needed. Contrary to the intent of the process, to encourage immediate feedback, participants did not respond in a timely fashion.

Discussion and Conclusions: Free text comments allow the collection of rich assessment data and are especially useful in formative assessment. Training is essential for both learners and preceptors in a variety of formats to reach all users. Involving users in development and implementation ensures the assessment system is user friendly. User acceptability is influenced by a number of factors, including the process for data entry and submission. Cultural change is a major determinant of success in implementation of new assessment systems, and stakeholder engagement is essential for successful uptake of mobile technologies for work-based assessment.

Take-home Messages: Mobile technology offers a feasible means for facilitating work based assessment of EPA achievement and encouraging direct observation and assessment of learner performance.