



Abstract

High quality assessment systems minimally include formative and summative, reliable and valid measures; data collection from multiple sources via varied methods; sufficient information to accommodate data triangulation; and the use of assessment results to guide improvement efforts. The Ohio University Heritage College of Osteopathic Medicine (OU-HCOM) has created a model to guide the development of its entrustable professional activities (EPA) assessment toolbox. The model fosters the use of empirical evidence and best practices in the development of new assessment strategies and instruments as well as in the evaluation of existing ones.

Introduction

Medical schools are accountable for the competency of the students they advance to graduate medical education training. To support academic accountability, the assessment systems used to determine students' EPA mastery must be of high quality and reflect best practices. The use of a model that promotes best practices in the development of the institution's EPA toolbox is essential to successful needs identification, planning, development, and implementation, and can enhance a culture of assessment.

Goals

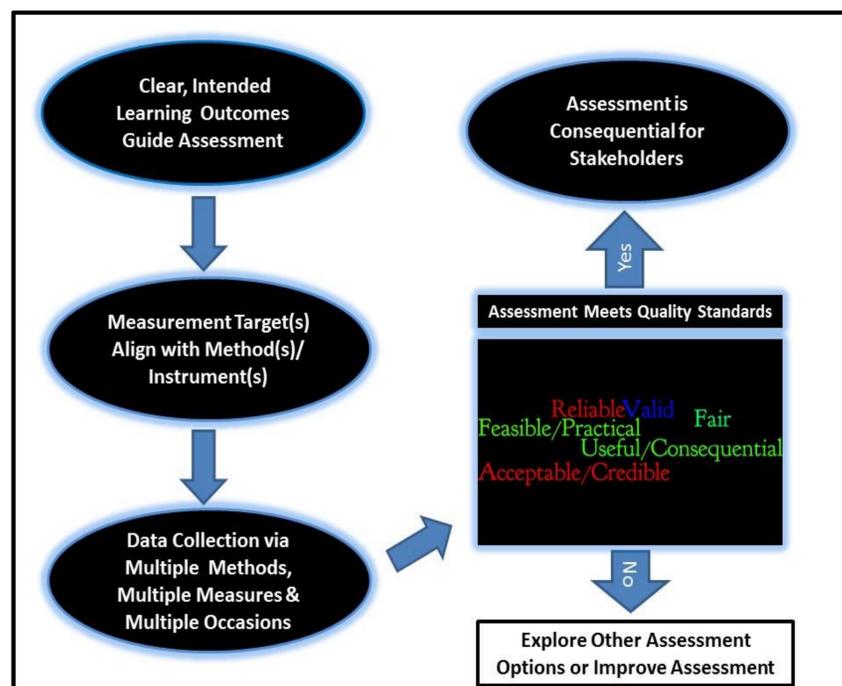
The primary project goals were 1) to develop a model that would ensure that strategies and tools ultimately included in the college's EPA assessment toolbox reflected best practices and were of high quality and 2) to advance the continuing quality improvement culture associated with the institution's ongoing efforts to assure students' EPA mastery prior to the first day of their graduate medical education (GME) training.

Discussion

The resultant model requires purposeful consideration of best practices and relative quality issues in the development, implementation, and use of assessment strategies and tools. A particularly useful tool to supplement other measures has been a self-assessment scale (Cronbach's alpha >.9) used to collect MS4 trainees' confidence in their ability to perform the EPAs upon graduation; see Table 1. This information has prompted revisiting EPA-specific skills training and assessment as well as efforts to support students' development of their self-calibration skills.

Outcomes

Model for Additions to the EPA Assessment Toolbox



Adapted from Norcini, J. et al., (2011). Criteria for good assessment: Consensus statement and recommendations from the Ottawa 2010 Conference. *Medical Teacher*, 33(3), 206-14.

Table 1: IM Residency Directors' Top 5 EPAs

| EPAs | Importance to IM Residency PDs (Angus et al., 2016) | OU-HCOM Grads' Confidence to Perform the EPAs |
|--|---|---|
| Perform a H&P | 1 | 1 |
| Provide an oral presentation of a clinical encounter | 2 | 5 |
| Document a clinical encounter in the patient record | 3 | 3 |
| Collaborate as a member of an interprofessional team | 4 | 4 |
| Recognize patient requiring urgent or emergent care and initiate evaluation and management | 5 | 8 |

Angus, S. V., Vu T. R., Willett, L. L., Call, S., Halvorsen, A.J., & Chaudhry, S. (2016). Internal medicine residency program directors' views of the core entrustable professional activities for entering residency: an opportunity to enhance communication of competency along the continuum. *Academic Medicine* (published ahead of print), Available at http://journals.lww.com/academicmedicine/Abstract/publishahead/Internal_Medicine_Residency_Program_Directors__98373.aspx

Challenges

Challenges to the development of a high quality EPA assessment toolbox are primarily resource related. Needed personnel resources include dedicated individuals with content expertise in testing, measurement and evaluation to support the development, implementation and evaluation of assessment strategies and instruments; faculty development personnel, particularly for implementation of new methods and tools (e.g., to foster interrater reliability); other manpower with the skills needed to support selected measurement activities and systems management; and, ultimately, faculty with the skills and time dedicated to increased assessment activities. Facilities and technology resource needs vary by assessment method but are inherent in the adoption of some types of performance assessments e.g., OSCEs.

Lessons Learned

1. Capitalize on existing, available resources when possible.
 - MedEdPORTAL - peer-reviewed health education teaching and assessment resources <https://www.mededportal.org/about/missionandvision/>
 - AACOM Core Considerations for Core EPAs <https://www.aacom.org/docs/default-source/med-ed-presentations/core-epas.pdf?sfvrsn=10>
 - AAMC Core EPA Initiative <https://www.aamc.org/initiatives/coreepas/>
 - Graduate students in Education Measurement and Testing looking for projects and independent studies
2. Development and implementation of an EPA assessment toolbox functions best when supported by an institutional culture committed to continuous quality improvement.
3. Along with the search for best practices and empirical evidence, diverse input is invaluable. Creativity and thinking outside the box can help address challenges and enhance the final products.

Future Directions

- Support the development of faculty interested in serving as champions for teaching, learning and assessing particular EPA/s across the medical education continuum.
- Disseminate lessons learned and new instruments in peer reviewed presentation and publication venues.
- Collaborate with colleagues in the medical education community to develop and implement EPA assessments and promote resources sharing when possible (e.g., regional OSCEs).