

Enhancing Approaches to Clinical Skills Teaching and Assessment at Harvard Medical School

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Consortium projects

1. NEW: Clinical skills coaching in the core clinical year

To develop, implement, and assess the use of longitudinal faculty coaches for teaching and evaluation of communication, history taking, physical examination, and clinical reasoning skills with patients.

2. NEW: Mobile device app in the assessment of EPAs

To develop and pilot a mobile device app to enable documentation of clinical skills and relevant EPAs during directly observed student-patient encounters with the goal of increasing the quantity and quality of feedback and assessment.

3. ONGOING: Helping Faculty and Students Ask Good Questions

In this ongoing project focused on understanding the relationship between the types of questions asked on summative evaluations in pre-clerkship science courses and the impact on learning, we plan to: (1) re-evaluate exam questions to analyze changes in Bloom's taxonomy, and (2) analyze individual student data to explore if the ability to answer higher-order questions predicts clinical performance

Grant team members



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Background and Overview

Clinical Skills Coaching

Clinical skills (CS) development among medical students requires direct observation by faculty who are knowledgeable of the expected CS competencies, and are able to effectively teach, assess and coach students along their developmental trajectory. This process can be hampered by infrequent observations by faculty, some of whom are not adequately trained to provide appropriate evaluation and feedback to students. A longitudinal coaching program with specially trained faculty will enhance development of clinical skills.

Strategy: Identify opportunities during the core clerkship year for students to be paired with CS coaching faculty. Specific programming to be developed include objectives, frequency and focus of coaching sessions, and assessment methods. Faculty development will be a critical focus.

Outcomes: The impact of a CS Coaching program can be measured by OSCE ratings, clerkship performance, and student and faculty satisfaction.

Mobile Device App for EPAs

Students receive relatively infrequent feedback on clinical skills performance despite frequent clinical encounters with patients under the supervision of residents and faculty. Among several factors contributing to this gap include recall bias with delayed feedback resulting in a missed opportunity to document and provide "in-the-moment" workplace-based assessments. With a simple to use, readily available mobile device app, faculty will provide students with more frequent and timely feedback and documentation of CS and relevant EPAs, while also encouraging students to seek feedback on a more regular basis.

Strategy: Using behavioral descriptors for each EPA level (pre-entrustable / emerging / entrustable), a unique rubric will be modified and developed specifically for use in a mobile app. This will be piloted among the core clerkships as a way to evaluate the required EPAs that are part of the students' CS assessment.



Outcomes: The impact of a mobile device app for assessment of EPAs will be measured by the number and quality of documented observed clinical encounters, and collection of more data points (encounters) related to student performance of EPAs.

Need/Gap Addressed

Through these two approaches to clinical skills assessment (coaching and the provision/documentation of in-the-moment feedback using a mobile device app), we hope to close the gap between a student's current level and desired level of competency for various clinical skills. Through direct faculty observation and coaching, and the provision of real-time actionable feedback, students will be able to advance in their clinical skill milestones in an effective, meaningful and deliberate way.



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