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Following the evidence: implementing a redesigned evidence based medicine curriculum into an internal medicine residency

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Keywords

Assessment of learning, Educational research findings, SOTL/Education scholarship

Abstract

Evidence based medicine (EBM) skills are important to foster throughout medical training, as EBM principles aim to promote the conscientious, explicit, and judicious use of the current best evidence for the care of individual patients¹. As medical complexity and the volume of scientific literature increases, EBM skills are made more essential to guide clinical practice. This is evidenced by the American College of Graduate Medical Education (ACGME) requiring residents to demonstrate competence in core EBM principles upon completion of residency². Here at Oregon Health and Science University (OHSU), our Internal Medicine residency program facilitates a dedicated EBM curriculum that has been identified as an opportunity for improvement based in resident and faculty feedback. This feedback has yielded questions on how to further explore learner's perceptions of the current curriculum and their desires for future content. Subsequently, we set a goal to redesign our EBM curriculum to achieve improved congruency with resident expectations and to better illustrate the importance of EBM principles into daily clinical practice.

Using Kern's framework for curriculum development, we will be performing a needs assessment of Internal Medicine residents during four sessions in January through February 2023³. At these sessions, we will be administering a previously validated instrument to characterize residents' perception of the EBM learning environment at OHSU⁴. We will also be performing focus groups to explore residents perceptions on valuable content within the current EBM curriculum, opportunities for content improvement, didactic format preferences, and current use of near-peer teaching formats. We plan to audio record the sessions and utilize a thematic analysis approach to analyze the content. We will also assess residents knowledge of core EBM principles by administering a validated EBM assessment during following up sessions⁵.

The resulting assessments, focus group analysis, and ACGME competencies will be utilized to guide the development of curriculum objectives, educational strategies, and implementation methods as part of Kern's curriculum development six-step approach³. The current timeline for implementing the redesigned curriculum is beginning July 2023 when a new cohort of Internal Medicine residents join OHSU. As part of future evaluation and feedback for the curriculum, intentions are that both validated assessments of perceived learning environment and knowledge would be administered at prespecified intervals to track changes over time. This process of curriculum development aims to improve perceptions of the EBM learning environment at OHSU, EBM skills during residency, and congruency between resident desires in an EBM curriculum and the demands of modern clinical practice.

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1. Describe the importance of evidence-based medicine (EBM) skills in modern clinical practice
2. Compile residents' perceptions of the EBM learning environment at OHSU
3. Characterize resident perspectives on the current EBM curriculum and desires for future content
4. Evaluate OHSU Internal Medicine residents' performance on a validated EBM knowledge assessment

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