

Software to Enhance Precision Bedside Learning

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Importance

Precision education “harnesses the power of information technology...to shape the curriculum so that students can progress at their own pace, get individual remediation, and even learn in their preferred modality,” according to Dean Paul Rothman. Bedside teaching has suffered recently with time demands placed on busy clinician faculty. This technology addresses both issues.

Aim

We have developed interactive software “Learn More” that we hope enhances bedside teaching with the utilization of adult learning principles. It allows for learner initiated questions to the faculty, with personalized responses. The software will track board exam outline topics, types of questions (e.g., medical knowledge, diagnosis, patient management or system-based practice), as well as learner and faculty engagement.

Plan

The software is an original online interface developed within the Department of Physical Medicine. In the Learn More interface, residents post a reflection on something they learned during their daily clinical experience. Residents then direct a question to the attending about something they want to learn next. The attending can respond online, attach articles, or dedicate in-person teaching time to the topic. In one month of beta-testing, over 100 questions and responses were generated among 18 residents. The software currently resides on a SharePoint site; we hope to develop a customized application usable on multiple devices, and to develop the back-end flexibility to track data in multiple medical specialties.

Outcomes

Outcomes measurable with this software are the number and frequency of posts and responses, the breadth of board-relevant topics posted, and insight into the learning processes employed by residents. We will assess its value through the number of learners and teachers using it, improvement in annual standardized testing scores and ACGME learner satisfaction surveys.