Purpose: With support from NIH/NCATS [Grant #R44TR000576-03] we are creating web and tablet-based environments to challenge health professional students to enhance their skills in diagnosing and treating patients with pain, while decreasing the chance of opioid misuse and diversion.

In each EHR-coordinated simulated pain management case, health professional students collect data, examine the patient, choose the appropriate course of action, outline a treatment plan, and receive feedback.

The online curriculum can also be used to assess students’ clinical competence and skills, and guide additional training.

Results: In a pilot test of one pain management case (n=38), knowledge quiz score improved significantly pre- to post-training from a mean of 67.8 (SD=17) to a mean of 96.9 (SD=4.7) (p<0.001).

Discussion: The experience was well-received and input is guiding the further enhancement of a complete online training experience, including 6 additional cases. Expanded clinical functionality will include:
1) simulated consultation with and referral to pain treatment experts
2) follow-up visits,
3) urine drug testing and other laboratory tests, and
4) scenarios involving diversion, addiction to opioids, and pseudo addiction.

Future Directions: We are currently recruiting sites to complete a longitudinal study to assess the effectiveness of the training program on target professional and clinical skills. The study measures impact on competence and performance via a randomized, cross-over design with at least 60 participants per site and a wait-list control.

References:
4) ACGME. ACGME Program Requirements for Graduate Medical Education in Pain Medicine. Accreditation Council for Graduate Medical Education. 2007.

Results:
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