Clinical Encounters with Patients who use Alcohol.

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Abstract

Clinical Encounter:
Alcohol is a serious game intended to teach intervention skills to medical students via challenging clinical scenarios and branched path learning. The web/tablet application focuses on appropriate screening, interventions, and referrals to treatment for patients at risk for or with an alcohol use disorder. It is being developed with funding from the NIH/NIAAA.

Through the simulated clinical encounter, students work through the five steps of a basic clinical encounter. They can select clinical evaluations, interpret results, make clinical decisions, and experience realistic clinical outcomes based on their clinical choices. Positive patient outcomes are experienced when patient-centered, evidence-based approaches are followed and medical knowledge is correctly applied.

Clinical Encounter:
Alcohol consists of 5 different simulated patient cases. In the cases, students can make decisions about asking appropriate interview questions and use Motivational Interviewing strategies with patients, develop treatment plans, and arrange follow up with patients. Multiple options are presented at each step in the encounter, with final outcome based on the combination of choices. Suboptimal clinical choices yield poor patient outcomes. After each step in the clinical encounter students receive feedback on their selections from a 'Virtual Preceptor'. The cases range in difficulty from beginner to advanced.

Medical students and recent medical school graduates participated in alpha/usability testing of the prototype. Participants were satisfied with the design and were able to complete requested tasks quickly. All users agreed: 1) the interface was well organized, 2) content was appropriate, 3) material was organized clearly for learning to occur, 4) learning could occur playing a game like the prototype, 5) they would recommend this activity to others, and 6) it was a useful learning experience. Specific usability weaknesses were identified and improvements to enhance usability were made. Phase II is adding additional patient cases. Also, a summative case/control evaluation will assess the games' ability to change competency, performance, clinical, and communication skill, and improve treatment behavior related to alcohol use assessment and intervention.