

Title: Evaluating the Use and Affordance of the iPad for Standardized Patient Encounters During Clinical Skills Examinations

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## **ABSTRACT**

Mobile technology is an increasingly prevalent part of the patient experience and the clinical setting, technology etiquette, effective usage and its effect on patient interaction remains a relatively under examined area. This study establishes a framework to reliably capture and codify doctor patient clinical encounter involving the use of iPad. In addition to highlighting areas of opportunity in physician training pertaining to mobile device use and technology assisted patient education. The findings of this study are based on the observing video recordings of OSCE (Objective Structured Clinical Examination) exams; the OSCE is a simulation of a doctor's visit with a patient actor with a rehearsed standardized patient case. Use of the iPad on average constituted no more than 27% (or 4.42 minutes) of total patient encounter, mitigating concerns that the iPads would distract and take over from patient education. Most physicians used the iPad as a supplementary to explain patient education, additionally the iPad presented more opportunities for the clinician to directly interact with the patient. Seamless integration of mobile technology into everyday patient interaction, resulting in more impactful and meaningful encounters, is achievable through directed physician training. Eventually opening the door to introducing mobile technology in more areas of patient interaction, in an effective and consistent fashion.

## **BACKGROUND**

Medical students at the University of California, Irvine are required to take an exam called the OSCE (Objective Structured Clinical Examination) to assess their clinical readiness. The OSCE is a simulation of a doctor's visit with an actor who acts as a patient with a standardized patient case memorized. At UC Irvine, administration of the exam at the Clinical Skills Center, a facility on the medical school campus that has a large number of simulated exam rooms, where the students interact with standardized patients. The exam sessions are both video and audio recorded from two different angles in the room. This examination usually consists of three sections- a twenty-minute initial visit, a ten-minute period that the student has to prepare, and another twenty-minute visit that simulates a follow-up visit after two weeks. The students are asked to use iPads to educate their patients about their condition, and they are expected to use the ten-minute period in between the two twenty-minute sessions to prepare these images on their iPad using an application called DrawMD.