WEBOSCE: A SYSTEM FOR ASSESSING TRAINEES' CLINICAL SKILLS VIA ON-LINE VIDEO

Dennis H. Novack, MD and Christof J. Daetwyler MD
Drexel University College of Medicine, Philadelphia, PA, USA

Summary and Focus:

The golden standard to assess clinical skills – including communication skills – is by means of an OSCE (Objective Structured Clinical Exam). During such exams, the students perform on Standardized Patients (SP), who then grade the students using a checklist. WebOSCE is a novel system that employs Internet technology to make this process independent having the students being in one room with the SP – using video chat – plus it provides the student with a recording of the interaction. Additionally, after the session the student is provided with a structured feedback to make best use of the WebOSCE as a learning experience. http://www.webosce.net

Background:

About 5 years ago, John Morris (IT Drexel University) together with Dennis Novack (Assoc. Dean for Medical Education at Drexel University College of Medicine) and their colleagues had the idea to use a teleconference system for the students' interactions with standardized patients for OSCE exams.

They pilot-tested this system during a required year-end objective structured clinical exam. Performance data between the 26 distance students taking the exam via WebOSCE with 221 on-site students were compared, as well as both student groups' responses on a post-exam questionnaire, and they conducted a post-exam structured interview to elicit the Pittsburgh students' perspectives on the WebOSCE experience. Students taking the exam via WebOSCE scored significantly lower in most categories except for physical exam and information-giving skills, on which the groups did not differ. (Medical Teacher,Vol.24,No.5,2002,pp.483–487)

While developing "doc.com" we anticipated further development of "WebOSCE" as a logical extension. We imagined that for example after learning on-line with Tim Quill's doc.com module "How to give bad news," students could arrange an on-line meeting with a Standardized Patient and apply in a real-life situation what they had learned. The Standardized Patient would provide the student with accurate feedback on how they did and where they need to improve.

The Internet technology we needed for our project was then becoming available. We did some preliminary tests with Adobe CONNECT (then MacroMedia BREEZE), connecting video and voice of a Standardized Patient in the U.S. and a medical student in Brazil. CONNECT not only allows the recording of the encounter, but also offers the option of laying out different screens – an option which adds substantially to the WebOSCE concept. We set up an initial screen where the student can learn about the patient's

condition and gets to know what “bad news” to give. The second screen is for the video encounter whereas a third screen allows the sharing of instructional web-pages with movies for the feedback part of the encounter. We have a research project planned to show the efficacy of the WebOSCE approach for assessment and learning of clinical skills. Plese see http://www.webosce.net for the recording of a WebOSCE session.

Contact information: Christof Daetwyler MD, Drexel University College of Medicine, 2900 Queen Lane, Room 221B, Philadelphia, PA 19129-1096
Christof.Daetwyler@Drexelmed.edu