A NOVEL PATIENT INTERVIEW SKILLS SIMULATOR WITH VIRTUAL FACULTY FEEDBACK

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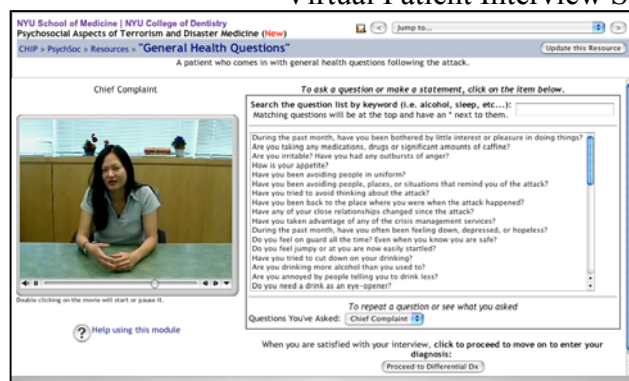NYU School of Medicine

The use of standardized patients (SP) to teach and assess medical students and house staff is a valid, engaging exercise in realistic simulated patient interactions. We sought to recreate the SP interaction on the web using web-based virtual patients (VP), with special emphasis given to the development of a new feedback system. The virtual patient cases created for this project focus on developing skills of medical interviewing. The application has three sections: an introduction, the multimedia VP interaction, and multi-step feedback.

Users can ask questions of the patient by selecting from a list or using free-text searches of the question database. Each question has a digital video-based patient response. To date we have developed seven cases with over 360 questions and video responses. The cases cover topics such as depression, domestic violence, bereavement, and some are in Mandarin and Cantonese as well as English.

The feedback section provides a 'virtual facilitator' framework with an expert providing an overview of the challenges and skills of each case. The system automatically evaluates the questions asked during the interview and provides customized feedback using text, graphical analyses, and video. For example, users who didn't ask open-ended questions at the beginning of the interview will be told to how to reinforce this skill. Users receive feedback in the areas of open-ended questions, rapport building, and patient understanding/patient education.

We are using this tool to teach our students and house staff and are currently conducting a randomized trial to compare outcomes between virtual and live OSCEs.

Virtual Patient Interview Screen   Virtual Feedback Screen