FY04 Innovations in Teaching with Technology Awards: A Web-Based Course on Communication Skills for Medical Students on Clinical Rotations

FY04 Innovations in Teaching with Technology Awards

Proposal Title: A Web-Based Course on Communication Skills for Medical Students on Clinical Rotations

Marcy Rosenbaum, PhD, Assistant Professor of Family Medicine and Faculty Development consultant for the Office of Consultation and Research in Medical Education. Dr. Rosenbaum provides communication skills training to students, residents and faculty in the College of Medicine including intensive remediation for those needing to improve their skills. She has experience designing cases and curricula for communication skills, training simulated patients to enact cases and assessing learners’ communication skills. She has also conducted research and produced instructional videos related to clinician-patient communication.

George Bergus, MA, MD, Associate Professor of Family Medicine. Dr. Bergus is the Director of the Performance Based Assessment program and in this role has developed cases and assessment tools for clinical communication skills and trained simulated patients to enact cases. He has a MA degree in Instructional Design and has developed interactive web-based educational interventions and assessments.

Ellen Franklin, MA, MBA, Coordinator for the Performance Based Assessment program. Ms. Franklin will be responsible for recruitment of actors and assist in actor training, tasks that are a primary part of her current position.

Justin Stone, MA, Instructional Designer for the Office of Consultation and Research in Medical Education, will be the Instructional Designer, video editor and Web Designer for this project. He has experience with multimedia design, video production, video editing and web design. He specializes in building web-based, interactive multimedia learning modules.

Staff in the Video Services Alliance will assist in video production and content delivery for this project.

Org Unit: Carver College of Medicine

Department(s):
- Office of Consultation and Research in Medical Education
- Family Medicine
Proposal: We seek funding to develop an easily accessible communication skills training program by means of Web-Based Instruction (WBI). WBI is a flexible and time-efficient learning method, which puts the learner in control over his or her own learning process. Initially, this communication WBI will consist of two one-hour modules, in which various communication skills and techniques will be presented, based on principles of patient-centered medicine. The first module will focus on basic communication skills regarding verbal and non-verbal behavior of physician and patient, such as eye contact, posture, facial expressions, tone of speech, and implicit and explicit ways of communication. The second module will deal with providing information effectively, based on two-way interaction, and checking the patient's needs.

In addition, skills will be presented which aim to enhance the effectiveness of information, such as repeating information and checking the patient's understanding and pre-existing knowledge. This is a proof of concept proposal with future plans to expand the number of modules to cover additional communication skills including appropriately responding to patients' emotions and delivering bad news to patients. In addition to being an appropriate educational resource for medical students, the content and format of these modules would be applicable for learners in all of the health sciences including nursing, physician assistant, pharmacy and others students.

In each module, video examples will be presented of poor and adequate communication in the interactions between medical students and patients. To obtain examples of these interactions we will use the video recordings acquired over the last year by the College’s PBA Program. Our program video records all students in the clinical years as they complete a series of at least 13 different simulated patient encounters with trained actors. These recordings will be reviewed to obtain relevant good and bad examples of specific communication skill. We will then use these videos for training actors to reenact these encounters. This will allow us to preserve the confidentiality of the original students and also to obtain high quality video recordings of these encounters.

In addition to the streaming video clips, the WBI will review communication theory, research literature and instructions about the displayed skills, including suggestions for improved communication behaviors, presented verbally and visually supported by keywords. Optional links to more in-depth information and full text research articles will be made available. Multiple-choice practice questions about the video examples will be presented frequently, followed by immediate feedback. Operating instructions will be presented in start and dropdown menus. Sections of each module can be easily repeated. The program can be interrupted and resumed again at the same point. Each module can be completed within an hour.
We will use the communications WBI in two ways. First, we will make the WBI available to all M3 students after they have completed their first PBA as a resource for review in preparation for subsequent PBAs and for their day-to-day interaction with patients. These students will have already mastered the basics of physician-patient communication but will benefit from additional training. We anticipate that those students who have already come to make use of these basic skills will be motivated to strengthen their skill set by further instruction. Because we are using WBI, we will be able to track students’ use of the program and evaluate program effectiveness by comparing PBA performance of users and non-users.

Second, we will use the WBI as part of a structured remediation curriculum for students who demonstrate the need for more specific attention to their communication skills during their clinical years. Those students who perform poorly on communication within their clinical rotations and/or in the PBAs will be required to participate in intensive consultation, observation and feedback sessions with clinical teachers who have expertise in communication skills. As part of this intervention, these students will be required to engage in intensive review of the communication WBI.

Background: Doctor-patient communication is one of the most important tools in healthcare. Adequate interviewing techniques help the doctor to recognize the patient’s problems and the patient to understand the doctor’s instructions. Furthermore, adequate communication is crucial to patient satisfaction. Despite the centrality of these skills medical students are given only limited training in the area of communication skills. Generally, all the training that is within the curriculum comes during the first 2 years of the curriculum, before students start having sustained interactions with patients.

Research suggests that unless there is continued training in communication skills during the clinical years, that the skills of medical students do not improve. This is ironic because it is during these years that students have ample opportunities to practice new communication skills with patients they encounter in the hospital and other medical facilities. It is crucial to help students further develop with communication skills before graduation because it is unlikely that communication skills will advance during the residential years. Two obstacles to integrating a successful communication skills curriculum into the clinical years are time and expertise. Students do not always observe effective communication skills demonstrated by their faculty and resident teachers. Thus they tend to adopt the skills they see modeled. The other obstacle is time. During the clinical years students move from one department to the next, and their daytime learning sessions are highly focused on learning clinical medicine.

In recent years, there has been a new emphasis placed on the importance of communication skills within medical education. This is particularly evidenced by the
new mandate by the US Liaison Committee on Medical Education, the main accrediting body for medical schools, that these skills be assessed during medical school through Performance-based Assessments (PBAs) and also tested as part of the medical licensure exam that all students must pass. These assessments require students to interview standardized patients while being observed by faculty and demonstrate a standard level of proficiency in core communication skills. In the last year, students at the Carver College of Medicine participated in several newly established PBAs during their third year of training as part of clerkships in Internal Medicine, Family Medicine, Community Medicine, Surgery, Pediatrics and Psychiatry. A full year of data from the PBAs demonstrates that many students lack core skills with common mistakes being made in both basic and advanced non-verbal and verbal communication behaviors.

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<th>What resources will you need?</th>
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<tr>
<td>1. Hiring actors to portray patients, students and/or clinicians ($2000)</td>
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<tr>
<td>2. Video production using Video Services Alliance ($8,000 for production, $1500 for materials and content delivery)</td>
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Costs for video editing, compression, instructional design and web design will be in-kind, provided through the Office of Consultation and Research in Medical Education.

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<th>Rough estimate of costs</th>
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ITSupport Information