

Medical Students Invited To Engage in Practice Conversations with Virtual Patients Designed To Help Improve Physician-Patient Communication And The Appropriate Prescribing Of Antibiotics For URIs

A new website (www.conversationsforhealth.com) featuring a series of simulations where users engage in practice conversations with virtual humans. The simulations were developed by Kognito, a pioneer in developing role-play simulations that prepare people to effectively lead real-life conversations, with the support of the Robert Wood Johnson Foundation. The conversations help to prepare primary care physicians and patients to manage challenging health conversations they have during an everyday medical encounter. As medical schools seek new approaches to modernize lectures and the traditional standardized patient approach, interactive conversation simulations featuring virtual patients offer exciting promise.

“The conversation simulation was very true to form, it felt very intuitive and it felt very much like an actual patient experience. The facial expressions and the non-verbal cues we use were all there. It made me more attuned to paying attention to things that I know I should be paying attention to, but sometimes in the process of seeing patients in a busy clinic day can fall by the wayside.” NYU Resident

Two (2) of the simulated conversations, set in a primary care office, allow users to experience both the physician and the patient perspectives of the same medical encounter.

- In one you play the role of the physician talking to a virtual patient: You see how well you do in building trust, collaborating on a treatment plan, and addressing the patient’s request for antibiotics.
- In the other, you play the role of a moderately activated patient talking to a virtual physician: You learn about the appropriate prescribing of antibiotics for upper respiratory infections, how to make sure you get answers to your questions, and leave the office with a plan that works for you.

Healthcare providers and patients often express frustration engaging in conversations about challenging or sensitive topics within the medical encounter. Overuse of antibiotics for treating viral infections is one such case. A review of the evidence shows that most antibiotics for viral infections are not prescribed as the result of clinical evidence, but rather given in response to patient demands or due to physician’s lack of training in the appropriate guidelines.

Users make dialogue choices as they progress through the conversation simulation, learning about their effective and ineffective choices and receiving guidance from virtual expert coaches. At the conclusion, a personalized reporting dashboard provides the user feedback on their performance in the conversation to support their ongoing skills building.

The simulations were developed using the Kognito Conversation Platform™ with input from experts in motivational interviewing and medical education (including **Missing Microbes** author Dr. Martin Blaser and Dr. Adina Kalet, NYU School of Medicine; co-director of the Program on Medical Education Innovation and Research (PrMEIR)). The simulations are being made available for FREE to medical students, HCPs, researchers and patients to encourage individuals to experience the conversations, use them to build skills and change behaviors, or to conduct further research.

A pilot study conducted by Antoinette Schoenthaler, EdD, at the NYU School of Medicine, Center for Healthful Behavior Change, examined the potential utility of the two simulations designed to promote effective communication and collaborative decision-making between healthcare providers and patients in order, to improve health outcomes, including over-prescribing of antibiotics. In the study, primary care providers (n=34) and patients (n=33) completed a pre-survey and then experienced a 7-12 minute conversation simulation, followed by a post-survey, and a one-month follow-up survey.

- Providers reported that the simulation was a much better learning tool than the standardized patient model, as they felt more comfortable and free to make decisions within the virtual space.
- Patients rated it as a very useful tool saying that it would help them to: be better prepared for a doctor's appointment, increase assertiveness when communicating with their physician, create a treatment plan, and learn specific content about antibiotics.

While providers of all levels benefited from the simulation, residents and medical students may experience the greatest gains in improving their knowledge and communication skills for challenging conversations and attitudes about patient-centered care. A full summary of the study results can be found on the site.

This isn't Kognito's first time using virtual humans to impact behavior change – it has created simulated conversations with organizations such as the *American Academy of Pediatrics* to help maintain conversations between doctors, children and parents (available for download from the Apple App StoreSM or Google PlayTM). Kognito is a digital health education company that believes in the power of conversation to inspire and inform, impact how people think and act, instill empathy and change lives.. For more information, contact Lois@kognito.com.