

Using Simulation with Virtual Patients to Educate Nursing Students in SBIRT

CASE STUDY

Interactive simulation technology helps equip health professionals with conversation skills to address substance use.

OPPORTUNITY

Only one in 10 adults with a substance use disorder receives treatment.¹ With 28% of U.S. adults engaging in excessive drinking,² the need to screen and engage patients in collaborative conversations about substance use has never been higher.

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an evidence-based practice that has been shown to decrease substance use and risky behaviors, and improve quality of life. The SBIRT process entails:

SCREENING

Assesses the severity of substance use and identifies the appropriate level of treatment.

BRIEF INTERVENTION

A patient-centered conversation using Motivational Interviewing to increase awareness about substance use and motivation toward change.

REFERRAL TO TREATMENT

Provides access to specialty care for those with substance use disorders.³

Using collaborative communication techniques like Motivational Interviewing, health providers can better identify and intervene with at-risk patients to improve their health and reduce healthcare costs in the long term.

Nurses are in a unique position to talk with patients about alcohol use due to the time they spend interacting with patients and their training in communication and health promotion. They are also well positioned to identify patients in need of specialist treatment and to connect them with the right resources.

“A big part of what nurses do all the time is educate. If you engage a patient in a conversation about risky substance use in a trusting manner, you can gain trust and get honest information that you can use to help them,” says Cathy Koetting D.N.P., APRN, CPNP, NP-C, an assistant professor at the Saint Louis University School of Nursing who teaches undergraduate nursing students.

The challenge is integrating SBIRT skills into the nursing curriculum and ensuring that nursing students are competent and confident navigating SBIRT conversations.

CLIENT



School of Nursing

MARKET

*Healthcare
Higher Education*

SIMULATION

SBI with Adolescents

“*The way the Kognito simulation is done is the closest you can come to actually having a conversation...it's the most realistic simulation that I have worked with.*”

-Dr. Cathy Koetting,
Assistant Professor,
Saint Louis University
School of Nursing



Kognito's SBI for Adolescents clinical simulation

¹ [Facing Addiction In America: The Surgeon General's Report on Alcohol, Drugs, and Health \(2016\)](#)

² [NIH National Institute on Alcohol Abuse and Alcoholism Rethinking Drinking \(2016\)](#)

³ [SAMHSA Screening, Brief Intervention, and Referral to Treatment \(SBIRT\) \(2017\)](#)

SOLUTION

Saint Louis University School of Nursing adopted **Kognito's *SBI with Adolescents***, an online interactive simulation, to prepare its undergraduate nursing students to effectively screen and engage in brief intervention conversations with patients.

In the simulation, users meet a virtual coach and learn about the basics of SBIRT and Motivational Interviewing skills. Users then engage in a series of interactive scenarios where they practice leading conversations with virtual adolescent patients who use substances. The virtual patients in these role-play conversations are fully animated and were designed to mimic the behavior and responses of real patients.

The first two conversations are with Josh and Emily, whose screening results indicate that they use alcohol and marijuana. In the third conversation with Kayla, the learner conducts the Brief Intervention without help from the virtual coach, and sees their performance results in a detailed dashboard. The simulation can be completed in about an hour.

“What’s unique about Kognito is that it’s a way to role-play a situation as a nurse that is actually more interactive than traditional role-playing could really be,” says Dr. Koetting.

Dr. Koetting commented that students feel like alternatives to simulations, like in-person role-play, may not reflect the real-world situations they would encounter as nurses. “The way the Kognito simulation is done is the closest you can come to actually having a conversation like this, but still be doing it in an actual simulation.” As a nurse practitioner herself, Dr. Koetting adds “it’s the most realistic simulation that I have worked with.”

“*SBIRT gives [nursing students] the scaffolding they need to get the job done. It gives them the exact steps. The more they practice it, the more they begin to learn those propositions in between, the transitions from one step to the next...those are the hard things to do.*”

RESULTS

As reported in the *Archives of Psychiatric Nursing*, 59 students were asked to complete the simulation in their mental health and psychiatric nursing course. In the third simulated conversation, which assesses student competency in SBIRT, about two-thirds of students scored 80% or above.

Based on surveys taken before and after the Kognito simulation, students reported feeling more confident in their ability to screen patients, more confident in how they assess and discuss patients’ readiness to change their behavior, and more confident in referring patients to treatment.

Dr. Koetting says, “after doing this type of simulation, the fact that students would engage a patient like this is great because it

shows that at least if you’re more confident, you’re going to attempt it. They would not attempt it without an increase in confidence.”

The Kognito simulation also reinforced student knowledge about substance use and how to approach it with patients. “The simulation gives them the scaffolding they need to get the job done,” says Dr. Koetting. “It gives them the exact steps. The more they practice it, the more they begin to learn those propositions in between, the transitions from one step to the next...those are the hard things to do.”

Since she conducted the study, Dr. Koetting has continued to incorporate *SBI with Adolescents* into her nursing course. “Students really liked Kognito...it gives them as good of a real situation as you can possibly get.”



For more information on Kognito's *SBI for Adolescents* simulation, visit www.kognito.com.