

# SIMULATIONS TO AID DOCTORS IN THE FIGHT AGAINST CHILDHOOD OBESITY

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*Computerized Simulated Conversation Will Help Doctors Practice Talking to Parents About Changing Their Families' Habits for Diet and Activity*

(COLUMBIA, MD) In the fight against obesity, physicians and other healthcare practitioners are often the most likely people to promote behavior change, but educating and motivating patients without offending them is a difficult task. For a practitioner, talking to a parent about his or her child's weight can be especially uncomfortable, but learning how to have that discussion has become essential.

Nearly one-third of American children have been classified as overweight or obese, with the rate of severe childhood obesity having tripled in the last 25 years. Children who are overweight or obese experience a host of adverse consequences, including sleep apnea, fatty liver, high blood pressure, diabetes, and psychological concerns such as decreased self-esteem. Even more critically, the lifetime health effects of obesity in children are more likely to start at an earlier age and be more severe than those faced by individuals who become obese later in life.

Research indicates that healthcare providers could use additional education related to obesity prevention and treatment. For instance, many providers stop at discussing children's consumption of juice, fruits, and vegetables but do not discuss fast food or exercise.

To help combat this growing trend, SIMmersion LLC is developing a training system that will give providers information and tools to talk to parents about childhood obesity, and it will provide them with a simulated role-play conversation to practice techniques and learn from mistakes, without the consequence of providing incomplete care to an actual patient. Providers will learn by talking to a simulation character, the mother of an overweight child who is in danger of becoming obese. The mother will vary in her concern for her child's situation, her awareness of a problem, and her motivation to change her family's health habits. The character will be played by an actor, creating an immersive experience for practitioners who will become engaged in a realistic, generalizable setting.

This system, which is being funded through a Small Business Innovative Research (SBIR) grant through the Centers for Disease Control and Prevention (CDC), is being developed in cooperation of Dr. Jayne Fulkerson, the Director of the Center for Child and Family Health Promotion Research, and Dr. Nancy Sherwood, who has been the senior investigator of several research projects involving childhood obesity, as well as a panel of experts in the field of childhood obesity prevention. The current training system will be evaluated by an independent panel of experts in an effort to be funded for a fully-fledged, commercially available training product through a potential Phase II SBIR grant. Commercial launch of a training system to help doctors fight childhood obesity is anticipated for the second half of 2013.

“Our country’s problem with weight has been well documented. We’re all aware of the lower quality of life and higher healthcare costs that can result from obesity, and it’s sad to see the greatest negative effects are on children, who must rely on their parents as models for diet and activity,” said Dale Olsen, president and founder of SIMmersion LLC. “We’re encouraged by the ability to make an impactful difference for these children and their families by giving their healthcare providers a valuable resource of education and practice.”

SIMmersion has also created additional training systems to aid healthcare practitioners. Products available for sale include training alcohol screening and brief intervention, prescription drug abuse and follow-up care for high- and low-risk patients, and using motivational interviewing techniques.

SIMmersion provides advanced training for difficult conversations through interactive systems featuring simulations. These face-to-face conversation simulations allow users to acquire information, practice, and build communication skills. Professional actors are used to create life-like, challenging situations. Each simulated character has memory and an advanced emotional model that allows the character to respond to the user’s statements as a real person would. The result is a nearly free-form conversation that is different each time the simulation is used. Users receive feedback through the non-verbal cues of an on-screen coach, quantitative scoring at the end of each interaction, and instant replay features.