Simulation and Immersive Learning Shown to Successfully Teach Safe Opioid Prescribing in a Medical School Setting

March 16, 2017, ORLANDO, Fla. – Negative consequences from opioid prescribing stem in part from a lack of education and skills training in all levels of medical education. A 2011 study that assessed U.S. and Canadian medical school curricula concluded that pain education for North American medical school students is limited, variable, and often fragmentary, with significant gaps existing between recommended pain curricula and documented educational content (Mezei and Murinson J Pain 2011;12(12):1199-208).

“Pain has historically been understood as a symptom of a disease process, injury or surgery within the context of acute pain,” says Jordan Newmark, MD, associate division chief of education at Stanford University School of Medicine. “More recently, the concept of chronic pain representing a disease itself – associated with changes to the nervous and other body systems – is being appreciated. Given the public health implications of chronic pain and its consequences on our society, medical schools are gradually making the curriculum changes necessary to teach this important knowledge.”

Dr. Newmark recently conducted a study on the effectiveness of using simulation and immersive learning as a teaching modality to augment various pain medicine curricula in order to educate physicians in training on safe opioid prescribing for chronic non-cancer pain. The results were presented today in a scientific poster at the 33rd Annual Meeting of the American Academy of Pain Medicine.

Anesthesiology residents and pain medicine fellows participated in this study by engaging in a simulation experience during which they encountered a standardized patient requesting a refill of oral hydromorphone. The patient in the simulation fit the criteria for a moderate opioid misuse disorder, according to Diagnostic and Statistical Manual of Mental Disorders (DSM–V) criteria.
Study participants were assessed based on their use of management strategies to treat the patient within the simulation. A majority of participants provided a hydromorphone refill with weaning in the patient who fits DSM-V criteria for moderate opioid use disorder. Participants also employed prescription drug monitoring programs and urine drug testing to monitor at-risk patients. The results of this study indicate that simulation and immersive learning techniques are an effective method for teaching and practicing safe opioid prescribing.

“Safe prescribing of opioids requires a number of skills, including proper utilization of monitoring techniques,” says Dr. Newmark. “Simulation provides several impactful advantages over traditional, didactic-style instruction, as well as over real world clinical experiences, when it teaching comes to safe opioid prescribing. Students learning through simulation experience deliberate practice with timely performance feedback, leading to enhanced opioid-related education, and ultimately improved patient care.”

*Poster 159 – Use of Simulation and Immersive Learning to Teach Safe Opioid Prescribing*

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The American Academy of Pain Medicine is the premier medical association for pain physicians and their treatment teams with some 2,000 members. Now in its 34th year of service, the Academy’s mission is to optimize the health of patients in pain and eliminate pain as a major public health problem by advancing the practice and specialty of pain medicine through education, training, advocacy and research. Information is available on the Academy’s website at [www.painmed.org](http://www.painmed.org).

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