

Proposal for Novel R25 Science Education Program

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In January 2019, Michigan State University created the Michigan Collaborative Addiction Resources and Education System (MI CARES) in response to staggering increases in overdose due to illicitly manufactured fentanyl, fentanyl analogs, methamphetamine, and cocaine. Prescription opioid-related overdose and alcohol use disorder were also a concern. Through utilization of State Opioid Response funds, MI CARES not only trains physician-level addiction specialists in Michigan but across the country. Nearly 400 physicians in 43 states are currently on the pathway to becoming board-certified in Addiction Medicine. Michigan State University's MD and DO colleges also began implementing curricular changes to offer more training in treating persons with substance use disorders to their medical students. Student response has been overwhelmingly positive. Of the inaugural 36 first-year elective students, all 36 stated that they would recommend the elective to a colleague.

MI CARES is an effective program, and through its reach, we've learned that we must do more to prepare clinicians for what they'll experience throughout the addiction services continuum. We've learned that addiction and substance use disorders (SUDs) are often neglected in medical education. As a result, many prescribers graduate and begin to practice with feelings of discomfort, uncertainty, and inexperience when seeing SUD-affected patients. We can help them, and here's how: we propose the creation and development of a Novel R25 Science Education Program to complement existing federal, state, and local public health initiatives intended to reverse the epidemic of overdose deaths in the United States and to promote reduced prevalence of alcohol, psychostimulant, and other drug use.

Our Novel R25 Science Education Program will be guided by the premise that medical school education should include an addiction medicine curriculum focused on the nuances of substance use disorders and be implemented early in the training years. MI CARES has taught us that this early exposure can improve the standard of care in communities and help students and physicians feel comfortable and confident when delivering high-quality and evidence-based treatment across the addiction services continuum. Therefore, MI CARES is our proposed platform for the integration and delivery of the Novel R25 Science Education Program, requiring an addiction medicine curriculum at all levels of medical education.

Furthermore, Michigan State University is exceptionally positioned to address this need as it's the only university in the United States having Doctor of Medicine, Doctor of Osteopathic Medicine, and Nursing Colleges. During the current Respiratory Pandemic COVID-19, schools and universities were tasked with immediate transformations from traditional learning delivery models to supporting entire curriculums online. This wasn't a challenge for MI CARES, whose curriculum consists of online asynchronous modules, small group case-based simulations, large group lecture materials, and exam-style questions – all-inclusive of faculty notes. The adaptability of this robust online curriculum enables expansion for use among a broader population of healthcare professionals, including advanced practice specialty nurses. In addition, the adaptable curriculum can enhance the interaction amongst inter-professionals for a more seamless approach to the management and treatment of substance use disorders.

Through MI CARES we've learned, and we've proven that evidence-based methods and research for online education exist and result in positive program outcomes. We're poised to leverage our program to include a Novel R25 Science Education Program that will educate students about substance use disorders in the early stages of their careers. Why set them up for failure in a system full of providers who may lack education or comfort facing this ever emergent and escalating epidemic when we can support them right now?