



PROVIDING BETTER HEALTHCARE THROUGH  
SYSTEMS ENGINEERING

## Engineering Solutions to Surgical Pain Management

Alexander K. Hallway and Mike Englesbe, MD



**Monday 11/8 at 4:30 PM ET**

All seminars will be held in-person in IOE 1680 as well as virtually on Zoom. For the Zoom link and password, [RSVP here](#).

Opioid prescribing for pain after surgery is a common practice in western medicine. These medications are an important tool for pain management, however excessive opioid prescribing, especially after surgery, can lead to long-term dependence and medication diversion in our communities. This is a dangerous trend that has contributed to the rise of the opioid epidemic in the United States. Dr. Englesbe and Alex Hallway have spent the last 5 years studying these trends and developing solutions to reduce excessive opioid prescribing in acute care. This talk details their efforts to improve practice at a local and state level through policy, innovation, and interdisciplinary collaboration.

**Alex Hallway** is a Research Area Specialist affiliated with the Michigan Opioid Prescribing Engagement Network and the Michigan Surgical Quality Collaborative (MSQC). Alex studied Human Biology and Supply Chain Management at Michigan State University. He has worked on patient care and quality improvement initiatives at Michigan Medicine since 2017. As the Pain-control Optimization Pathway Lead, Alex works with Blue Cross Blue Shield of Michigan and the MSQC to promote surgical pain control innovation in Michigan hospitals. Alex also leads the MSQC Prehabilitation program, which aims to collect novel preoperative data elements and optimize patient health prior to surgery. Alex is passionate about surgical process optimization using technology and lean thinking. He enjoys working at the intersection of quality improvement and research and has published his work in journals such as JAMA Surgery, The Journal of the American College of Surgeons, and JAMA Network OPEN.

**Michael Englesbe, MD, FACS** is the Cyrenus G. Darling Sr., MD and Cyrenus G. Darling Jr., MD Professor of Surgery at the University of Michigan in the Section of Transplantation Surgery. Dr. Englesbe received his undergraduate degree at Yale University in New Haven, Connecticut in 1993. He went on to obtain his medical degree in 1997 from the Robert Wood Johnson Medical School and completed his general surgery residency at the University of Michigan Health System in 2004. From 2000 to 2002, Dr. Englesbe did a surgical research post-doctoral fellowship at the University of Washington Medical Center in Seattle, Washington. Dr. Englesbe specializes in kidney and liver transplantation in adults and children. He has a specific expertise in portal hypertension in children and adults.

This seminar series is presented by the U-M Center for Healthcare Engineering and Patient Safety (CHEPS): Our mission is to improve the safety and quality of healthcare delivery through a multi-disciplinary, systems-engineering approach. For the Zoom link and password and to be added to the weekly e-mail for the series, [please RSVP](#). For additional questions, contact [CHEPSseminar@umich.edu](mailto:CHEPSseminar@umich.edu). Photographs and video taken at this event may be used to promote CHEPS, College of Engineering, and the University.