CENTER FOR
HEALTHCARE ENGINEERING & PATIENT SAFETY
UNIVERSITY OF MICHIGAN

PROVIDING BETTER HEALTHCARE THROUGH SYSTEMS ENGINEERING

Understanding the Imbalance of Supply and Demand of Transplant Organs in the US: A Multidisciplinary Team Approach

Monday 9/27 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.

Organ donor shortage is expected to grow as demand for organs outweighs supply. However how various levers impact supply and demand of organs in the present and the future is not understood. Our team has created a framework to better understand some of the many aspects that impact supply and demand of organs to gain insights into how this issue may be ameliorated in the present and the future. Using data from various sources including Organ Procurement and Transplantation Network database, the U.S. Census Bureau and the National Health and Nutrition Examination Survey (among others), we explore how changes in donation rates (including implied consent) may impact the supply/demand imbalance.

Mariel Lavieri, Ph.D., Associate Professor of Industrial and Operations Engineering, University of Michigan
Mariel Lavieri joined the faculty at the University of Michigan - Ann Arbor in 2009. In her work, she applies operations research to healthcare topics. Her most recent research focuses on medical decision making, in particular on determining optimal monitoring and treatment by explicitly modeling stochastic disease progression.

David Hutton, Ph.D., Associate Professor School of Public Health & Industrial and Operations Engineering, University of Michigan
David Hutton holds a PhD from Stanford's department of Management Science and Engineering with a focus on health policy modeling. David's current research is focused on health policy and medical decision making, in particular the use of mathematical models to assist with the allocation of resources for health.

Neehar Parikh, MD, Gastroenterology, Internal Medicine, Transplant Hepatology, Michigan Medicine
Dr. Parikh's clinical and research work focuses on treatment and outcomes for hepatobiliary malignancies. He has research interests in liver cancer treatment allocation, treatment effectiveness modeling, cost and cost-effectiveness of healthcare interventions, quality of life, liver transplantation and allocation, and cancer screening and prevention.

Luke DeRoos, Ph.D. Student, Industrial and Operations Engineering, University of Michigan
Luke DeRoos is a PhD student under the guidance of Dr. Mariel Lavieri. His research focuses on improving the quality of and access to healthcare.

Wesley J. Marrero Colón, Ph.D., Postdoctoral Research Fellow, MGH Institute for Technology Assessment, Harvard Medical School
Wesley J. Marrero Colón's current research focuses on the usage and creation of data-driven methods to make better decisions and aims to address healthcare applications from a population and patient perspective.

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. Photographs and video taken at this event may be used to promote CHEPS, College of Engineering, and the University.