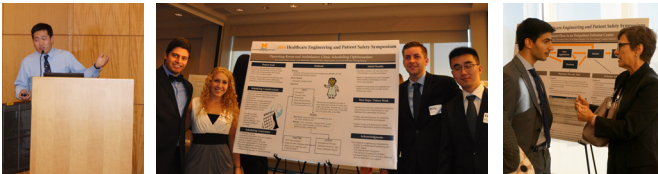


Healthcare Engineering & Patient Safety Symposium

Monday, September 28th
5 – 7:30 p.m.

North Campus Research Complex (NCRC)
Building 18, Dining Hall & Adjacent Hallway



Join us to learn more about how the Center for Healthcare Engineering and Patient Safety (CHEPS) is improving the safety and quality of healthcare delivery by identifying, fostering, and promoting collaborative projects across the University.

Posters and presentations represent collaborations between:

- Engineering
- Medical School
- School of Public Health
- School of Nursing
- UMHS
- and more...

"I think it's just the start. I think the big thing is to get a dialogue going between both the clinicians and other healthcare folks and the engineering side of the house... in a more successful way than we probably have in the past."

- Jim Bagian, Director of CHEPS



Schedule of Events

5:00 – 7:30

Live music by a classical trio of U of M students & alumni, refreshments, posters from units & researchers across the university & beyond, networking.

5:30

Welcome and remarks by Jim Bagian, CHEPS Director, and Amy Cohn, CHEPS Associate Director.

5:45

Attendees will have a chance to attend brief presentations at each poster as the presentations are being filmed.

5:45 - 6:15: GS01 - P08

6:15 - 6:45: P09 - P22

6:45 - 7:15: P23 - P38

7:00

Ballots due for Best Poster Award. Turn in at registration table.

7:15

Poster award announcement, raffle prizes, closing remarks, and more...

Games and Simulations

- GS01 **Flow Visualization at C.S. Mott Children's Hospital**
Hassan Abbas, Mark Grum, Brooke Szymanski, Amy Cohn, Michelle Macy, and Allison Cator
- GS02 **Phlebotomy Simulation**
Ajaay Chandrasekaran and Jonathon McCormick
- GS03 **A Simulation-Based Tool to Improve Matching of Trainees to Surgical Opportunities**
Billy Pozehl, Amy Cohn, Rishi Reddy, Jake Seagull, and Mark Daskin
- GS04 **Patient Appointment Scheduling Game**
Nina Scheinberg

- GS04 **Pediatric Shift Scheduling Game**
Luke Stumpus

Posters

- P01 **Care at Home**
CAH
- P02 **Michigan Center for Integrative Research in Critical Care**
M-CIRCC
- P03 **Documentation using Discrete Fields or Free-Text in Mi-Chart: Implications for Research**
Andrea Bouwhuis and Michelle Macy
- P04 **Referral Patterns from Pediatric Care Clinics to the Emergency Department**
Molly Laux, Christina Grech, Michelle Macy, Heather Burrows, and Elaine Pomeranz
- P05 **The Seth Bonder Foundation**
CHEPS and The Seth Bonder Foundation
- P06 **Seth Bonder**
CHEPS and The Seth Bonder Foundation
- P07 **Institute for Healthcare Improvement Open School**
IHI Open School
- P08 **Using Optimization Techniques to Improve the Shift Scheduling of Operating Room Staff**
Kayse Lee Maass, Mark S. Daskin, Kerstin Rider, Amy McGonegal, Laura Feuerbacher, and Emily Tucker
- P09 **Simulating a Medical Observation Unit for a Pediatric Emergency Department**
Mark Grum and Gabriel Zayas-Caban
- P10 **Data Quality and Strategy for Healthcare Providers and Payers under Pay-for-Performance**
Xuanya (Bill) Zhang

- P11 **Optimization of OR Block Schedule**
Mary Duck, Sachin Kheterpal, and Jenny Pardo
- P12 **Surgery Scheduling with Recovery Resources**
Maya Bam, Brian Denton, Mark Van Oyen, Mark Cowen
- P13 **Institute for Healthcare Policy & Innovation**
IHPI
- P14 **Learning Health System**
LHS
- P15 **Glove Box - Secure Cloud Computing For Research At UM**
Patrick Brady, Sharon Broude Geva, Tony Markel, and Brahmajee Nallamothu
- P16 **Scheduling Medical Residents With Conflicting Requests For Time-Off**
Brian Lemay, Amy Cohn, and Marina Epelman
- P17 **A Stochastic Programming Approach to Reduce Patient Wait Times and Overtime in an Outpatient Infusion Center**
Jeremy Castaing, Amy Cohn, and Brian Denton
- P18 **Predicting Deliveries in a Labor and Delivery Unit**
Vanessa Morales
- P19 **Advancing Hospital Institutional Objectives Through Engineering Applications**
Joseph East, Suneela Nayak, Jordan Peck, and Jeff Sanders
- P20 **Human infrastructure for Patient Safety: PASQUAL Scholars Program**
F. Jacob Seagull, Grant Greenberg, and Joe Derosier
- P21 **Policy Approximation for Optimal Treatment Planning**
Wesley Marrero, Gregory Schell, Mariel Lavieri, Jeremy Sussman, and Rodney Hayward

- P22 **Exact Methods for Finding Pareto-Dominant Resident Shift Schedules for a Pediatric Emergency Department**
Young-Chae Hong, Amy Cohn, and Marina Epelman
- P23 **Block Scheduling for Medical Residents**
Billy Pozehl, Amy Cohn, Janice Davis, and Ed O'Brien
- P24 **Shift Scheduling for C.S. Mott Pediatric Emergency Department**
Paige Mollison, Amy Cohn, Gabriel Zayas-Caban, and Steven Gorga
- P25 **Attending Physician Scheduling at the Mott Emergency Department**
Luke Stumpos and Brendan Schultz
- P26 **Creating a Dedicated Quality and Value-creation System in an Academic Department of Pathology**
Brian Tolle, Lisa Brown, Suzanne Butch, Kellen Kangas, Jeffrey Lott, Amy Mapili, Marianne Mara, John Perrin, and Scott Owens
- P27 **An Innovative Framework to Improve Efficiency of Interhospital Transfer of Children in Respiratory Failure**
Luke Bruski, Mariel Lavieri, Fola Odetola, and Gabriel Zayas-Caban
- P28 **Improving the Efficiency of Newborn Screening from Collection to Test Results**
Amy Cochran, Mary Klein, Sarah Reeves, Beth Tarini, Dalton Simancek, and Gabriel Zayas-Caban
- P29 **Optimizing Global Liver Function in Stereotactic Body Radiotherapy**
Victor W. Wu, Marina A. Epelman, H. Edwin Romeijn, Yue Cao, Hesheng Wang, Randall K. Ten Haken, and Martha Matuszak
- P31 **Missed Opportunities in Preventing Hospital Readmissions: Redesigning Post-Discharge Checkup Policies**
Xiang Liu, Jonathan Helm, Michael Hu, Mariel Lavieri, and Ted Skolarus
- P32 **Innovations in Surgical Instrument Reprocessing Methods for Improved Patient Safety and Financial Stewardship at UMHS**
Rama Mwenesi, Nina Scheinberg, Amy Cohn, James P. Bagian, Joseph DeRosier, Mark Grum, and Shawn Murphy
- P33 **Accreditation Council for Graduate Medical Education (ACGME) Case Requirements for General Surgeons in Pediatric Surgery: Evaluation of Current Operative Volume on Resident Completion of Index Cases**
Tina Thomas, Rishindra Reddy, Tiffany Ballard, Amy Cohn, William Pozehl, and Peter Ehrlich
- P34 **Accreditation Council for Graduate Medical Education (ACGME) Pediatric Surgery Requirements for the General Surgery Resident in the Era of Technological Advancement & Fellowship Programs**
Tina Thomas, Rishindra Reddy, Tiffany Ballard, Amy Cohn, William Pozehl, Kenneth Gow, and Peter Ehrlich
- P35 **Improving Patient Access to Weight Management Program for Morbidly Obese Patients**
Moses Chan, Elizabeth Olin, Amy Cohn, and Amy Rothberg
- P36 **Optimizing Early Detection Decisions for Prostate Cancer: Can New Biomarkers Help Save Lives?**
Christine Barnett, Scott Tomlins, John Wei, Todd Morgan, James Montie, Brian Denton
- P37 **Improving Patient Flow in an Outpatient Chemotherapy Infusion Center**
Matt Rouhana and Pamela Martinez
- P38 **Rule-based Prediction Analysis for 30-Days Neurological Recovery Status Post Stent-Assisted Coiling Treatment of Brain Aneurysms**
Karmel S. Shehadeh, Chun-An Chou, Varun Reddy, and Yahia Lodi

Poster Voting & Raffles

Turn in your ballot at the registration table before 7pm to vote for the People's Choice Best Poster Award!

Tweet with hashtag #chepssymposium for a chance to win a raffle prize. And keep an eye out for other raffle prize opportunities throughout the symposium!

Poster, Game, and Simulation Locations

