The Regenstrief Center for Healthcare Engineering (RCHE) is pleased to welcome you to the REMEDI Pump Collaborative Annual Conference.
REMEDI

The Regenstrief National Center for Medical Device Informatics (REMEDI) is an evidence-based community of practice for medical device informatics. REMEDI is a collaborative community of pharmacists, nurses, researchers, vendors and others working to improve patient safety and quality through the development and exchange of infusion pump medication administration knowledge and best practices. REMEDI currently includes a pump vendor-neutral analytics and reporting package, allowing hospitals to perform self-analysis and comparison of Dose Error Reduction Software (DERS) programming alerts, smart pump compliance, and drug limit libraries.

For more information:

https://www.purdue.edu/discoverypark/rche/centers/remedi/remedi-overview.php

“REMEDI: Where technology, practice, and interdisciplinary teams meet”

RCHE

The Regenstrief Center for Healthcare Engineering (RCHE) is an interdisciplinary research center located at Purdue University in West Lafayette, Indiana. RCHE’s mission is to transform healthcare delivery systems by conducting impactful research guided by national priorities and leveraging collaborative partnerships.

For more information: http://www.purdue.edu/discoverypark/rche/
# SCHEDULE AT A GLANCE

**REMEDI 2019**  
**APRIL 16-18, 2019**  
**BIG TEN CONFERENCE CENTER**  
**ROSEMONT, ILLINOIS**

<table>
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| 11:00 A.M. | Registration & Gathering  
Lunch (Provided)          |
| 12:00 P.M. | **Welcome and Introductions**  
Rich Zink, Regenstrief Center for Healthcare Engineering |
| 12:15     | **The Team Approach to Improving Medication Infusion Safety using IV Smart Pumps**  
Karen Giuliano, Northeastern University  
Scott Hirschy, Cameron Memorial Community Hospital  
Bev Vermace, University of Iowa Hospitals & Clinics |
| 1:00      | Break                                                                 |
| 1:30      | **“But I thought we were different?”: Clinical Practice Trends Identified Across an Infusion Pump Data Network**  
Sean O’Neill, Bainbridge Health |
| 2:15      | **The ASHP Standardize 4 Safety Initiative**  
Mike Ganio, American Society of Health-System Pharmacists |
| 2:45      | Break                                                                 |
| 3:15      | **NRFit: Reducing Medical Tubing Misconnections**  
Michael Cusack, GEDSA (Global Enteral Device Suppliers Association) |
| 4:00      | **Safety improvements in the Perioperative Environment**  
Scott Ciarkowski, University of Michigan Health |
| 4:30      | Reception                                                              |
| 6:00      | Adjourn                                                                |
### Wednesday, April 17

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<td><em>Infusion Data for Hospitals Utilizing Interoperability</em></td>
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<td>Kathryn Marwitz, Purdue University College of Pharmacy</td>
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<td>9:45</td>
<td><strong>Alaris DataSet Optimization and Improved Usage</strong></td>
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<td>Katie Kosch, Bellin Health</td>
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<td>10:15</td>
<td>Break</td>
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<td>10:45</td>
<td><strong>Intravenous Solutions Shortages: A Manufacturer’s Perspective on the Past, Present, and Future</strong></td>
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<td>JW Beard, ICU Medical</td>
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<td>11:15</td>
<td><strong>Joint Commission Update: A Human Factors Approach to Patient Safety</strong></td>
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<td>Erin Lawler &amp; Ed Pollack, The Joint Commission</td>
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Our sincere gratitude to the following organizations for supporting the REMEDI Pump Collaborative.

Primary funding is provided by the Regenstrief Foundation.

Additional funding is provided by our corporate partners.
Thank you for your leadership and contributions to the REMEDI Collaborative
**AGENDA**  
*Tuesday, April 16th*

All events are casual business attire

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Scott Ciarkowski, University of Michigan Health |
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Dinner on your own (See options in “Dining” section)
The Team Approach to Improving Medication Infusion Safety using IV Smart Pumps

In this session we will review the body of evidence on IV smart pump usability, drug library compliance, common user workarounds, and ongoing issues related to IV medication administration error. As the primary end-users of IV smart pumps, nurses are in the key position to identify the most important usability issues and work in collaboration with pharmacists, manufacturers, IT professionals and researchers to guide innovation and outcomes research in this very important area of patient safety.

Karen K. Giuliano, PhD, RN
Associate Professor
Executive Director Healthcare Innovation & EntrepreNURSEhip
Northeastern University

Karen K. Giuliano, PhD, RN, MBA, FAAN has clinical experience providing direct care to acutely and critically ill patients, and has made numerous contributions to the literature, with over 80 publications in more than 20 different journals, including Critical Care Medicine, American Journal of Critical Care, American Journal of Infection Control, and Nursing Research. Karen is also a frequent national and international presenter at professional healthcare conferences, with specific interests focused on the intersection of clinical needs and medical technology use, development and innovation.

Karen’s interdisciplinary program of research is focused in two main areas: non-ventilator hospital-acquired pneumonia and IV infusion safety using IV Smart Pumps.

Karen is a Fellow in the American Academy of Nursing (FAAN), a six-sigma green belt, and holds a BSN and PhD in nursing from Boston College, nurse practitioner from the University of Massachusetts, an MBA (Global Management Concentration) from Babson College and completed a postdoctoral research fellowship on IV infusion safety at Yale University.
Scott Hirschy, RN, BS  
**Director of Information Technology**  
Cameron Memorial Community Hospital

**Scott Hirschy**, RN, BS, is currently the Director of Information Technology at Cameron Memorial Community Hospital. He has also been a nurse for 19 years. Scott received his Bachelor of Science in Biology from the University of Indianapolis, and his Associate of Science in Nursing from Purdue University Fort Wayne.

Scott has worked in critical care nursing, as well as held numerous leadership positions. He was the Project Manager for the team that brought the Alaris Smart pumps to Cameron Hospital. He is a Member of Regenstrief National Center for Medical Device Informatics (REMEDI) Central National Steering Committee and an associate of the Purdue University Regenstrief Center for Healthcare Engineering. Scott works with the Medication Safety Committee to provide IV pump informatics data and trigger tools for the committee.

Bev Vermace, RN, MSN  
**Nursing Quality and Medication Safety**  
University of Iowa Hospitals & Clinics

**Bev Vermace**, RN, MSN is a Registered Nurse at the University of Iowa Hospitals and Clinics (UIHC) in Iowa City, Iowa. She has 40 years of clinical nursing experience with a focus on the Pediatric and Neonatal patient population. Bev received her Master in Nursing with an emphasis in Nursing Education. Her role at UIHC is the Parental Infusion Device Coordinator and Clinical Coordinator within the Division of the Chief Medical Information Officer. She supports both the nursing and medical staff on technology. During the Integration implementation process she worked closely with the Nursing Informatics team in testing of the process, education for the nursing staff, and support during the go-lives.

Bev became a member of the REMEDI community in 2010 and was one of the first of four hospitals to join. She served on REMEDI steering committee from 2012 – 2015 and was the first to introduce the then, IPI members, to the Auto-ID barcoding scanning at the IV pump level. UIHC was one of a very small number of hospitals to use the Auto-ID module on the Alaris IV pumps in where they scanned the patient, medication and the clinician into the IV pump. Additionally, UIHC was the first hospital in the world to integrate between Epic and Alaris in 2014.
This presentation will describe clinical trends in medication infusion practice across a network of hospitals. The focus will be on efficient translation of the data into meaningful and actionable quality improvement interventions.

Sean P. O'Neill, PharmD, is the Chief Clinical Officer of Bainbridge Health. Prior to Bainbridge Health, Sean served as the first Medication Safety Officer at The Children's Hospital of Philadelphia. In that capacity, Sean led a multi-disciplinary team of safety and quality leaders and oversaw the selection and/or implementation of large-scale technologies, including Electronic Health Records, Smart Infusion Pumps, and Barcode Scanning Systems. Sean serves as a board member of the Medication Safety Officers Society (MSOS) and has been a recipient of the Institute for Safety Medication Practice's CHEERS award in recognition for his contribution in the medication safety space. Prior to his work as a medication safety officer, Sean served as a Clinical Pharmacist at The Children's Hospital of Philadelphia and Boston Children's Hospital. Sean speaks nationally about medication safety and the use of technology to improve clinician workflow and patient safety. Sean completed his PharmD at Northeastern University.
Standardize 4 Safety is the first national, interprofessional effort to standardize medication concentrations in order to reduce errors and improve transitions of care. The initiative is focused on standardizing the concentrations of adult and pediatric continuous infusions, compounded oral liquids, and intravenous intermittent medications. This presentation will describe the need for the initiative, standard-development methodology, and completed work so far.

Dr. Michael Ganio, Pharm.D., M.S., BCPS, FASHP, joined the staff at ASHP as Director of Pharmacy Practice and Quality in January of 2018. As a member of the Center on Medication Safety and Quality team, his responsibilities span the practice of pharmacy and include drug shortages, sterile and non-sterile drug compounding practices, and hazardous drug safety.

Dr. Ganio earned his Pharm.D. from the Rutgers University Ernest Mario School of Pharmacy and his Master’s degree in Health-System Pharmacy Administration from The Ohio State University College of Pharmacy. He completed a PGY1 Pharmacy Practice residency at The Ohio State University Wexner Medical Center.

Dr. Ganio has over 17 years of hospital and health-system experience. His previous job roles have included clinical pharmacy practice, pharmacy informatics and technology, and operations management of outpatient oncology infusion pharmacies. He has extensive knowledge of pharmacy informatics and automation, medication billing and reimbursement, outpatient infusion and ambulatory care models, and sterile compounding.

Dr. Ganio is a Board Certified Pharmacotherapy Specialist (BCPS) and is a Certified Professional in Healthcare Information and Management Systems (CPHIMS). He has previously served as President of the Ohio Society of Health-System Pharmacists and as a member of the ASHP Council on Pharmacy Practice.
NRFit: Reducing Medical Tubing Misconnections

Michael Cusack, MBA
Executive Director
GEDSA (Global Enteral Device Suppliers Association)

Develop an understanding and history of ISO 80369-6 standard, commonly known as NRFit™.

Michael Kevin Cusack started his career with Abbott Laboratories’ Diagnostics Division as a sales rep in New England. After a series of domestic and international marketing and sales assignments with Abbott, he participated in a series of successful start-up companies in the medtech and biotech industries as a senior executive including CYTYC Corporation France (Hologioc), Ventana Medical Systems (Roche) BioImagene (Roche), HTG Molecular Diagnostics and Xeridiem Medical Devices (Spectrum Plastics). Mike joined GEDSA as its executive director in January 2018 after serving as its Board secretary during his time at Xeridiem where he was responsible for the enteral feeding tube business.

Mike holds a BS in Marketing from the University of Delaware and an MBA from Temple University, Philadelphia.
Safety Improvements in the Perioperative Environment

Scott Ciarkowski, PharmD, MBA
Manager—Quality and Safety
University of Michigan Health

Improve medication safety for anesthesiology. Review of the changes Michigan Medicine made in transitioning from a syringe pump only to both large volume and syringe pump for anesthesia providers along with changes pharmacy made to provide commercially available or compounded infusions.

Scott Ciarkowski, PharmD, MBA, is the Manager—Quality and Safety at the University of Michigan Health System and adjunct Clinical Instructor in University of Michigan College of Pharmacy,. He focuses on proactive strategies to improve safe medication use processes. Prior to accepting his current role, Scott was the Medication Safety Officer. Scott chairs the Medication Safety Committee, reporting to the Pharmacy and Therapeutics Committee and serves on various committees related to the medication use process. He has special interest in smart infusion pump libraries, compounded oral liquids, and pediatrics.
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Dinner on your own (See options in “Dining” section)
Summary of Day 1—Get Pumped Up!

Dan Degnan, PharmD, MS, CPPS, FASHP  
Associate Director of Professional Program Laboratory  
Clinical Assistant Professor of Pharmacy Practice (Courtesy)  
Purdue University College of Pharmacy

The morning review will poll participants about takeaways from the previous day and review complementary resources from the previous day’s presentations. The session is designed to enhance dialog and networking among attendees.

To start the day, Dan will kick off a discussion on Tuesday’s presentations and:

1. Informally poll participants about previous day learning  
2. Review his top 3 takeaways  
3. Provide complementary resources for the previous day

Come prepared to discuss:

1. What is something important you learned the day before?  
2. Who is someone you would like to meet and learn more about?  
3. Are there any takeaways for REMEDI and the future?

Dan Degnan, PharmD, MS, CPPS, FASHP is currently the Associate Director of the Professional Program lab at the Purdue University College of Pharmacy and a Clinical Assistant Professor of Pharmacy Practice. He also works with the Regenstrief Center for Healthcare Engineering (RCHE) at Purdue as a Clinical Research Associate with expertise and research interests in the area of medication safety technology, safety culture, pharmacy operations and high reliability.
The Opioid Epidemic: Misuse and Abuse

Natasha C. Nicol, PharmD, FASHP
Director of Global Patient Safety Affairs
Cardinal Health, Inc.

This session will explore the complex and multi-faceted etiology behind the opioid epidemic that has greatly impacted the United States. A look at the events which resulted in a perfect storm of legal and illicit drug use reveals surprising patterns. Understanding the etiology behind the epidemic also assists healthcare workers in planning for the care of potential patients. Interestingly however, the complexity of the problem facing the United States has also led to additional issues not previously predicted.

Natasha Nicol, PharmD, FASHP, is Director of Global Patient Safety Affairs for Cardinal Health, Inc. She received her Doctorate of Pharmacy degree from the University of Maryland School of Pharmacy. She is faculty for the Institute for Healthcare Communication, a certified Just Culture trainer, and invited professor for the South Carolina and Presbyterian Colleges of Pharmacy.

She is past-President of the South Carolina Society of Health-System Pharmacists. She is a Fellow of the American Society of Health-System Pharmacists and served on the Council on Education and Workforce Development, as well as the House of Delegates. She is Program Chair for the ASHP Medication Safety Collaborative. She was recognized for her work with the ASHP Award for Excellence in Medication-Use Safety and was named Pharmacist and Mentor of the Year by SCSHP.

She is a frequent presenter to professional groups, primarily focusing on safety as it relates to culture, use of technology, and development of processes.
Identifying and Monitoring Patients at Highest Risk for OIRD

Paul Milligan, PharmD
Medication Safety Pharmacist
BJC Healthcare

Paul will discuss risk factors of OIRD and explore existing and future models for risk-stratification. He will also present data on effectiveness of continuous monitoring of these patients.

Paul Milligan, PharmD, is Medication Safety Pharmacist at BJC HealthCare in St. Louis, Missouri. As Medication Safety Pharmacist, Dr. Milligan provides a leadership role in formulating system policy and instituting interventions that promote medication safety in all aspects of the medication management process. Additional activities include, being a liaison to several active system safety teams at BJC including, BJC System Pharmacy and Therapeutics Committee, Glycemic Management Team, Clinical Decision Support Collaborative, and Oversedation Task Force, among others.
**Opioid Data is NOT a Pain**

Rich Zink, MBA  
Managing Director, REMEDI Operations  
Regenstrief Center for Healthcare Engineering (RCHE)  
Purdue University

What do we know about the IV opioid data shared by REMEDI members? We will answer this question by summarizing a descriptive study, performed by RCHE researchers, on the REMEDI IV opioid data; concentrations, hard and soft dosing limits, durations, care areas where used, PCA usage and more.

Rich Zink, APIT (Amateur Pharmacist-In-Training), SOB (Son of Bob), FARTR (Father of ARchie The Roadrunner), has had the honor and privilege of working with the REMEDI collaborative since 2013. Mr. Zink is a recovering workaholic and lifelong learner who works diligently to improve his clinical knowledge by attending conferences, volunteering and contributing to national organizations focused on medication safety, reading ASHP Connect newsfeeds, and religiously scanning AJHP and the ISMP Newsletter for knowledge and ideas to share with the REMEDI collaborative. He often entertains REMEDI membership by, inadvertently, mispronouncing drug names.

Rich earned undergraduate degrees in Mathematics and Mechanical Engineering from Purdue University and an MBA from the University of Minnesota. Sadly, he has been relatively unsuccessful in cheering Purdue sports teams to national championships.
Habits shape the daily lives of everyone at work and home. The culture of an organization is often shaped by the habits of the employees. This session will describe how the personal and professional habits of healthcare providers can enhance or detract from patient safety initiatives.

Dan Degnan, PharmD, MS, CPPS, FASHP is currently the Associate Director of the Professional Program lab at the Purdue University College of Pharmacy and a Clinical Assistant Professor of Pharmacy Practice. He also works with the Regenstrief Center for Healthcare Engineering (RCHE) at Purdue as a Clinical Research Associate with expertise and research interests in the area of medication safety technology, safety culture, pharmacy operations and high reliability.
Beyond Alerts and Alarms: Novel Applications For Infusion Pump Data

Sean O’Neill, PharmD
Chief Clinical Officer
Bainbridge Health

This presentation will describe new applications of infusion pump data beyond evaluating compliance to DERS and alert management. The focus will be on how this data can play a role in medication cost stewardship, drug shortage management, and drug diversion monitoring.

Sean P. O’Neill, PharmD, is the Chief Clinical Officer of Bainbridge Health. Prior to Bainbridge Health, Sean served as the first Medication Safety Officer at The Children’s Hospital of Philadelphia. In that capacity, Sean led a multi-disciplinary team of safety and quality leaders and oversaw the selection and/or implementation of large-scale technologies, including Electronic Health Records, Smart Infusion Pumps, and Barcode Scanning Systems. Sean serves as a board member of the Medication Safety Officers Society (MSOS) and has been a recipient of the Institute for Safety Medication Practice’s CHEERS award in recognition for his contribution in the medication safety space. Prior to his work as a medication safety officer, Sean served as a Clinical Pharmacist at The Children’s Hospital of Philadelphia and Boston Children’s Hospital. Sean speaks nationally about medication safety and the use of technology to improve clinician workflow and patient safety. Sean completed his PharmD at Northeastern University.
In this action packed session, attendees will have their opportunity to share their thoughts on four (4) breakout topics. Further information will be provided during the session.

**Topic 1: Research & Scholarship**
One of the guiding principles of the collaborative is to conduct research on the pump data, share the results with the group, and use the information to improve patient safety and quality. This group will identify research topics of interest to the REMEDI infusion pump collaborative.

**Topic 2: Pump Metrics**
Many factors, including an increase in the number of hospitals which have implemented EHR-pump integration, are driving the need to refine pump reporting metrics. This breakout group will define the most important infusion pump metrics to report on a pharmacy and/or medication safety dashboard.

**Topic 3: Opioids & REMEDI**
The opioid crisis is a public health problem that has reached our hospitals. The individuals with interest in this topic will identify opportunities for REMEDI to assist in tackling the opioid crisis.

**Topic 4: REMEDI Vision**
As we move into the second decade of providing data-based tools and community activities focused on sharing knowledge and capturing best practices for infusion pump administration, we want to make sure that REMEDI is meeting the needs of the collaborative. In this voice of the customer session, group members will provide input on REMEDI’s future direction.
Low flow continuity, especially with syringe pumps, is an ongoing interest of ECRI Institute. In our testing of infusion pumps, we have found that pumps perform well, but only when used correctly. We’ll discuss some of the relatively simple steps clinicians can take in their normal practice to reduce the problems associated with low flows.

Bradley Bonnette is a Senior Project Officer in ECRI Institute’s Health Devices group, which conducts comparative evaluations of medical devices for the benefit of ECRI Institute member hospitals. He worked in the medical device industry before joining ECRI Institute, and has developed expertise on a wide variety of medical devices in the more than 10 years he has been with ECRI. Mr. Bonnette has conducted numerous comparative evaluations of medical devices for ECRI Institute publications. Technologies he has evaluated include intensive care ventilators, portable ventilators, anesthesia units, infusion pumps, video laryngoscopes, diagnostic electrocardiograms, and home care devices that communicate with smartphones.
Unveiling (some of) the Mysteries of IV Pumps

Bob Butterfield
Becton-Dickinson Research Fellow Retired
Principal
RDB Consultants

More than 1 million Americans receive life-supporting/saving infusions by IV pump daily. Caregivers often encounter confusion when these pumps fail to deliver with the needed accuracy. This presentation will uncover some of the mechanisms and impact of several of the unexpected sources of mis-behavior and offer some solutions and fore-warnings.

Bob Butterfield began his professional career in 1973 at Loma Linda University Medical Center in California. He soon moved to the role of Director of Clinical Engineering where he pioneered close teamwork between clinical staff and engineering in the management of complex systems including intra-aortic balloon pumps, ECMO systems and computerized ECG monitors. His research into detection of IV complications led to a career with the IVAC corporation which, after many acquisitions is now a major business of Becton-Dickinson BD. He is author of over sixty patents covering both IV therapy and non-invasive vital signs monitoring and has led in the development of a number of BD products. He presently serves as an expert on several medical device standards committees and is an advisor and invited speaker at three California engineering schools. He is presently “semi-retired’ (LOL) and consults with medical device manufacturers.
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             | Dan Degnan, Purdue University College of Pharmacy                                |
| 9:00       | **Overcoming data overload: Effectively using multiple sources of IV medication**  
             | *Infusion data for hospitals utilizing interoperability*  
             | Kathryn Marwitz, Purdue University College of Pharmacy                           |
| 9:45       | **Alaris DataSet Optimization and Improved Usage**  
             | Katie Kosch, Bellin Health                                                       |
| 10:15      | Break                                                                            |
| 10:45      | **Intravenous Solutions Shortages: A Manufacturer’s Perspective on the Past,**  
             | *Present, and Future*  
             | JW Beard, ICU Medical                                                           |
| 11:15      | **Joint Commission Update: A Human Factors Approach to Patient Safety**  
             | Erin Lawler & Ed Pollack, The Joint Commission                                   |
| 12:00 P.M. | Adjourn                                                                          |
Summary of Day 2 —Get Even More Pumped Up!

Dan Degnan, PharmD, MS, CPPS, FASHP
Associate Director of Professional Program Laboratory
Clinical Assistant Professor of Pharmacy Practice (Courtesy)
Purdue University College of Pharmacy

The morning review will poll participants about takeaways from the previous day and review complementary resources from the previous day’s presentations. The session is designed to enhance dialog and networking among attendees.

To start the day, Dan will kick off a discussion on Wednesday’s presentations and:
1. Informally poll participants about previous day learning
2. Review his top 3 takeaways
3. Provide complementary resources for the previous day

Come prepared to discuss:
1. What is something important you learned the day before?
2. Who is someone you would like to meet and learn more about?
3. Are there any takeaways for REMEDI and the future?

Dan Degnan, PharmD, MS, CPPS, FASHP is currently the Associate Director of the Professional Program lab at the Purdue University College of Pharmacy and a Clinical Assistant Professor of Pharmacy Practice. He also works with the Regenstrief Center for Healthcare Engineering (RCHE) at Purdue as a Clinical Research Associate with expertise and research interests in the area of medication safety technology, safety culture, pharmacy operations and high reliability.
**Overcoming Data Overload: Effectively Using Multiple Sources of IV Medication Infusion Data for Hospitals Utilizing Interoperability**

Kathryn Marwitz, PharmD, MPH  
Medication Safety Fellow  
Purdue University College of Pharmacy

With IV medication infusion data retrievable from multiple data sources, clinicians may be challenged with efficiently managing and interpreting this data. This presentation will detail a systematic approach to analyzing and prioritizing infusion data from the EMR, infusion pump, and the REMEDI database in the setting of interoperability.

**Kathryn Marwitz**, PharmD, MPH, is in the second year of her two-year postgraduate fellowship in medication safety with Purdue University College of Pharmacy, Eli Lilly, and the US Food and Drug Administration (FDA). Through her fellowship, she has had the opportunity to work with many individuals at the Regenstrief Center for Healthcare Engineering and the Indianapolis Coalition for Patient Safety contributing to collaborative research on IV smart pumps, medication safety, high-alert medications, and interoperability. She has also worked in pharmacovigilance supporting medication safety and reviewing adverse event data from the pharmaceutical industry and FDA perspectives. Kathryn received her doctorate of pharmacy degree from Drake University College of Pharmacy and Health Sciences and her master in public health degree from Johns Hopkins Bloomberg School of Public Health. Her research interests reside in developing and defining new ways to connect patient safety metrics and clinical pharmacy and health outcomes.
This presentation details how Bellin Health improved Guardrail usage and decreased unnecessary alert overrides for our outpatient oncology infusion center. Pharmacy and nursing collaborated to evaluate the infusion practices, the dataset entries, and the override data to optimize the dataset and nursing practices to increase infusion safety and nursing efficiency.

Katie Kosch, PharmD, is the Medication Safety and Informatics Pharmacist at Bellin Health. She evaluates the quality and compliance data for the infusion pump technology and provides direction to nursing staff on the safe use of the infusion pumps, as well as, other key medication safety metrics. She co-led the implementation of interoperability between the infusion pumps (Alaris) and the EMR (Epic). She also has many other responsibilities at Bellin, including leading the medication reconciliation initiative, medication alert optimization, order set building and maintenance, oversight and coordination of responses to medication safety event reports, etc.
Intravenous Solutions Shortages: A Manufacturer’s Perspective on the Past, Present, and Future

JW Beard, MD, MBA
Medical Director
ICU Medical, Inc.

This presentation will discuss drug shortages with a focus on the supply of intravenous solutions.

Dr. JW Beard, MD, MBA, is a board certified anesthesiologist who leads the Medical Affairs division at ICU Medical. Prior to joining ICU Medical, Dr. Beard was in clinical practice for twelve years, including preadmission clinics, operating rooms, pain management services, and labor and delivery units. During the course of his practice, Dr. Beard led multiple quality improvement initiatives and held leadership positions including Chairman and Medical Director of the Department of Anesthesia.
**Joint Commission Update: A Human Factors Approach to Patient Safety**

This interactive presentation will demonstrate The Joint Commission’s approach to patient safety using case studies and examples which will highlight the critical role of Human Factors in driving towards safer, more reliable processes in pursuit of zero harm.

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**Erin Lawler, MS**
**Human Factors Engineer**
**The Joint Commission**

Erin Lawler, MS, is the Human Factors Engineer in the Office of Quality and Patient Safety in the Division of Healthcare Improvement. As Human Factors Engineer, Ms. Lawler supports the division and enterprise-wide need for knowledge and expertise in human factors and ergonomics related to healthcare, and responds to patient safety events identified by the Office of Quality and Patient Safety. She provides education and consultation on human factors analysis in incident investigations, process improvement, and the development of sustainable interventions.
Dr. Edward Pollak, M.D., a practicing anesthesiologist and Fellow of the American Society of Anesthesiologists, is medical director and patient safety officer for the Division of Healthcare Improvement at The Joint Commission. In this role, he is responsible for promoting The Joint Commission’s performance improvement and patient safety initiatives. Dr. Pollak provides oversight and physician leadership to the Division of Healthcare Improvement, and leads the response to reported patient safety incidents at accredited and certified health care organizations.

A surveyor of record, Dr. Pollak is a member of the Accreditation Council. He also serves on working groups which look at areas of focus for The Joint Commission’s patient safety efforts and ongoing issues related to interpretation of current standards. He directs the patient safety fellowship and leads physician patient safety education throughout the organization. Dr. Pollak recently led a webinar on workplace violence, is a member of the Sentinel Event Alert writing group, and frequently speaks on physician engagement, safety culture, and burnout.

Prior to coming to The Joint Commission, Dr. Pollak was patient safety officer at William Beaumont Hospital Royal Oak where he helped lead the hospital to consistent top performance in patient safety and quality by championing a robust safety culture. A board certified anesthesiologist, he served as vice chief of Anesthesiology and Perioperative Medicine at William Beaumont Hospital Royal Oak.

Dr. Pollak received his medical degree from the University of Michigan Medical School, Ann Arbor, Michigan, and completed his residency in anesthesiology at the University of Michigan Medical Center. In addition to his medical background, Dr. Pollak holds a master’s degree in philosophy from Harvard University, Cambridge, Massachusetts, where he wrote his thesis on ethics.
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REMEDI Conference Room Rate of $145 Block Reservation Link, available until Friday, March 25th.

Book your room here
(The hyperlink resolves to: https://www.marriott.com/events/start.mi?id=1548709475209&key=GRP)

Attendees are responsible to book their own hotel.
The Big Ten Conference Headquarters and the Alpft Hotel are located directly off I-294 at the Balmoral Avenue exit in the Parkway Bank Park Entertainment District.

Parkway Bank Park Entertainment District
5401 Park Place
Rosemont, IL 60018
(847) 349-5008

Directions to Parkway Bank Park:
The Parkway Bank Park is conveniently located a block from the Donald E. Stephens Convention Center, the Rosemont Theatre and minutes from O’Hare International Airport and accessible from many major expressways in the south section of the Village of Rosemont.

From O’Hare International Airport:
East on Interstate I-90 to River Road South exit.
Proceed south on River Road about half mile to Bryn Mawr and turn right.
Continue two blocks and entrance is on the left.

From Downtown Chicago:
West on the Kennedy Expressway (I-90) to Northwest Tollway (I-90).
Exit River Rd. and turn right at the light.
Proceed south on River Road about 1 mile to Bryn Mawr and turn right.
Continue two blocks and entrance is on the left.

From Southbound Tri-State Tollway (I-294):
Exit at Balmoral Ave. (pay toll).
Turn Right on Balmoral Ave. and move into the left lane.
Merge left and follow signs into the Parking garage or go thru the underpass to get to the front of the Parkway Bank Park.

From Northbound Tri-State Tollway (I-294):
I-294 S toward Indiana/O’Hare. From there exit IL-19 Westbound- Irving Park Road.
Turn right at US-12 W/US-45 N/Mannheim Rd then take a slight right at Balmoral Ave.
Turn Right on Balmoral and merge left. Go over I-294 bridge.
Follow signs into the Parking garage or go thru the underpass to get to the front of the Parkway Bank Park.

From the West (Rockford)
I-90 E towards Chicago, then take the I-190W / I-294 S toward O’Hare/Indiana.
IL-19 Westbound- Irving Park Road
Turn right at US-12 W/US-45 N/Mannheim Rd then take a slight right at Balmoral Ave.
Turn Right on Balmoral and merge left. Go over I-294 bridge.
Follow signs into the Parking garage or go thru the underpass to get to the front of the Parkway Bank Park.
Parking

Parking validation available at the Big Ten Conference Center for $7.50 per day with no in/out privileges. Tickets must be validated at the Big Ten security desk prior to returning to car for departure.

Parking validation available at the Aloft Hotel for $15.00 per day with in/out privileges.

Dining

Dining options: [https://www.rosemont.com/thepark/dining/restaurant-listing/](https://www.rosemont.com/thepark/dining/restaurant-listing/)
ACKNOWLEDGEMENTS

Our sincere gratitude to these individuals, and their organizations, for contributing to the 2019 REMEDI Pump Collaborative Conference

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Andrew Fritschle ¹

Mike Ganio ²
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Bev Vermace ²

¹ Steering Committee Member
² Conference Speaker

The Big Ten Conference Center & Purdue University
Thank you for attending the 2019 REMEDI Infusion Pump Collaborative Annual Conference