March 1-3, 2017
Loews Royal Pacific Resort
Orlando, Florida
Lead efforts to improve healthcare quality – discuss ideas, applications and research with experts from around the world. HSPI offers innovative thinking in quality improvement, case management, simulation, human factors and safety.

March 1-3, 2017 • Loews Royal Pacific Resort • Orlando, Florida

SPONSORS
The organizations listed above are just three of SHS’s esteemed corporate partners who use membership to their advantage.

Discover the variety of SHS Corporate Partner benefits Fortune 100 companies and other smaller organizations use to improve their organization and support their employees.

• Up to 50% off membership cost and no new member application fee for corporate members
• 40% off of the regular, nonmember price for conferences (save hundreds per registration)
• 40% off of the regular nonmember price for training and seminars (save hundreds per course)
• Discounted job postings in the SHS online career center and for ISE and Industrial Management recruitment and display ads

Contact Doug Long, Global Director of Strategic Alliances, at dlong@iise.org to develop a customized plan for your company.

The Society for Health Systems (SHS) is happy to host this conference and facilitate meaningful discussions about optimizing healthcare systems to provide quality service and care. As you participate in the program, we hope you are inspired and challenged by the solutions, research and best practices presented. This year’s conference includes:

» Concurrent sessions on leadership, change management, process improvement, operations research and more. Choose topics relevant to your current position or explore new interests.
» Two half-day and one full-day pre-conference workshops to build new skills or refresh your knowledge on a variety of topics.
» Keynote presentations from Julie Ginn Moretz and Donald J. Wheeler, two world-renowned leaders in quality and process improvement.
» Networking opportunities and events to help you connect and build relationships with colleagues from around the world.
» Poster sessions to discover even more innovations and applications that apply to your organization.
» Exhibits from top healthcare service providers and health systems academic programs.

» Student activities and competitions.

Thank you for joining us to explore the latest operational and quality improvements and industry best practices in healthcare. The 2017 program will provide solutions and ideas to address your most challenging issues.

Save the date for 2018:
February 21–23, 2018 | Grand Hyatt Atlanta | Atlanta
Meet the 2017 Healthcare Systems Process Improvement Conference Committee.

Conference Chairs
» Chair – Lauren Cooper, Wake Forest Baptist Health
» Outgoing Chair – Thomas Roh, HDR
» Incoming Chair – Bianca Garcia, WellStar Kennestone Hospital

Day Coordinators
» Darrin Judkins, Boulder Community Health
» Eddie Perez-Ruberte, BayCare Health System
» Laura Silvoy, Array Architects

Board Liaison
» Evelyn Brown, East Carolina University

Track Chairs
» Vanda Ametlli, Henry Ford Health System
» Evelyn Brown, East Carolina University
» Michael Coleman, International Capital and Management Co.
» Brent Costa, San Francisco General Hospital
» Seth Hostetler, Pennsylvania State University
» Darrin Judkins, Boulder Community Health
» Jennifer Percivil, University of Ontario Institute of Technology
» Eddie Perez-Ruberte, BayCare Health System
» Lavana Ragavan, Montefiore Medical Center
» Tom Redding, St. Onge Company
» Farzan Sasangohar, Texas A&M University
» Benjamin Schleich, Binghamton University
» Susan Seidensticker, University of Texas Medical Branch
» John Templin, Templin Management Associates

Keynotes
» Chair – Thomas Roh, HDR

Reviewers
» Todd Banks, Wake Forest Baptist Medical Center
» Ashley Benedict, VA Sunshine Healthcare Network
» Mark Biscone, Texas Hospital Association
» Steve Clayman, Optimal-Use
» Chris Farnham, Spectrum Health
» Tiffany Formby, Huron Healthcare
» Bianca Garcia, WellStar Kennestone Hospital
» Marti Jordan, East Tennessee Children’s Hospital
» Lauren Klitz, University of Florida
» Tarun Mohan Lal, Mayo Clinic
» Danelle Montero, Primary Children’s Hospital
» Derek Murray, Health First Inc.
» Diana Nugent, Health First Inc.
» Anita Patel, Moffitt Cancer Center
» Laura Silvoy, Array Architects
» Katy Smith, North Carolina State University
» Michelle Taylor, Adventist Health System
» Varun Venkateswaran, The Kirklin Clinic of UAB Hospital
» Melissa White, North Carolina State University

Social Media & Marketing
» Chair – Bianca Garcia, WellStar Kennestone Hospital Committee:
» Todd Banks, Wake Forest Baptist Medical Center
» Adele Braun, UF Health/Shands
» Jana Browning, University of Florida Health
» Tiffany Formby, Huron Healthcare
» Melissa White, North Carolina State University

Student Events & Competitions
» Chair – Eddie Perez-Ruberte, BayCare Health System Committee:
» Derek Murray, Health First
» Lavana Ragavan, Montefiore Medical Center
» Katy Smith, North Carolina State University

Tracks & Curriculum
» Chair – Darrin Judkins, Boulder Community Health

Social Events & Networking
» Chair – Laura Silvoy, Array Architects Committee:
» Todd Banks, Wake Forest Baptist Medical Center
» Mark Biscone, Texas Hospital Association
» Adele Braun, UF Health/Shands
» Brent Costa, San Francisco General Hospital
» Marti Jordan, East Tennessee Children’s Hospital
» Lauren Klitz, University of Florida
» Varun Venkateswaran, The Kirklin Clinic of UAB Hospital
JULIE GINN MORETZ

Family Leader/Associate Vice Chancellor, Patient- and Family-Centered Care
University of Arkansas for Medical Sciences

Thursday, March 2 | 8 – 9 a.m. | Pacifica Ballrooms 8-12

Inspired by her young son’s battle with heart disease, Julie Moretz has spent the better part of her career as a family leader passionate about improving healthcare. At the University of Arkansas for Medical Sciences (UAMS) in Little Rock, Arkansas, Julie has overall leadership responsibility for developing clinical and academic programs related to patient- and family-centered care.

Julie has presented throughout North America and led a faculty team to Saudi Arabia to share the concepts of patient- and family-centered care. As a proponent of patient-centered outcomes research, she serves on the Patient-Centered Outcomes Research Institute’s (PCORI) Advisory Panel on Patient Engagement.

Julie is a recipient of the Woman of Excellence in HealthCare Award, the American Heart Association’s Lifetime Achievement Award and, in 2015, was honored with the National Healthcare Industry Access Initiative “Make A Difference” Award. Moretz and her family were featured in the PBS “Remaking American Medicine” series, in the “Hand-in-Hand” episode, where she was named a “Champion of Change.”

DONALD J. WHEELER

Statistical Process Controls Inc.
SPC Press

Friday, March 3 | 10:15 – 11:15 a.m. | Pacifica Ballrooms 8-12

Donald J. Wheeler is an author and consulting statistician who knew and worked with W. Edwards Deming for more than 20 years. A former associate professor at the University of Tennessee, Donald has conducted more than 1,100 seminars for more than 350 organizations in 17 countries.

Donald is a fellow of both the American Statistical Association and the American Society for Quality, and he was awarded the Deming Medal in 2010. His work has had a profound impact on companies and organizations around the world.
## SCHEDULE AT-A-GLANCE*

### Wednesday, March 1

*All educational sessions will be held at the Loews Royal Pacific Resort at Universal Orlando*

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>7 a.m. – 5 p.m.</td>
<td>Registration desk open</td>
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<tr>
<td>8 a.m. – 5 p.m.</td>
<td>Pre-Conference Workshops</td>
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<tr>
<td>4 – 5 p.m.</td>
<td>Student Welcome Reception</td>
</tr>
<tr>
<td>4:30 – 5:15 p.m.</td>
<td>Speed Networking Event</td>
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<tr>
<td>5 – 6 p.m.</td>
<td>Welcome Reception</td>
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### Thursday, March 2

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<td>7 a.m. – 5 p.m.</td>
<td>Registration Desk Open</td>
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<td>7 – 7:30 a.m.</td>
<td>Coaching Session for Students – Starting Strong!</td>
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<tr>
<td>7:45 – 7:55 a.m.</td>
<td>Welcome</td>
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<tr>
<td>8 – 9 a.m.</td>
<td>Keynote Presentation – Julie Ginn Moretz, University of Arkansas for Medical Sciences</td>
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<tr>
<td>9:10 – 11:15 a.m.</td>
<td>Concurrent Sessions</td>
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<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Dedicated Exhibit Time</td>
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<tr>
<td>11:15 a.m. – 6:15 p.m.</td>
<td>Exhibit Hall Open</td>
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<tr>
<td>12:15 – 1:30 p.m.</td>
<td>Lunch with an Update on the Dr. Rawson Challenge</td>
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<tr>
<td>1:40 – 5 p.m.</td>
<td>Concurrent Sessions</td>
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<td>5 – 6:15 p.m.</td>
<td>Networking Reception in the Exhibit Hall</td>
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<tr>
<td>6:45 p.m.</td>
<td>Dutch Treat Dinners – Sign-up sheets will be available at the conference registration desk</td>
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### Friday, March 3

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<tbody>
<tr>
<td>7 a.m. – 5:30 p.m.</td>
<td>Registration Desk Open</td>
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<tr>
<td>7 – 7:50 a.m.</td>
<td>Breakfast with the Exhibitors</td>
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<tr>
<td>7 a.m. – 3 p.m.</td>
<td>Exhibit Hall Open</td>
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<tr>
<td>7:50 – 9:55 a.m.</td>
<td>Concurrent Sessions</td>
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<tr>
<td>10 – 11 a.m.</td>
<td>Keynote Presentation – Donald J. Wheeler, SPC Press</td>
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<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Dedicated Exhibit Time</td>
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<tr>
<td>12:15 – 1:30 p.m.</td>
<td>Lunch with Awards</td>
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<tr>
<td>1:30 – 5 p.m.</td>
<td>Concurrent Sessions</td>
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<td>5:15 p.m.</td>
<td>Lean Cocktails</td>
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### Exhibit Hall Hours | Pacifica Ballroom 7

- **Thursday, March 2** | 11:15 a.m. – 6:15 p.m.
- **Friday, March 3** | 7 a.m. – 3 p.m.
SPECIAL EVENTS & MEETINGS

Wednesday, March 1

Facility Tour
Nemours Children’s Hospital
7:15 a.m. – 12:30 p.m. | Depart from the conference registration desk

Student Welcome Reception
Sponsored by the Healthcare Systems Engineering Institute at Northeastern University
4 – 5 p.m. | Oceana Grand Ballroom 12

Speed Networking Event
4:30 – 5:15 p.m. | Pacifica Ballroom 12

Welcome Reception
5 – 6 p.m. | Pacifica Ballrooms 10-11

Thursday, March 2

Coaching Session for Students
7 – 7:30 a.m. | Timor Sea 1

Welcome Address
7:45 – 7:55 a.m. | Pacifica Ballrooms 8-12

Dedicated Exhibit Time
11:15 a.m. – 12:15 p.m. | Pacifica Ballroom 7

Lunch with an Update on the Dr. Rawson Challenge
12:15 – 1:30 p.m. | Pacifica Ballrooms 8-12

Networking Reception in the Exhibit Hall
5 – 6:15 p.m. | Pacifica Ballroom 7

Friday, March 3

Breakfast with the Exhibitors
7 – 7:50 a.m. | Pacifica Ballroom 7

Dedicated Exhibit Time
11:15 a.m. – 12:15 p.m. | Pacifica Ballroom 7

Awards Luncheon
12:15 – 1:30 p.m. | Pacifica Ballrooms 8-12

Expert Panel Session
4 – 5 p.m. | Timor Sea 1

Lean Cocktails
5:15 p.m. | Meet at the conference registration desk

Dutch Treat Dinners
6:45 p.m. – First come, first serve.
Sign-up sheets will be available at the conference registration desk
PRE-CONFERENCE WORKSHOPS

All workshops are held on Wednesday, March 1. Additional fee applies.

8 a.m. – Noon

Developing Your Ability to Lead Teams – From the Inside Out
Room: Hibiscus 1
Jean Ann Larson, Jean Ann Larson & Associates
Intermediate level

You will walk away from this experiential workshop more confident and knowledgeable of how to lead teams. You will understand your and others’ behavior and what motivates individuals and teams. The workshop includes two insightful leadership assessments to help you understand how you can leverage your unique leadership style.

8 a.m. – 5 p.m.

Toyota Kata: Improving & Coaching Your Way to Success in Healthcare
Room: Hibiscus 2
Brandon Brown, Continuous Coaching Commitment LLC
Skip Steward, Baptist Memorial Health Care Corp.
All levels

This workshop will demonstrate Toyota kata, a brilliantly innovative management system that provides the means to problem-solving and a way to develop managers and leaders as coaches for creating a culture of continuous improvement. Find out how Baptist Memorial Health Care Corp. uses Toyota kata to overcome seemingly overwhelming challenges.

1 – 5 p.m.

Intensive Lean Huddle Board Workshop: Developing Local A3 Thinking Teams to Set Yourselves Up for Success
Room: Hibiscus 1
Brock Husby, KBPI/University of Michigan
Jerry Berlanga, KBPI
All levels

Process improvement and lean efforts regularly look at overall organizational change. While the goal is to drive organizational and cultural change, true change takes place at the individual and small team level. This workshop includes interactive simulations and practical tools and templates for teams to transform their organizations.
Student Networking Reception
Sponsored by

**Wednesday, March 1 | 4 – 5 p.m.**
*Oceana Grand Ballroom 12*
Meet other student attendees and jump-start your conference networking.

Third Annual SHS Student Simulation Competition
Sponsored by

Three finalist teams will present their solution to a real-world case study designed by competition sponsor FlexSim. Teams, which consist of a maximum of four students plus an advisor, were given approximately nine weeks to develop their solutions.

Cash prizes will be awarded to the competitors based on their finishing position. You can attend the finalist presentations on Thursday, March 2:

University of Washington
1:35 – 2:15 p.m. | Hibiscus 2

Western Michigan University
2:10 – 2:40 p.m. | Hibiscus 2

Bulacan University
2:45 – 3:15 p.m. | Hibiscus 2

Closing/Farewell
3:15 – 3:20 p.m. | Hibiscus 2

The final results will be announced at the Lunch and Award Ceremony scheduled for noon in the Pacifica Ballrooms 8-12.

Society for Health Systems Graduate Student Paper Competition
The Society for Health Systems is pleased to announce Jia Yan of the Georgia Institute of Technology won the 2017 Graduate Student Paper Competition.

Don’t miss the presentation of the winning paper, “Age-Specific Risk-Cutoff Values in Prenatal-Integrated Screening for Down Syndrome Considering Fairness,” from 3:25 – 3:45 p.m. in Hibiscus 2.

The judging criteria was based on originality and soundness, applicability, methodology, organization and quality of the paper. The competition recognizes outstanding work that demonstrates the use of ISE skills in improving healthcare-related products, processes or services.

Society for Health Systems Scholarship
Sponsored by

The winner of the 2017 SHS Scholarship, sponsored by HealthTrust Workforce Solutions, will be presented with the award during the SHS Awards Luncheon on March 3 in the Pacifica Ballrooms 8-12. The amount of the scholarship is $1,000. The recipient also received complimentary registration to HSPI 2017 and a travel stipend of $300.

Our Student Committee members have highlighted events and presentations that may be of particular interest for students. We hope that you will use this resource to help plan your conference experience.

**Thursday, March 2**

7 – 7:30 a.m. | *Timor Sea 1*
• Starting Strong: Coaching Session for Students

9:10 – 11:15 a.m. | Various Rooms – See Session Matrix for details
• Lean in Medical Education: A Cultural Transformation
• See the Bigger Picture: A True Systems Approach to Healthcare
• Redesigning U.S. Graduate Medical Education Using Systems Engineering
• Student Panel Discussion: Preparing for a Career in PI

1:35 – 5 p.m. | Various Rooms – See Session Matrix for details
• Integrating a Lego Simulation into a Lean Six Sigma Belt Training
• FlexSim Competition
• Graduate Student Paper Presentation
• Innovation Competition
• Improving Workflow and Layout on a Nursing Unit Using Lean

**Friday, March 3**

8 – 10:10 a.m. | Various Rooms – See Session Matrix for details
• Promoting, Supporting and Celebrating Operational Excellence
• Using Simulation and Mobile Technology to Improve Day-of-Surgery Patient Care
• Analyzing Patient Scheduling, No-Shows, and Cancellations in a Specialty-Care Clinic
• Creatively Using Lean Six Sigma and Manufacturing Concepts in Healthcare

1:35 – 5 p.m. | Various Rooms – See Session Matrix for details
• Lessons from the Frontier of Space: Space Exploration, Healthcare, Safety, Culture, and Leadership
• One Style Doesn’t Fit All: Selecting the Proper Leadership Approach In Continuous Improvement Environments
• Utilizing Computer Simulation for Optimal Facility Design and Clinic Workflow
• 12 Steps to Room Turnover Efficiency
Our **Young Professionals** Committee members have highlighted the following events and presentations that may be of particular interest to early-career professionals.

**Thursday, March 2**
9:10 – 11:15 a.m. | Various Rooms – See Session Matrix for details
- Redesigning Urgent Care: Transforming Patient Care in a New Facility
- Open Space: Choose Your Own Adventure
- Implementing EHR - A Life Altering Event
- Stop Driving Into Bridges!: Better Visual Controls in 5S

1:35 – 5 p.m. | Various Rooms – See Session Matrix for details
- Operating Room Capacity Management - How 5 Different Hospitals Do It - Perioperative PI Panel
- Driving Employee Safety with Lean
- Huddling and Huddle Boards: Developing Lean Culture One Team at a Time!
- Cape Canaveral Hospital - ED Pull Time Initiative
- Innovation Competition Pitch Session

**Friday, March 3**
8 – 10:10 a.m. | Various Rooms – See Session Matrix for details
- Old Wine, New Cask: Avoiding Broken Systems in Shiny Spaces
- Leanagement
- Gemba: Managing for Daily Improvement
- Reducing ED to ICU Transfer Time: The Role of Leadership and Kata

1:35 – 5 p.m. | Various Rooms – See Session Matrix for details
- The Next Step in Your Career - Young Professionals Pursuing Management Roles
- Process Improvements and Schedule Redesign for Increased Throughput
- 12 Steps to Room Turnover Efficiency
- Reducing ED Boarding Times by Standardizing Handoffs
- Eradicating the Average: Capturing the Complexity of Healthcare

Our **Experienced Professionals** Committee members have highlighted the following events and presentations that may be of particular interest to more seasoned professionals.

**Thursday, March 2**
9:10 – 11:15 a.m. | Various Rooms – See Session Matrix for details
- How Do I Set My Consulting Charge Rate?
- Design Thinking through 3P - Creating Waste-Free Processes
- Are Games an Interesting Way to Teach Continuous Improvement?

1:35 – 5 p.m. | Various Rooms – See Session Matrix for details
- Safety-Specific Transformational Leadership, Worker, and Patient Safety and Improved Health Systems
- Experienced Professionals Panel – Emotional Intelligence
- Lean and Six Sigma Principles & Decision-Making in Healthcare

**Friday, March 3**
8 - 10:10 a.m. | Various Rooms – See Session Matrix for details
- Old Wine, New Cask: Avoiding Broken Systems in Shiny Spaces
- Promoting, Supporting and Celebrating Operational Excellence
- Gemba: Managing for Daily Improvement

1:35 – 5 p.m. | Sessions | Various Rooms – See Session Matrix for details
- How to Manage ME Expectation Challenges in Difficult Financial Times
- One Style Doesn’t Fit All: Selecting the Proper Leadership Approach in Continuous Improvement Environments

We hope that you will use these resources to help plan your conference experience.
### WEDNESDAY, MARCH 1

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<td>Registration Desk Open – Registration Desk South</td>
<td>Hibiscus 1</td>
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<td>8 a.m. – Noon</td>
<td>Developing Your Ability to Lead Teams - From the Inside Out</td>
<td>Hibiscus 2</td>
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<td>Jean Ann Larson, Jean Ann Larson &amp; Associates</td>
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<td>1 – 5 p.m.</td>
<td>Intensive Lean Huddle Board Workshop: Developing Local A3 Thinking Teams to Set Yourselves Up for Success</td>
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<td>Brock Husby, KBPI/University of Michigan</td>
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<td>Jerry Berlanger, KBPI</td>
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<td>4 – 5 p.m.</td>
<td>Student Welcome Reception sponsored by the Healthcare Systems Engineering Institute at Northeastern University - Oceana Grand 12</td>
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<td>4:30 – 6:15 p.m.</td>
<td>Speed Networking Event - Pacifica Ballroom 12</td>
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<td>5 – 6 p.m.</td>
<td>Welcome Reception - Pacifica Ballrooms 10-11</td>
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### THURSDAY, MARCH 2

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<td>Coaching Session for Students – Starting Strong! – Timor Sea 1</td>
<td>Oceana Grand 12</td>
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<td>7:45 – 8 a.m.</td>
<td>Welcome – Pacifica Ballrooms 8-12</td>
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<td>8 – 9 a.m.</td>
<td>Keynote Presentation – Julie Ginn Moretz, University of Arkansas for Medical Sciences – Pacifica Ballrooms 8-12</td>
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#### Track

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<tr>
<th>Room</th>
<th>Process Improvement I</th>
<th>Process Improvement II</th>
<th>Quality &amp; Patient Safety</th>
<th>Human Factors</th>
<th>Change Management</th>
<th>Potpourri</th>
<th>Academia</th>
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<td>Oceana Grand 11</td>
<td>See the Bigger Picture: A True Systems Approach to Healthcare</td>
<td>Redesigning Urgent Care: Transforming Patient Care in a New Facility</td>
<td>Multisystem Approach to Standardizing the Evidence-Based Sepsis Practice in BayCare Health System</td>
<td>Stop Driving into Bridges!: Better Visual Controls in SS</td>
<td>Lean in Medical Education: A Cultural Transformation</td>
<td>Smart Health Data Analysis Platform on the Cloud</td>
<td>Increasing Diversity in Engineering through Healthcare Applications</td>
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<td></td>
<td>Brian Galli, Long Island University</td>
<td>Brent Costa, Zuckerberg San Francisco General Hospital &amp; Trauma Center</td>
<td>Chhavi Gupta, BayCare Health System</td>
<td>Shana Dykema, Medical University of South Carolina</td>
<td>Luca Boi and Wayne Samuelson, University of Utah Health Care</td>
<td>Arman Sargolzaei, Walmart Corp.; Ben Amaba, IBM Corp.; Mohamed Abdelghani and Saman Sargolzaei</td>
<td>Grisselle Centeno, Susana Lai-Yuen and Sharmin Mithy, University of South Florida</td>
</tr>
<tr>
<td>9:05 – 9:35 a.m.</td>
<td>Increasing Cath Lab Efficiency by Decreasing First-Case Preparation Times</td>
<td>Times Scott Springstead, James A. Haley VA</td>
<td>Design Thinking through 3P - Creating Waste-Free Processes Emily Swaney and Todd Schneider, OhioHealth</td>
<td>Utilizing PDCA for CLABSI Maintenance Bundle Compliance Improvement</td>
<td>Marcy Miles, Penn State Hershey Medical Center</td>
<td>Implications of Patient Demand on Medical Staff Mental Workload Setting Margaret Currie-Coy, Tiffany Jones, Jamie Piotrowski and Michael Buckingham, Wake Forest Baptist Medical Center</td>
<td>How Do I Set My Consulting Charge Rate? John Templin, Templin Management Associates Inc.</td>
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<td>Oceana Grand 12</td>
<td>Banda Sea 1</td>
<td>Banda Sea 2</td>
<td>Timor Sea 1</td>
<td>Hibiscus 1</td>
<td>Hibiscus 2</td>
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<td></td>
<td>Project “Shift It” – A New Way to Improve Cath Lab Capacity</td>
<td>Designing an Effective System to Manage Infusion Pump and Channels</td>
<td>Improving Safety &amp; Culture of Patient Care through Structured Problem Solving and Collaboration</td>
<td>Are Games an Interesting Way to Teach Continuous Improvement?</td>
<td>Open Space: Choose Your Own Adventure</td>
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<td></td>
<td>Meagen Mahowald, Boston Scientific Corp.</td>
<td>Bryan Norman, University of Pittsburgh; Kristine Wolff and Sandra Stokes, UPMC Presbyterian</td>
<td>Sudhan Gowrish Chinnappan, Houston Methodist</td>
<td>Julie Charron-Latour, Samuel Bassetto and Tadja Diderot, Polytechnique Montréal</td>
<td>Michele Stuart, Efficiency Engineers; Michael Kimball, St. Luke’s University Health Network</td>
<td>Isaac Mitchell, East Tennessee Children’s Hospital; Mark Graban, Kainexus</td>
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<td>FlexSim Student Simulation Competition Presentations University of Washington, Western Michigan University, Bulacan University</td>
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<td>Kevin Nortrup, Sugar Creek Solutions</td>
<td>Lavana Ragavan, Montefiore Medical Center; Vanda Amettil, Henry Ford Health System; Sheena Butts, Lakeland Regional Health; Rachel Douglas Hodge, MD Anderson Cancer Center; Anita Patel, Moffitt Cancer</td>
<td>Kent Riopelle, Jason De Leon and Kevin Allard, Blue Cottage Consulting</td>
<td>Kent Riopelle, KBPI/University of Michigan; Jerry Berlanga, KBPI</td>
<td>Brock Husby, VA Sunshine Healthcare Network (VISN 8); Hugh McManus, Metis Design</td>
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<td>Lunch with an Update on the Dr. Rawson Challenge – Pacifica Ballrooms 8-12</td>
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### THURSDAY, MARCH 2

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<td></td>
<td>Same Day Access to Cardiovascular Consultation Anna Paszczuk, Cherise Paulk, and Dennis Hall, Bay Pines VA</td>
<td>OR Turnaround Time: A Multifactorial and Cross-Functional Journey Ashely Sgaliardich, Holy Cross Hospital</td>
<td>In Tandem: Evidence-Based Practice and DMAIC Rebecca Harper, Amanda Davis and Emily Brennan, Medical University of South Carolina</td>
<td>A Modeling Approach for Performance Analysis of Medical Treatment Processes in Healthcare Systems Farhood Rismanchian and Young Hoon Lee, Yonsei University</td>
<td>Staffing Tool for Managers in a Large Ambulatory Care Center George Lourentzatos, Mount Sinai Hospital; Asala Erekat and Mohammad Khasawneh, SUNY at Binghamton; Xiaojun (Gene) Shan, University of Houston–Clear Lake</td>
<td>Safety-Specific Transformational Leadership, Worker and Patient Safety and Improved Health Systems Todd Smith, Indiana University School of Public Health – Bloomington</td>
<td>FlexSim Student Simulation Competition Presentations University of Washington, Western Michigan University, Bulacan University</td>
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<td>Cape Canaveral Hospital – ED Pul Time Initiative Derek Murray, Health First</td>
<td>Reducing Our Day of Surgery Cancellations for Ambulatory Surgery Lavana Ragavan, Montefiore Medical Center</td>
<td>Smoke Free Families Learning Collaborative: A Quality Approach to Smoking Cessation Dushka Crane, Meredith Cameron and Allison Lorenz, The Ohio Colleges of Medicine Government Resource Center</td>
<td>Resident Block Scheduling William Pozehl and Amy Cohn, University of Michigan</td>
<td>Lean and Six Sigma Principles &amp; Decision-Making in Healthcare Brian Galli, Long Island University – Post</td>
<td>Leading with Quality: Elevating Clinical Documentation Maria Hamilton, Penn State Health Milton S. Hershey Medical Center</td>
<td>Society for Health Systems Graduate Student Paper Competition Winner: Age-Specific Risk-Cutoff Values in Prenatal-Integrated Screening for Down Syndrome Considering Fairness Jia Yan, Georgia Institute of Technology</td>
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<td>2:40 – 3:10 p.m.</td>
<td>3:15 – 3:45 p.m.</td>
<td>3:45 – 4 p.m. Break – Pacifica Ballroom 7</td>
<td>4 – 5 p.m.</td>
<td>5 – 6:15 p.m.</td>
<td>Networking Reception – Exhibit Hall – Pacifica Ballroom 7</td>
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For more detailed information on each talk, please visit the online interactive schedule at [www.xcdsystem.com/shs/program](http://www.xcdsystem.com/shs/program)
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<td>7 a.m. – 5 p.m.</td>
<td>Registration Desk Open – Registration Desk South</td>
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<td>7 – 7:55 a.m.</td>
<td>Breakfast with the Exhibitors – Pacifica Ballroom 7</td>
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<td>7 a.m. – 3 p.m.</td>
<td>Exhibit Hall Open – Pacifica Ballroom 7</td>
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<td>Oceana Grand 11</td>
<td>Roll With the Changes: Creating Value by Reduction of Clinical Variation</td>
<td>Oceana Grand 12</td>
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<td>John Elliott, HORNE LLP</td>
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<td>Banda Sea 1</td>
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<td>Old Wine, New Cask: Avoiding Broken Systems in Shiny Spaces</td>
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<td>Isaac Mitchell, East Tennessee Children’s Hospital; Jen Dieter, JKA Consulting</td>
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<td>Multidisciplinary Heart Failure Clinic and Remote Monitoring</td>
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<td>Elpiñqi Martopullo and Prateek Verma, Boston Scientific</td>
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<td>Oceana Grand 12</td>
<td>Using Geographic Information Systems for Location-Allocation of Mass Casualty Medical Kits</td>
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<td>Christina Rusnock and Vhance Valencia, Air Force Institute of Technology</td>
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<td>Leangagement Eddie Perez-Ruberte, BayCare</td>
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<td>Banda Sea 2</td>
<td>Promoting, Supporting and Celebrating Operational Excellence</td>
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<td>Timor Sea 1</td>
<td>Adele Braun and Brandon Charette, Holy Cross Hospital</td>
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<td>Hibiscus 1</td>
<td>Using Simulation and Mobile Technology to Improve Day-of-Surgery Patient Care</td>
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<td>Kevin Taaffe, Larry Fredendall and Joel Greenstein, Clemson University; Nathan Huynh and Jose</td>
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<td>Vidal, University of South Carolina</td>
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<td>8 – 9 a.m.</td>
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<td>Hospital Pharmacy Supply Chain Improvement</td>
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<td>Xiaojin Zhang, Ayliana Dharmawan, Heng Yong Sheng, Kong Lin Mary Chong, Yao Zong Teo and</td>
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<td>Indu Sharma, Tan Tock Seng Hospital</td>
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<td>Establishing Patient Empanelment and Panel Redesigns at a Primary Care Practice</td>
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<td>So Youn Kweon and Mohammad Khasawneh, SUNY-Binghamton University; Andrew Nenos, Mount Sinai</td>
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<td>Health System; Xiaojun (Gene) Shan, University of Houston-Clear Lake</td>
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<td>Improving Patient Safety through the Reduction of Inaccurate Surgical Consents</td>
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<td>Mike Gegner, Northwestern Medicine</td>
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<td>Analyzing Patient Scheduling, No-Shows and Cancellations in a Specialty-Care Clinic</td>
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<td>Pranjal Singh, Amy Cohn, Amy Rothberg and Henry Ballout, University of Michigan</td>
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<td>Gemba: Managing for Daily Improvement</td>
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<td>Sheena Butts, Lakeland Regional Health</td>
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<td>Building a Sustainable Lean Healthcare Program</td>
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<td>Mechanistic vs Organic Lean System Building Part 1</td>
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<td>Brock Husby, KBPI/University of Michigan</td>
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<td>Predicting Radiation Therapy Response Using Gene Expression Profiles</td>
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<td>Grisselle Centeno and Florentino Rico, University of South Florida</td>
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<td>9:05 – 9:35 a.m.</td>
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<td>Building a Sustainment System – The Model Cell Approach</td>
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<td>Ben Wilk and Sherida Harvey, OhioHealth</td>
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<td>Creatively Using Lean Six Sigma and Manufacturing Concepts in Healthcare</td>
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<td>Shane Jenkins, Genesis Healthcare System</td>
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<td>Scheduling Colonoscopy Patients in an Outpatient Endoscopy Clinic</td>
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<td>Karmel Shehadeh, Sameer Saini, Jacob Kurlander and Amy Cohn, University of Michigan</td>
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<td>Simulation-Based Optimization of a Cancer-Specific Urgent Care Clinic</td>
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<td>Shoshana Goldberg and Howard Abrams, University Health Network; Huda Bilal, Michael Lu,</td>
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<td>Matthew Jamieson, Isis Gutierrez and Sabrina Bennett, University of Toronto</td>
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<td>Reducing ED to ICU Transfer Time: The Role of Leadership and Kata Sarah Bonzo, State University</td>
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<td>Brock Husby, KBPI/University of Michigan</td>
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<td>The Costs and Consequences of Poor Access to Care</td>
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<td>Melissa Cyr, Margo Jacobsen and James Benneyan, Northeastern University</td>
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### FRIDAY, MARCH 3

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<td>11:15 a.m. – 12:15 p.m.</td>
<td>Dedicated Exhibit Time – Pacifica Ballroom 7</td>
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<td>12:15 – 1:30 p.m.</td>
<td>Lunch with Awards – Pacifica Ballrooms 8-12</td>
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<td>1:35 – 2:35 p.m.</td>
<td>Systemwide Alignment of Improvement Work - Brittany Patterson and Luca Boi, University of Utah Health Care</td>
<td>Leveraging Remote Video Auditing and Facilitation to Improve OR Turnover - Alyssa Ferrer and James Rudy, Northwell Health</td>
<td>Lessons from the Frontier of Space: Space Exploration, Healthcare, Safety, Culture, and Leadership - Brock Husby, KBPI/University of Michigan</td>
<td>Reduce Nurse Overtime at Oncology Centers with Integer Programming and Simulation - Mohammed Aladeemy, Srikanth (Sri) Poranki and Mohammad Khasawneh, State University of New York at Binghamton; Xiaojun (Gene) Shan, University of Houston-Clear Lake</td>
<td>The Next Step in Your Career – Young Professionals Pursuing Management Roles - Laura Silvoy, Array Advisors; David Fones, Universal Health Services; Tarun Mohan Lal, Mayo Clinic; Brent Costa, Zuckenberg San Francisco General Hospital &amp; Trauma Center; Jordan Aronhalt, Long Island Jewish Medical Center; Elizabeth Gentry, University of Louisville; Amy Slovacek, Lutheran Senior Services</td>
<td>Asset Mapping to Build Patient- and Family-Centered Care Networks - James Rawson, Georgia Regents University</td>
<td>Process Improvement with Short Run Data in Healthcare Systems - Siram Krishnaswamy, Thomas Holzer and Shahryar Sarkani, The George Washington University</td>
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<td>2:40 – 3:10 p.m.</td>
<td>Utilizing Video Relay Interpretation to Influence Length of Stay and Readmissions - Susan Seidensticker, University of Texas Medical Branch (UTMB)</td>
<td>Turnover Timer App: A Visual Management Tool for Turnover Time Improvement - Robert Allen, Kevin Taffee, Larry Fredendall and Joel Greenstein, Clemson University; Nathan Huynh and Jose Vidal, University of South Carolina</td>
<td>Studying Health Management Workflow at Daily Living Settings - Mustafa Ozkanay, University of Colorado Denver; Rupa Valdez, University of Virginia</td>
<td>Process Improvements and Schedule Redesign for Increased Throughput - Timothy Dougherty, Lehigh University</td>
<td>How to Manage ME Expectation Challenges in Difficult Financial Times - Roque Perez-Velez, UF Health Shands</td>
<td>One Style Doesn’t Fit All: Selecting the Proper Leadership Approach in Continuous Improvement Environments - Brian Galli, Long Island University – Post</td>
<td>Mitigating Information Security Risk through Process Modeling - Jennifer Percival, University of Ontario Institute of Technology; Nathan Percival, Durham College</td>
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## FRIDAY, MARCH 3

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<td>4 – 5 p.m.</td>
<td>Oceana Grand 11</td>
<td>Reducing ED Boarding Times by Standardizing Handoffs Flynn Vickers and Elizabeth Melzer, James A. Haley Veterans’ Hospital; Colleen Park, Department of Veterans’ Affairs</td>
<td>Eradicating the Average: Using DES to Answer Complex Healthcare Questions Laura Silvy, Array Advisors</td>
<td>The Value of Simulation Exercises in Hospital Move Planning Ammarah Shahid, Alice Geertsen and Jackie Charko, Halton Healthcare</td>
<td>Utilizing Computer Simulation for Optimal Facility Design and Clinic Workflow Varun Venkateswaran, Lee Kate Hamff, Britani DeLoach and Beth Winningham, UAB Medicine</td>
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5:15 p.m. Lean Cocktails – Meet at Conference Registration Desk – Registration Desk South
As the healthcare industry strives for more efficient operations, quality customer service, and improved processes that limit costs and increase profitability, the Society for Health Systems and the Institute of Industrial and Systems Engineers have developed seminars that apply industrial engineering skills and tools in the healthcare environment.

This series of seminars focuses on two types of management engineering courses. The first provides you with the basics of the industrial engineering toolbox as applied to healthcare and introduces you to the fundamental management skills required for demanding tasks in this industry. The second shows how to apply the lean and Six Sigma toolbox within the healthcare environment.

**AVAILABLE CLASSROOM COURSES:**
- Lean Green Belt for Healthcare
- Lean Black Belt for Healthcare
- Six Sigma Green Belt for Healthcare
- Six Sigma Black Belt for Healthcare
- Lean Six Sigma Green Belt for Healthcare
- Lean Six Sigma Black Belt for Healthcare
- Intro to IE in Healthcare
- Healthcare Management Engineering Certificate Program
- Principles in Hospital Labor Management
- Principles in Patient Flow and Throughput
- Project Management Fundamentals

**AVAILABLE ONLINE COURSES:**
- Six Sigma Green Belt for Healthcare Online
- Lean Six Sigma Green Belt for Healthcare Online On-Demand
- SHS “No-Wait Ed” Series: This Is How We Do It
- Intro to IE in Healthcare
- Principles in Hospital Labor Management
- Principles in Patient Flow and Throughput

**ON-SITE CORPORATE TRAINING**
SHS and IISE will work with your organization to develop specially priced training programs that meet your particular needs and will conduct the training at your locations lowering your training and travel expenses.

For complete course details, visit our website at [www.iisetraining.org/healthcare](http://www.iisetraining.org/healthcare) or contact Larry Aft, P.E., director of continuing education and program development, at (770) 349-1130 or cell (404) 786-1541.
THURSDAY, MARCH 2
7 – 7:30 a.m.

Starting Strong!
Room: Timor Sea 1
Lavana Ragavan, Montefiore Medical Center
Muyuan Li and Eddie Perez-Ruberte, BayCare
Derek Murray, Shands Health Care
Kathryn Smith, North Carolina State University
Basic level

This professional coaching session for students will provide advice on how to make the best out of the conference and address other professional questions.

9:05 – 9:35 a.m.

See the Bigger Picture: A True Systems Approach to Healthcare
Room: Oceana Grand Ballroom 11
Brian Galli, Long Island University – Post
Basic level

Learning Objectives
• A new perspective of how to see our healthcare system
• Showing the relationships that the different stakeholders have on the effectiveness of our healthcare system as a whole
• Embedding lean and Six Sigma concepts and tools into this systems view of healthcare
• Showing how all of the stakeholders need to align

Redesigning Urgent Care: Transforming Patient Care in a New Facility
Room: Oceana Grand Ballroom 12
Brent Costa, Zuckerberg San Francisco General Hospital & Trauma Center
Intermediate level

Years after becoming Zuckerberg San Francisco General Hospital’s original value stream, the Urgent Care Center began preparing to move into a new facility. This presentation will focus on this department’s culmination of years of previous rapid improvement events and the opportunity to redesign patient care using 3P methodology.

Multisystem Approach to Standardizing the Evidence-Based Sepsis Practice in BayCare Health System
Room: Banda Sea 1
Chhavi Gupta, BayCare Health System
All levels

BayCare Health System developed a systemwide approach to improve early identification and treatment of sepsis.

Best practice-based initiatives, led by an interprofessional team including physicians, nurses, clinical educators and a performance improvement team, led to improved sepsis bundle compliance and reduced mortality.

Stop Driving into Bridges! Better Visual Controls in 5S
Room: Banda Sea 2
Shana Dykema, Medical University of South Carolina
Intermediate level

This session will describe the biology, psychology and cognitive ergonomics underlying people’s interactions with visual controls. Participants will learn to apply this knowledge to create more effective, highly reliable visual controls for use in 5S and other lean/Six Sigma projects, which can lead to more effective implementation and control phases.

Lean in Medical Education: A Cultural Transformation
Room: Timor Sea 1
Luca Boi, Wayne Samuelson and Sylvia Jessen, University of Utah School of Medicine
All levels

In 2013, the University of Utah Health Sciences Colleges were challenged to embrace lean principles to improve the value and quality in education and research. The School of Medicine used lean principles and tools to improve the students’ grades submission process and change the culture of the organization.

Smart Health Data Analysis Platform on the Cloud
Room: Hibiscus 1
Ben Amaba, IBM Corp.
Arman Sargolzaei, Walmart Corp.
Saman Sargolzaei
Mohamed Abdelghani
Basic level

The objective of the current work was to design and develop a cloud-based smart health data analysis platform for real-time, patient-specific health monitoring and analysis with long-term surveillance to support a learning-based information processing system benefiting from cloud and mobile technologies.

Increasing Diversity in Engineering through Healthcare Applications
Room: Hibiscus 2
Grisselle Centeno, Susana Lai-Yuen and Sharmin Mithy, University of South Florida
All levels

Statistics reflect that 18.9 percent of women earn a bachelor’s degree in engineering. Conversely, bachelor’s degrees
awarded to women in health professions surpass 85 percent. Through this project, we develop innovative pedagogical interventions focused on healthcare applications to engage and motivate students, particularly females, to complete their degrees and join the engineering field.

9:40 – 10:10 a.m.

**Increasing Cath Lab Efficiency by Decreasing First-Case Preparation Times**
Room: Oceana Grand Ballroom 11
Scott Springstead, Glenn Cormier, Thomas Oneill and Holly Wertheimer, James A. Haley VA
All levels

The Tampa VA Cardiac Catheterization Lab performs procedures on over 1,400 veterans yearly. Veterans must undergo a multistep preparation process the morning of the procedure that was taking an average of 109 minutes. Through process redesign using lean, the average preparation time was reduced to 60 minutes.

**Design Thinking through 3P – Creating Waste-Free Processes**
Room: Oceana Grand Ballroom 12
Todd Schneider and Emily Swaney, OhioHealth
Intermediate level

After successfully engaging associates within a model cell, hospital leadership was looking for a new way to engage associates in preparing to open a new unit. A production preparation process (3P) was used to create new processes for critical moments in the patient’s stay.

**Utilizing PDCA for CLABSI Maintenance Bundle Compliance Improvement**
Room: Banda Sea 1
Marcy Miles, Penn State Hershey Medical Center
All levels

“Make Your Intention Prevention” – central line-associated bloodstream infection reduction utilizing an iterative approach to bundle compliance.

**Implications of Patient Demand on Healthcare Staff Mental Workload**
Room: Banda Sea 2
Erich Maxheimer, Christina Rusnock, Kyle Oyama and Vhance Valencia, Air Force Institute of Technology
Basic level

This research investigated the impact of increasing patient load on the mental workload of staff at Wright-Patterson Medical Surgical Unit. The task-demands are quantified using discrete-event simulation. The analysis reveals that current workload demands are unevenly distributed and predicts this would be exacerbated by increasing patient load.

**Shrinking and Spreading Change in an Inpatient Hospital Setting**
Room: Timor Sea 1
Margaret Currie-Coyoy, Tiffany Jones, Jamie Piotrowski and Michael Buckingham, Wake Forest Baptist Medical Center
All levels

At Wake Forest Baptist Medical Center, we have committed time and resources toward improving inpatient throughput by ensuring that patients are discharged in a timely fashion. Many of our efforts have revolved around changing the culture and habits of the care team to impact the patient and employee experience positively.

**How Do I Set My Consulting Charge Rate?**
Room: Hibiscus 1
John Templin, Templin Management Associates Inc.
Basic level

Many management engineers get the itch to become independent consultants but have no idea how to determine their hourly or daily consulting rate. The speaker has presented and written on this subject and will share updated information on consulting rate setting and related factors.

**Redesigning U.S. Graduate Medical Education Using Systems Engineering**
Room: Hibiscus 2
James Benneyan and Awatef Ergai, Healthcare Systems Engineering Institute, Northeastern University
Thomas Van der Kloot and Peter Bates, Maine Medical Center
Ryan Gurney, The Ohio State University
Intermediate level

The presenters summarize a new four-year $4.8 million initiative co-sponsored by the Accreditation Council of Graduate Medical Education (ACGME) and eight leading U.S. academic medical centers to conduct collaborative innovation projects to redesign physician resident training. ACGME provides oversight of approximately 9,600 residency and fellowship programs across the United States.
10:15 – 11:15 a.m.

**Project “Shift It” – A New Way to Improve Cath Lab Capacity**
Room: Oceana Grand Ballroom 11
Meagen Mahowald, Boston Scientific Corp.
All levels

With shifting patterns of procedure demand, a large urban cardiovascular center needs to change the paradigm of staff scheduling.

**Designing an Effective System to Manage Infusion Pump and Channels**
Room: Oceana Grand Ballroom 12
Bryan Norman, University of Pittsburgh
Kristine Wolff and Sandra Stokes, UPMC Presbyterian
All levels

Infusion pump management is a challenge in many healthcare systems. In this presentation, the speakers compare and contrast centralized and decentralized systems and describe a methodology for determining which type of system is best for a given context. The methodology is illustrated using a case study from a 656-bed hospital.

**Improving Safety & Culture of Patient Care through Structured Problem Solving & Collaboration**
Room: Banda Sea 1
Sudhan Gowrish Chinnappan, Houston Methodist
All levels

This presentation provides a snapshot of an initiative that combined structured problem-solving with robust measurement systems across six hospital departments with the aim of improving the safety and reliability of clinical processes through group learning and collaboration.

**Are Games an Interesting Way to Teach Continuous Improvement?**
Room: Banda Sea 2
Julie Charron-Latour, Samuel Bassetto and Tadja Diderot, Polytechnique Montréal
Intermediate level

Continuous improvement approach is mostly affected by the teamwork for problem-solving. Meetings are widely used to support collaboration and are deemed necessary for human connection. We suggested building and testing serious games to enhance these meetings and problem-solving.

1:35 – 2:35 p.m.

**Implementing EHR – A Life-Altering Event**
Room: Timor Sea 1
Michele Stuart, Efficiency Engineers
Michael Kimball, St. Luke’s University Health Network
All levels

Find out how SLUHN’s implementation of Epic’s EMR was named one of the top implementations of all time where less than a third of the expected complaints occurred. Using lean Six Sigma and simulation, an enterprisewide team brought 18 key workflows through a smooth transition to the new best practice.

**Open Space: Choose Your Own Adventure**
Room: Hibiscus 1
Isaac Mitchell, East Tennessee Children’s Hospital
Mark Graban, KaiNexus
All levels

Enjoy hallway conversations over formal presentations? Up for an adventure? Open space sessions have no lead speaker or planned agenda topic. Participants self-select topics to discuss ensuring that the group is always having the most interesting conversation possible. Participants become each other’s teachers and leaders.

**2017 HSPI Conference Student Panel Discussion – Preparing for a Career in PI**
Room: Hibiscus 2
Lavana Ragavan, Montefiore Medical Center
Eddie Perez-Ruberte and Muyuan Li, BayCare
Derek Murray, Health First
Kathryn Smith, North Carolina State University
Basic level

A panel discussion targeted for student and academic members, the topics will be decided/updated, but will tentatively cover preparing for a career in process improvement (PI).
Operating Room Capacity Management - How 5 Different Hospitals Do It - Perioperative PI Panel
Room: Oceana Grand Ballroom 12
Lavana Ragavan, Montefiore Medical Center
Vanda Ametlli, Henry Ford Health System
Sheena Butts, Lakeland Regional Health
Rachel Douglas Hodge, MD Anderson Cancer Center
Anita Patel, Moffitt Cancer Center
Intermediate level

Driving Employee Safety with Lean
Room: Banda Sea 1
Danielle Larson-Jaramillo, Spectrum Health
All levels

There is a growing need for improvement in employee safety within the healthcare industry. The session will share the journey of developing an organizational strategy, sharing the methods and tools used to create our structure and support staff.

The Power of Simulation Modeling for Hospital Planning
Room: Banda Sea 2
Jason De Leon, Kent Riopelle and Kevin Allard, Blue Cottage Consulting
Intermediate level

This will be a demonstration of the value and power of simulation modeling when applied to capacity planning. Discussion will delve deep into the approach used to create the model and will cover the benefits realized in helping a major Canadian university hospital determine how much surgery prep/recovery space was actually required.

Huddling and Huddle Boards: Developing Lean Culture One Team at a Time!
Room: Timor Sea 1
Brock Husby, KBPI/University of Michigan
All levels

Process improvement and lean efforts regularly look at overall organizational change. While the goal is to drive organizational and cultural change, true change takes place at the individual and small team level. This session will explore the power of problem-solving huddle boards to drive this local culture change.

Integrating a Lego Simulation into a Lean Six Sigma Belt Training
Room: Hibiscus 1
Ashley Benedict, VA Sunshine Healthcare Network (VISN 8)
Hugh McManus, Metis Design
Chadd Canode, Orlando VA Medical Center
Flynn Vickers, James A. Haley Veterans’ Hospital
Matthew Banas, VHA
All levels

The VA Sunshine Healthcare Network will share how they incorporated a Lego simulation into their lean Six Sigma training that has transformed how the students learn the different tools. A demonstration of the Lego simulation will be given, and attendees may have the opportunity to play a round!

Student Simulation Competition Finalist Presentations – Sponsored by FlexSim Software Products Inc.
Room: Hibiscus 2

Teams of ISE students solve a real-world healthcare situational case study using FlexSim's simulation software. The case study was prepared by FlexSim.

2:40 – 3:10 p.m.

Same-Day Access to Cardiovascular Consultation
Room: Oceana Grand Ballroom 11
Anna Paszczuk, Cherise Paulk and Dennis Hall, Bay Pines VA
Basic level

Lean Six Sigma methodology was utilized to address delays in access to cardiovascular consultation service. The project resulted in a patient-centric solution that led to cost avoidance.

OR Turnaround Time: A Multifactorial and Cross-Functional Journey
Room: Oceana Grand Ballroom 12
Ashley Sgaliardich, Holy Cross Hospital
Intermediate level

In September 2015, what started out as a small project driven by physician complaints expanded to become an all-encompassing peri-operative initiative. While the focus initially was on TAT, the group tackled surgical scheduling, on-time starts and pre-admissions testing. An unexpected byproduct was a significant increase in staff engagement.

In Tandem: Evidence-Based Practice and DMAIC
Room: Banda Sea 1
Rebecca Harper, Amanda Davis and Emily Brennan, Medical University of South Carolina
All levels

Using evidence-based practice and DMAIC in tandem creates a powerful tool to guide and implement decisions impacting healthcare value and clinical process. At the Medical University of South Carolina, interprofessional teams use both methodologies to develop tools that assist clinicians in making appropriate practice decisions for the best outcomes.
A Modeling Approach for Performance Analysis of Medical Treatment Processes in Healthcare Systems
Room: Banda Sea 2
Farhood Rismanchian and Young Hoon Lee, Yonsei University
Intermediate level

We combined process mining with graphical evaluation and review technique (GERT) to mathematically represent and analyze the clinical pathway patterns. With the proposed method, several performance measures can be efficiently determined. The proposed method is demonstrated through the patients’ medical treatment processes in an emergency department and verified using Arena simulation.

Staffing Tool for Managers in a Large Ambulatory Care Center
Room: Timor Sea 1
George Lourentzatos, Mount Sinai Hospital
Asala Erekat and Mohammad Khasawneh, Binghamton University
Xiaojun (Gene) Shan, University of Houston-Clear Lake
All levels

Resource alignment is fundamental to providing excellent patient care while also ensuring staff are not overburdened. Most managers tend to build their staff schedule based on methods that are rarely data-driven. This work develops a data-driven tool to provide an easy way for managers to align resources to patient demand.

Safety-Specific Transformational Leadership, Worker and Patient Safety and Improved Health Systems
Room: Hibiscus 1
Todd Smith, Indiana University School of Public Health – Bloomington
Intermediate level

A conceptual model, relevant to healthcare organizations, was derived and supported by recent research. The model argues that safety-specific transformational leadership can bolster safety climate, improve safety behavior outcomes and result in improved safety for workers and patients.

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Cape Canaveral Hospital – ED Pull Time Initiative
Room: Oceana Grand Ballroom 11
Derek Murray, Health First
Intermediate level

Health First Cape Canaveral Hospital (CCH) has placed a strong emphasis on improving patient experience. The feedback from our patients via HCAPHS scores shows that CCH is not achieving the current goals set for the system. Many opportunities have been identified to improve our patient experience.

Reducing Our Day of Surgery Cancellations for Ambulatory Surgery
Room: Oceana Grand Ballroom 12
Lavana Ragavan, Montefiore Medical Center
Basic level

Montefiore’s day of surgery cancellations rate hovered at 14 percent at our ambulatory center. A team was put together to review cancellation reasons and identify opportunities for improvement. The team is tracking weekly rates and improving using the lean PDCA model.

Smoke Free Families Learning Collaborative: A Quality Approach to Smoking Cessation
Room: Banda Sea 1
Dushka Crane, Meredith Cameron and Allison Lorenz, The Ohio Colleges of Medicine Government Resource Center
Basic level

Tobacco use during pregnancy leads to low birth weight, perinatal mortality and developmental delays in childhood. Using a QI approach, nationally recognized experts from the Ohio Smoke Free Families project led the implementation of the 5 A’s method for smoking cessation among maternal and child health agencies in Ohio.

Resident Block Scheduling
Room: Banda Sea 2
William Pozehl and Amy Cohn, University of Michigan
All levels

We describe work done to improve and automate the process of scheduling residents into rotations on an annual basis at a partner institution. We share the challenges, successes and lessons learned in this work and describe how similar projects may be initiated at other institutions.
Lean and Six Sigma Principles & Decision-Making in Healthcare
Room: Timor Sea 1
Brian Galli, Long Island University – Post
Basic level

Learning Objectives
• A continuous improvement approach to making decisions in healthcare settings
• A new perspective of decision-making in healthcare that is outside the normal decision-making paradigm for healthcare
• Embedding lean and Six Sigma concepts and tools into decision-making in healthcare settings
• Case studies to help demonstrate the value of the application of lean

Leading with Quality: Elevating Clinical Documentation
Room: Hibiscus 1
Maria Hamilton, Penn State Health Milton S. Hershey Medical Center
All levels

Successful clinical documentation improvement programs are critical to quality reporting, reimbursement and clinical care. The transition to ICD-10, value-based purchasing and emerging quality metrics make accurate documentation more important than ever. Establishing and sustaining a robust CDI program should be a top priority for hospitals.

Society for Health Systems Graduate Student Paper Competition Winner: Age-Specific Risk-Cutoff Values in Prenatal-Integrated Screening for Down Syndrome Considering Fairness
Room: Hibiscus 2
Jia Yan, Georgia Institute of Technology

In the prenatal-integrated screening for Down syndrome, commonly used risk-cutoff value of 1/270 is well-known for a considerably higher false positive rate in older pregnant women leading to a fairness concern across ages. Our study is to determine the optimal risk-cutoff values by considering age fairness. We propose a flexible mathematical framework and utilize Monte Carlo simulations to estimate the test accuracy and adverse pregnancy outcomes. We use two showcases to demonstrate the potential of age-specific, risk-cutoff values, which result in fewer number of adverse outcomes and lower false positive rates in women of ages 36-50, compared with 1/270.

4 – 5 p.m.

Improving Workflow and Layout on a Nursing Unit Using Lean
Room: Oceana Grand Ballroom 11
Diana Nugent and Patricia Canitano, Health First
Intermediate level

A lean process improvement effort was undertaken on one nursing unit of a 400-bed hospital to reduce the amount of time nurses were spending searching for and obtaining supplies and equipment. Many lean tools were used to reduce non-valued-added time allowing for more time at the bedside.

Implementing a Joint Center of Excellence and Improving OR Efficiency
Room: Oceana Grand Ballroom 12
James Rudy and Alyssa Ferrer, Northwell Health
Basic level

With the growing demand of total joint surgery, Long Island Jewish Medical Center (LIJMC) has launched a Joint Center of Excellence program. With a focus on pre-op planning, OR efficiency with a flip room and post-op recovery initiatives, LIJMC has seen dramatic results.

Transparency and Technology – How to Move the Mark on Ambulatory Clinical Quality Measures
Room: Banda Sea 1
Jose Rivera, The Nebraska Medical Center
Intermediate level

Nebraska Medicine utilized Six Sigma DMAIC/lean methodology to address issues identified when evaluating physician quality reporting system (PQRS) results from calendar year 2014. Presenters will highlight the technology implemented to aid in successful improvement and share lessons learned when working toward achieving project goals.

Iterated Local Search for Nurse Scheduling with Burnout Considerations
Room: Banda Sea 2
Nicolás Giedelman, William Guerrero and Angélica Sarmiento, Escuela Colombiana de ingeniería Julio Garavito
Intermediate level

Metaheuristic based on iterated local search to solve the NSP with burnout-oriented constraints with excellent performance compared with a commercial solver (GAMS).
Experienced Professionals Panel – Emotional Intelligence
Room: Timor Sea 1
Susan Seidensticker, University of Texas Medical Branch (UTMB)
Karl Kraebber, University of Alabama-Birmingham
All levels

Experienced professionals panel discussion intended to support the soft skills needed to transition to people-management and leadership roles. Attendees will participate in facilitated conversations to identify ways for practitioners to expand their professional growth and discuss how improvement methodologies impact the leadership pathways.

OR Quick Turnover Events: Utilizing Principles of TPS/Lean SMED to Improve Operating Room Effectiveness and Safety
Room: Hibiscus 1
Brock Husby, KBPI/University of Michigan
Jerry Berlanga, KBPI
All levels

Using Lean/TPS problem solving and project execution methods such as kaizen events, as well as specific TPS methodologies such as SMED (single minute exchange of die), teams can demonstrate OR turnover time reductions of 50%+ in as little as one week of dedicated effort. Multiple case studies discussed.

Innovation Competition Pitch Session
Room: Hibiscus 2
Eddie Perez-Ruberte and Muyuan Li, BayCare
Lavana Ragavan, Montefiore Medical Center
Derek Murray, Health First
Kathryn Smith, North Carolina State University
Basic level

Do you think you can make changes to healthcare? Do you want to create solutions to help form the future healthcare experience? Let your imagination go wild! We invite attendees to submit ideas about innovation and entrepreneurship for the healthcare sector. Ideas should be about making or deploying a disruptive product or service in the healthcare sector. They can be at any stage of development, from a rough plan of how their research could be commercialized to an already operating startup team.

FRIDAY, MARCH 3
8 – 9 a.m.

Roll with the Changes: Creating Value by Reduction of Clinical Variation
Room: Oceana Grand Ballroom 11
John Elliott, HORNE LLP
All levels

Declining reimbursements, coupled with the healthcare industry’s inability to control escalating costs, makes collaborating with physicians more imperative over the next several years and into the next decade. An untapped reservoir of cost inefficiency, reducing clinical cost variation can produce significant outcomes, financially and clinically.

Old Wine in New Casks: Avoiding Broken Systems in Shiny Spaces
Room: Oceana Grand Ballroom 12
Isaac Mitchell, East Tennessee Children’s Hospital
Jen Dieter, JKA Consulting
Advanced level

Coming soon! This March, East Tennessee Children’s Hospital will open a state-of-the-art patient- and family-centered care tower. Learn about our journey in integrated architectural and process design. Discover how we used our cross-functional team’s clinical experience and critical thinking skills to design and deliver ideal care.

Multidisciplinary Heart Failure Clinic and Remote Monitoring Reduce Hospital Readmissions
Room: Banda Sea 1
Elpiniqi Martopullo and Prateek Verma, Boston Scientific
Basic level

This is a congestive heart failure (CHF) care pathway transformation success story that describes the effects of a multidisciplinary heart failure clinic and an avatar-based remote monitoring program in keeping CHF patients from being hospitalized. The coordinated outpatient care helped significantly decrease 30- and 90-day readmissions.
Using Geographic Information Systems for Location-Allocation of Mass Casualty Medical Kits
Room: Banda Sea 2
Christina Rusnock and Vhance Valencia, Air Force Institute of Technology
Basic level

This research identifies the most effective placement of mass casualty kits throughout a deployed air base’s living area using location-allocation analysis via geographic information systems. The analysis showed that the higher population density area could be serviced with kits while the low population density area required a different approach.

Leanagement
Room: Timor Sea 1
Eddie Perez-Ruberte, BayCare
Intermediate level

A value stream analysis empowered this team to find new ways to engage their staff and achieve higher patient satisfaction. Join us as we experience the journey of this team from “lean as an experiment” to a full transformation of their culture and a complete overhaul of their operations.

Promoting, Supporting and Celebrating Operational Excellence
Room: Hibiscus 1
Adele Braun and Brandon Charette, Holy Cross Hospital
All levels

As pressure to make significant impacts on key performance indicators increased, corresponding changes needed to be made to the organization’s process improvement project structure. Thus, an administrative committee was formed, engagement issues were addressed and associates were empowered to lead projects that aligned with Holy Cross Hospital’s organizational strategies.

Using Simulation and Mobile Technology to Improve Day-of-Surgery Patient Care
Room: Hibiscus 2
Kevin Taaffe, Larry Fredendall and Joel Greenstein, Clemson University
Nathan Huynh and Jose Vidal, University of South Carolina
All levels

We demonstrate how a day-of-surgery mobile app, combined with a simulation and web-based dashboard display, provide important patient status and improve staff coordination. In addition to receiving app design feedback based on user tests, the simulation provides the ability to test and train staff without disrupting the actual delivery of care.

9:05 – 9:35 a.m.

Hospital Pharmacy Supply Chain Improvement
Room: Oceana Grand Ballroom 11
Xiaojun Zhang, Ayliana Dharmawan, Heng Yong Sheng, Kong Lian Mary Chong, Yao Zong Teo and Indu Sharma, Tan Tock Seng Hospital
All levels

Healthcare organizations worldwide are working on supply chain processes by continuous review and re-engineering for better efficiency and services. This study focused on improving the hospital pharmacy supply chain to reduce back order and ad-hoc orders while ensuring a well-stocked pharmacy with necessary drugs to enable good quality of services.

Establishing Patient Empannelment and Panel Redesigns at a Primary Care Practice
Room: Oceana Grand Ballroom 12
So Youn Kweon and Mohammad Khasawneh, SUNY-Binghamton University
Andrew Nenos, Mount Sinai Health System
Xiaojun (Gene) Shan, University of Houston-Clear Lake
Basic level

This presentation portrays the framework of patient empanelment and panel redesigns that were accomplished at a multiphysician primary care practice. The methodology successfully assigns each patient to an individual primary care physician based on the calculated patient acuity levels and physician panel capacities for improved continuity of care.

Improving Patient Safety through the Reduction of Inaccurate Surgical Consents
Room: Banda Sea 1
Mike Gegner, Northwestern Medicine
All levels

Using a Six Sigma methodology, our crossfunctional project team worked to reduce the average number of inaccurate consents that came from our inpatient units by 92 percent. The key to this project was turning data into valuable information that could be used to improve patient safety.

Analyzing Patient Scheduling, No-Shows and Cancellations in a Specialty-Care Clinic
Room: Banda Sea 2
Amy Cohn, Pranjal Singh and Amy Rothberg, University of Michigan
All levels

In this talk, we will present a large-scale data analysis that we have undertaken to better define scheduling and patient behavior with respect to no-shows, cancellation and access to timely care in a specialty clinic.
Gemba: Managing for Daily Improvement  
Room: Timor Sea 1  
Sheena Butts, Lakeland Regional Health  
Intermediate level

We are building a culture of continuous improvement and learning. Learn how Lakeland Regional Health has implemented gemba walks and have utilized gemba boards in order to align front-line staff to our True North strategic priorities and how we are daily managing for improvement.

Building a Sustainable Lean Healthcare Program: Mechanistic vs. Organic Lean System Building – Part 1  
Room: Hibiscus 1  
Brock Husby, KBPI/University of Michigan, Jerry Berlanga  
All levels

Just like any “startup” business, a new lean program can take a variety of different paths, and the right path depends on where you are in the journey (contingency theory). This presentation will explore the pros and cons of “mechanistic” vs. “organic” lean deployment during the program lifecycle, with a specific context within technology deployment and integration. Session 1 will focus on framework development and deployment.

Predicting Radiation Therapy Response Using Gene Expression Profiles  
Room: Hibiscus 2  
Grisselle Centeno and Florentino Rico, University of South Florida  
Steven Esrich and Javier Torres-Roca, Moffitt Cancer Center  
Advanced level

This work builds on the advancements in the area of microarray technology, the use of gene expression and the accessibility to robust computational approaches to develop an approach to organize and analyze gene expression data to predict an individual’s tumor radiosensitivity.

Scheduling Colonoscopy Patients in an Outpatient Endoscopy Clinic  
Room: Banda Sea 1  
Amy Cohn, Karmel Shehadeh, Sameer Saini and Jacob Kurlander, University of Michigan  
Intermediate level

In addition to all of the challenges that general outpatient scheduling problems have, colonoscopy patients introduce another significant variable in the quality of pre-procedure prep. We investigate how to incorporate this to improve both the efficiency of the clinic and the patients’ health outcomes.

Simulation-Based Optimization of a Cancer-Specific Urgent Care Clinic  
Room: Banda Sea 2  
Shoshana Goldberg, Centre for Innovation in Complex Care  
Huda Bilal, Michael Lu, Mathew Jamieson, Isis Gutierrez and Michael Carter, University of Toronto  
Sabrina Bennett and Howard Abrams, University Health Network  
All levels

REACH is an urgent care clinic at the Princess Margaret Cancer Centre (PM) in Toronto, Canada. The objective of this project was to determine potential beneficial changes to the current operations of REACH by analyzing a simulation of the clinic’s operations.

Reducing ED to ICU Transfer Time: The Role of Leadership and Kata  
Room: Timor Sea 1  
Sarah Bonzo, State University of New York at Oswego  
Basic level

We follow a large-scale patient safety effort over time to show how the approach taken by leadership and the routine established within the team has a significant impact on extending improvement across the system and sustaining the gains over time. REACH is an urgent care clinic at the Princess Margaret Cancer Centre in Toronto. The objective of this project was to determine potential beneficial changes to the current operations of REACH by analyzing a simulation of the clinic’s operations.
Building a Sustainable Lean Healthcare Program: Mechanistic vs. Organic Lean System Building – Part 2
Room: Hibiscus 1
Brock Husby, KBPI/University of Michigan, Jerry Berlanga
All levels

Just like any “startup” business, a new lean program can take a variety of different paths, and the right path depends on where you are in the journey (contingency theory). This presentation will explore the pros and cons of “mechanistic” vs. “organic” lean deployment during the program lifecycle, with a specific context within technology deployment and integration. Session 2 will focus on case studies and group discussion.

The Costs and Consequences of Poor Access to Care
Room: Hibiscus 2
Melissa Cyr, Margo Jacobsen and James Benneyan, Healthcare Systems Engineering Institute, Northeastern University
All levels

Access is a critical problem throughout healthcare, with significant efforts on optimizing resources to cost-effectively ensure timely care. This project’s purpose was to begin filling the gap identified by the Institute of Medicine via a multisite study of delayed care consequences on measures in three key domains: cost, health and overutilization.

1:35 – 2:35 p.m.

Systemwide Alignment of Improvement Work
Room: Oceana Grand Ballroom 11
Luca Boi and Brittany Patterson, University of Utah Health Care
All levels

There are many different forces to improve healthcare processes – institutional priorities, national payment reform (MIPS) and provider board certification (MOC) requirements, just to name a few. The University of Utah Health Care introduced a systemwide method to engage providers in improvement and receive credit for multiple initiatives.

Leveraging Remote Video Auditing and Facilitation to Improve OR Turnover
Room: Oceana Grand Ballroom 12
Alyssa Ferrer and James Rudy, Northwell Health
Basic level

With a Department of Health site visit and changes to OR Turnover Cleaning Protocol, Long Island Jewish Medical Center (LIJMC) faced increased turnover time impacting performance and employee satisfaction. To alleviate this, the team leveraged remote video auditing, a facilitator and a standard protocol to decrease turnover time by 36 percent.

Lessons from the Frontier of Space: Space Exploration, Healthcare, Safety, Culture and Leadership
Room: Banda Sea 1
Brock Husby, KBPI/University of Michigan
All levels

NASA’s exploits and accomplishments are legendary, as are its struggles and failures. This presentation will explore the process, cultural and leadership parallels with the challenges that healthcare organizations face, as well as the opportunities for learnings across these seemingly different “worlds.” Real-life examples of success, failure and opportunity will be shared.

Reduce Nurse Overtime at Oncology Centers with Integer Programming and Simulation
Room: Banda Sea 2
Mohammed Aladeemy, Srikanth (Sri) Poranki and Mohammad Khasawneh, State University of New York at Binghamton
Xiaojun (Gene) Shan, University of Houston-Clear Lake
Intermediate level

The infusion centers studied have been experiencing higher workload, which requires high-quality appointment schedules. Otherwise, poor appointment schedules cause inefficient healthcare delivery such as treatment delays, long patient waiting times and lower patient satisfaction. This paper provides a template of appointment scheduling that reduces nurse overtime.

The Next Step in Your Career – Young Professionals Pursuing Management Roles
Room: Timor Sea 1
Laura Silvoy, Array Advisors
David Fones, Universal Health Services
Tarun Mohan Lal, Mayo Clinic
Brent Costa, Zuckerberg San Francisco General Hospital & Trauma Center
Jordan Aronhalt, Long Island Jewish Medical Center
Elizabeth Gentry, University of Louisville
Amy Slovacek, Lutheran Senior Services
All levels

A panel discussion will focus on young professionals and early career professionals who are currently working in the healthcare industry and are interested in moving up to management positions. Young/early career professionals seeking advice/guidance on how to become a leader in an organization and the healthcare industry should attend.
Asset Mapping to Build Patient- and Family-Centered Care Networks
Room: Hibiscus 1
James Rawson, Georgia Regents University
All levels

The presenter will discuss asset mapping and how it was used to build a network of radiologists, patients, administrators and other stakeholders focused on patient- and family-centered care in radiology. The results of the 18 months of collaborations will be presented.

Process Improvement with Short Run Data in Healthcare Systems
Room: Hibiscus 2
Sriram Krishnaswamy, Thomas Holzer and Shahryar Sarkani, The George Washington University
Advanced level

This presentation shows a novel application of classic process improvement technique in a relevant, yet unexplored area of healthcare system. The novelty of the proposed approach is in the demonstration of the applicability of short run multi-attribute, multivariate technique to healthcare systems in situations where data is limited.

2:40 – 3:10 p.m.

Utilizing Video Relay Interpretation to Influence Length of Stay & Readmissions
Room: Oceana Grand Ballroom 11
Susan Seidensticker, University of Texas Medical Branch (UTMB)
Intermediate level

The use of video relay interpretation has been deployed to expedite the availability of translators in patient care settings. This session will look at the implementation process as well as the impact to date on outcomes such as length of stay and readmissions.

Turnover Timer App: A Visual Management Tool for Turnover Time Improvement
Room: Oceana Grand Ballroom 12
Robert Allen, Kevin Taaffe, Larry Fredendall and Joel Greenstein, Clemson University
Nathan Huynh and Jose Vidal, University of South Carolina
Basic level

An “OR Timer” application was developed for turnover time improvement for a large hospital and OR in upstate South Carolina. Initial results indicate increased awareness of process improvement efforts and decreased turnover. Important lessons learned during implementation will be presented as well.

Studying Health Management Workflow at Daily Living Settings
Room: Banda Sea 1
Mustafa Ozkaynak, University of Colorado Denver | Anschutz Medical Campus
Rupa Valdez, University of Virginia
All levels

Examining workflow is common in various clinical settings. We will apply the concept of workflow to home and community settings, which are more messy environments than clinical settings. We collected data from anticoagulation patients using interviews and tablet-based journaling tools. Findings highlight the need for innovative workflow techniques.

Process Improvements and Schedule Redesign for Increased Throughput
Room: Banda Sea 2
Timothy Dougherty, Lehigh University
Intermediate level

The presentation details an improvement project at the NMCSD Urology Clinic. The goal is to improve compliance to access-to-care metrics. Waste reduction and schedule redesign advancements were proven to reduce patient wait time and increase provider utilization, which will enable the addition of appointments, thus improving ATC.

How to Manage ME Expectation Challenges in Difficult Financial Times
Room: Timor Sea 1
Roque Perez-Velez, UF Health Shands
Intermediate level

How do you deal with upper management expectations as a management engineer coordinator during difficult financial times? The presenter wants to share trials, tribulations, challenges, techniques and opportunities as well as discuss with the audience other methods to deal with challenges effectively and maintain service levels while addressing long-term staffing constraints.

One Style Doesn’t Fit All: Selecting the Proper Leadership Approach in Continuous Improvement Environments
Room: Hibiscus 1
Brian Galli, Long Island University-Post
Basic level

Learning objectives:
• Present the common leadership styles used in continuous improvement projects
• The relationship between leadership and change management in continuous improvement projects
• The reasoning why one style is not reliable in today’s continuous improvement project environment
Mitigating Information Security Risk through Process Modeling
Room: Hibiscus 2
Jennifer Percival, University of Ontario Institute of Technology
Nathan Percival, Durham College
All levels

Currently, information security policies and practices are usually developed by information security professionals independently from the clinical processes. This separation increases the risks to patient data. By incorporating information security into the process modeling tools and techniques, safer and more functional systems and processes can be developed.

3:15 – 3:45 p.m.

Addressing Multiple Objectives When Scheduling Healthcare Providers
Room: Oceana Grand Ballroom 11
Amy Cohn, Marina Epelman, Brian Lemay and Young-Chae Hong, University of Michigan
All levels

In this talk, we will focus on how to solve provider scheduling problems with a focus on the healthcare-specific challenges associated with multiple objective criteria. We will use examples from shift and block scheduling of residents at the University of Michigan.

12 Steps to Room Turnover Efficiency
Room: Oceana Grand Ballroom 12
Vanda Ametlli, Joseph Hoegler, Mani Marashi and Claudine Hoppen, Henry Ford Hospital
Basic level

This presentation will provide strategies to achieving efficient room turnover through utilization of process improvement, analytics and change management principles. You will learn critical components that a 25-room suite used to decrease room turnover by 20 minutes after a decade of attempts.

Patient Safety Institute
Room: Banda Sea 1
Sheena Butts, Lakeland Regional Health
Intermediate level

Learn how Lakeland Regional Health has developed and deployed an organizationwide Institute for Safety, Discovery and Standard Work to improve patient and team member safety.

A Framework for the Evaluation of Clinical and Operational Interventions to Reduce Congestion and Wait Times at HIV Clinics
Room: Banda Sea 2
Kathryn Smith, Julie Ivy, Karen Hicklin and Anita Vila-Parrish, North Carolina State University
Elizabeth McCarthy, CHAI
All levels

Discrete-event simulation was used to analyze clinical and operational interventions to reduce congestion and patient wait times at HIV clinics in Zambia. The interventions tested include increased drug refill supplies, employing technicians to assist pharmacists, a fast track line and batching refill pick-ups.

Executive Leadership CDI/Huddling in a Federal Facility
Room: Timor Sea 1
Matthew Banas and Joe Battle, VHA
All levels

The director of a large and highly complex federal hospital will discuss the development, integration and results of his project to change the culture to one of engagement, empowerment and a never-ending drive to make the facility the best place a veteran can get care anywhere.

Getting Decisions That Stick!
Room: Hibiscus 1
Kurt Neubek, Page
All levels

Are your projects sometimes troubled by indecision and/or changing decisions? Do the so-called decision-makers delay needed decisions or make last-minute changes – costing everyone time and money? In “Getting Decisions That Stick,” you will learn 10 techniques you can use today to reduce costly changes by helping others make better-informed decisions.

Impact of Resident Training on Operative Duration and Hospital Labor Costs
Room: Hibiscus 2
Robert Allen, Clemson University
Intermediate level

The presence of residents in the operating room for training purposes increases the time it takes to complete surgery by 4.8 minutes for the average case at the partnering hospital. The impact to hospital staffing costs are less clear.
Reducing ED Boarding Times by Standardizing Handoffs
Room: Oceana Grand Ballroom 11
Flynn Vickers and Elizabeth Melzer, James A. Haley Veterans’ Hospital
Colleen Park, Department of Veterans’ Affairs
All levels

The timely transition of patients from the emergency department to inpatient settings is a critical challenge to patient flow. By focusing on standardization of communication and the removal of barriers, organizations can significantly reduce their boarding times with minimal investment.

Eradicating the Average: Capturing the Complexity of Healthcare
Room: Oceana Grand Ballroom 12
Laura Silvoy, Array Advisors
Intermediate level

A community hospital experiences significant ED holds due to inadequate inpatient capacity. Analysis of patient arrival and unit assignment data suggested that treating observation patients in inpatient units is causing the capacity problem. A discrete-event simulation helped determine a way to reduce ED holds and relieve current inpatient pressures.

The Value of Simulation Exercises in Hospital Move Planning
Room: Banda Sea 1
Ammarah Shahid, Alice Geertsen and Jackie Charko, Halton Healthcare
Basic level

Learn how “day-in-the-life” simulation exercises helped one Canadian hospital identify gaps in planned workflows and validate traffic pathways and communication processes between departments as part of move planning for a new facility (triple the size of its legacy site) prior to the hospital move.

Utilizing Computer Simulation for Optimal Facility Design and Clinic Workflow
Room: Banda Sea 2
Varun Venkateswaran, Lee Kate Hamff, Brittani DeLoach and Beth Winningham, UAB Medicine
All levels

Making data-driven decisions should be a priority when evaluating, improving and optimizing processes to create a patient-centered facility. This presentation will illustrate how UAB Internal Medicine used computer simulation to identify inefficiencies among the workflow and propose an improved facility design that is both patient-centered and efficient.
The poster session at the Healthcare Systems Process Improvement Conference is a forum for presenters from around the world to highlight their programs and to share their successful ideas with colleagues by presenting a research study, a practical problem-solving effort or an innovative program. Poster presentations provide other conference participants an opportunity to become acquainted with your topic quickly and easily.

Posters will be on display in the Exhibit Hall – Pacific Ballroom 7 – during exhibit hours.
Poster presenters will be at their posters to answer your questions during these dedicated poster session times:

Thursday, March 2 – 11:15 a.m. – 12:15 p.m.
Friday, March 3 – 11:15 a.m. – 12:15 p.m.

=* beaten by = Poster sessions with this symbol next to the name indicate that the poster presenter also will be giving an oral presentation.

**POSTER SESSIONS**

**Poster #2020**
Huddling and Huddle Boards: Developing Lean Culture One Team at a Time!
Brock Husby, KBPI/University of Michigan
Jerry Berlanga, KBPI

**Poster #2033**
Multisystem Approach to Standardizing the Evidence-Based Sepsis Practice in BayCare Health System
Chhavi Gupta, BayCare Health System

**Poster #2040**
Architecting a Systems Model for Managed Individual Health Outcomes
Inas Khayal and Amro Farid, Dartmouth

**Poster #2043**
Old Wine in New Casks: Avoiding Broken Systems in Shiny Spaces
Isaac Mitchell, East Tennessee Children’s Hospital
Jen Dieter, JKA Consulting

**Poster #2056**
Integrating a Lego Simulation into a Lean Six Sigma Belt Training
Ashley Benedict, VA Sunshine Healthcare Network (VISN 8)
Hugh McManus, Metis Design
Chadd Canode, Orlando VA Medical Center
Flynn Vickers, James A. Haley Veterans’ Hospital
Matthew Banas, VHA

**Poster #2061**
Are Games an Interesting Way to Teach Continuous Improvement?
Julie Charron-Latour, Samuel Bassetto and Tadja Diderot, Polytechnique Montréal

**Poster #2067**
Smoke Free Families Learning Collaborative: A Quality Approach to Smoking Cessation
Dushka Crane, Meredith Cameron and Allison Lorenz, The Ohio Colleges of Medicine Government Resource Center

**Poster #2068**
Use of Soft Systems Methodology in Healthcare Systems
Adrian Williams and Joseph M. Bradley, UMUC

**Poster #2074**
Improving Patient Safety through the Reduction of Inaccurate Surgical Consents
Mike Gegner, Northwestern Medicine

**Poster #2056**
Application of Systems Engineering in Emergency Department Process Improvement
Mohamed Elshal and Hazim El-Mounayri, Indiana University/Purdue University Indianapolis

**Poster #2079**
Implementing Lean Principles in Healthcare Industry: A Theoretical and Practical Overview
Fatma Pakdil, Eastern Connecticut State University
Timothy Harwood, Wake Forest University

**Poster #2081**
Optimizing ECT Appointment Scheduling using Simulation
Carla Rodriguez and Roque Perez-Velez, UF Health Shands

**Poster #2083**
Getting Decisions That Stick!
Kurt Neubek, Page

**Poster #2084**
Simulation-Based Optimization of a Cancer-Specific Urgent Care Clinic
Shoshana Goldberg, Centre for Innovation in Complex Care
Huda Bilal, Michael Lu, Mathew Jamieson, Isis Gutierrez and Michael Carter, University of Toronto
Sabrina Bennett and Howard Abrams, OpenLab, University Health Network

The poster session at the Healthcare Systems Process Improvement Conference is a forum for presenters from around the world to highlight their programs and to share their successful ideas with colleagues by presenting a research study, a practical problem-solving effort or an innovative program. Poster presentations provide other conference participants an opportunity to become acquainted with your topic quickly and easily.

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Poster #2091
The Power of Simulation Modeling for Hospital Planning
Jason De Leon, Kent Riopelle and Kevin Allard, Blue Cottage Consulting

Poster #2093
Patient Safety Institute
Sheena Butts, Lakeland Regional Health

Poster #2094
Gemba: Managing for Daily Improvement
Sheena Butts, Lakeland Regional Health

Poster #2097
Analyzing Patient Scheduling, No-Shows, and Cancellations in a Specialty-Care Clinic
Amy Cohn, Pranjal Singh and Amy Rothberg, University of Michigan

Poster #2099
Scheduling Colonoscopy Patients in an Outpatient Endoscopy Clinic
Amy Cohn, Karmel Shehadeh, Sameer Saini and Jacob Kurlander, University of Michigan

Poster #2100
In Tandem: Evidence-Based Practice and DMAIC
Rebecca Harper, Amanda Davis and Emily Brennan, Medical University of South Carolina

Poster #2104
Project “Shift It” – A New Way to Improve Cath Lab Capacity
Yixin Wang and Meagen Mahowald, Boston Scientific Corp.

Poster #2105
Same-Day Access to Cardiovascular Consultation
Anna Paszczuk, Cherise Paulk and Dennis Hall, Bay Pines VA

Poster #2106
Bundled Payments for Care Improvement
Sheena Butts, Lakeland Regional Health

Poster #2109
Standardizing the Bariatric Patient Experience through Coaching and Standard Work
Michael Bertke, OhioHealth

Poster #2112
Utilizing Computer Simulation for Optimal Facility Design and Clinic Workflow
Varun Venkateswaran, Lee Kate Hamff, Brittan DeLoach and Beth Winningham, UAB Medicine

Poster #2113
Implementing a Joint Center of Excellence and Improving OR Efficiency
James Rudy and Alyssa Ferrer, Northwell Health

Poster #2114
Leveraging Remote Video Auditing and Facilitation to Improve OR Turnover
Alyssa Ferrer and James Rudy, Northwell Health

Poster #2115
Right Sizing Clinical Space through Variation and Virtual Environment Capacity Modeling
Angela Chupa, Olivia Pewzer and Zhanting Gao, HDR

Poster #2116
Data-Driven Design: An Analysis of Space Need at MD Anderson Cancer Center
Angela Chupa, Olivia Pewzer and Zhanting Gao, HDR

Poster #2117
Multidisciplinary Heart Failure Clinic and Remote Monitoring Reduce Hospital Readmissions
Elpinigii Martopuloo and Prateek Verma, Boston Scientific

Poster #2122
Electronic Health Records in Private Medical Centers in Colombia: A Proposed Implementation Plan
Katherine Palacio, Universidad del Norte

Poster #2125
Redesigning U.S. Graduate Medical Education Using Systems Engineering
James Benneyan and Awatef Ergai, Healthcare Systems Engineering Institute, Northeastern University
Peter Bates and Thomas Van der Kloot, Maine Medical Center
Ryan Gurney, The Ohio State University

Poster #2126
Process Improvement with Short Run Data in Healthcare Systems
Sriram Krishnasawamy, Thomas Holzer and Shahryar Sarkani, The George Washington University

Poster #2130
Characterization of Health IT Used as Support to Metabolic Syndrome
Abimae Pertuz, Universidad del Norte

Poster #2132
Resident Block Scheduling
William Pozehl and Amy Cohn, University of Michigan

Poster #2133
Improving the Process of Process Improvement in Healthcare Systems
Kevin Nortrup, Sugar Creek Solutions

Poster #2135
Evaluating Different Proposed Scheduling Strategies with Discrete-Event Simulation
Mandana Rezaeiahari, Linda Adwan, Srikanth (Sri) Poranki and Mohammad Khasawneh, State University of New York at Binghamton
Xiaojun (Gene) Shan, University of Houston-Clear Lake

Poster #2140
ISO Meet PI – The Next Level of Evolution for the Healthcare Quality System
Maurice Spann, J Griffin Group
Poster #2143 🌟
12 Steps to Room Turnover Efficiency
Vanda Ametlli, Joseph Hoegler, Mani Marashi and Claudine Hoppen, Henry Ford Hospital

Poster #2146
Applying Discrete-Event Simulation to Staff a New Emergency Department
Marybeth Attanasio, John D’Angelo, Kate O’Neill, Jason Philip, Joseph Narvaez and Joriane Stadnyck, Northwell Health

Poster #2155 🌟
A Framework for the Evaluation of Clinical and Operational Interventions to Reduce Congestion and Wait Times at HIV Clinics
Kathryn Smith, Julie Ivy, Karen Hicklin and Anita Vila-Parrish, North Carolina State University
Elizabeth McCarthy, CHAI

Poster #2159
Process Improvement and Redesign of the Immuno Histology (IHC) Lab at Memorial Sloan Kettering Cancer Center
Samantha Meyerholz, Memorial Sloan Kettering Cancer Center

Poster #2161
Improving Make-Ahead Chemotherapy Drug Policies in the Outpatient Infusion Center Pharmacy
Donald Richardson and Amy Cohn, University of Michigan
Ajaay Chandrasekaran

Poster #2162
Expanded Roles of Project Managers in Healthcare Transformational Change
Monica Cummins and Whitney Rockefeller, Department of Veterans Affairs

Poster #2163
Scheduling Medical Trainees via Linear Programming Models Implemented in Excel
Roshun Sankaran, Amy Cohn, William Pozehl, Anna Munaco, Joseph Sorensen and Wesley Chen, University of Michigan

Poster #2165
Where’s the Medication! Handling Patient’s Supply during Inpatient Stay
Erika Duggan, Memorial Sloan Kettering Cancer Center

Poster #2169
Improving “Discharge before Noon” Process in a Neurology Unit at NYU Lutheran Medical Center
Ahmad Obeidat, Joseph Aloise, Sherri Sosnick and Nada Abou-Fayssal, NYU Lutheran Medical Center

Poster #2170
Improving PSI-90 Composite Scores as Part of Payment-Based Project Improvement Plans
Ahmad Obeidat, Priyanka Bangale and Sherri Sosnick, NYU Lutheran Medical Center

Poster #2171
Modeling Patient Inflows for an Inpatient Rehabilitation Facility
John Kros, ECU Department of Marketing & Supply Chain Management

Poster #2172 🌟
Hospital Pharmacy Supply Chain Improvement
Xiaojin Zhang, Ayliana Dharmawan, Heng Yong Sheng, Kong Lian Mary Chong, Yao Zong Teo and Indu Sharma, Tan Tock Seng Hospital

Poster #2173
Improving Antibiotics Access and Administration as Part of the Sepsis Quality Improvement Initiative
Priyanka Bangale, Ahmad Obeidat, Sherri Sosnick, Michael Timoney, Staci Mandola, Nazek Hassan, Betty Kovnator and Nibal Ghanim, NYU Lutheran Medical Center

Poster #2175
Improving Workflow and Layout in a Preoperative Care Unit
Diana Nugent and Patricia Canitano, Health First

Poster #2176
Reducing ED LOS for Admitted Patients – A Proven Way
David Fones, Universal Health Services

Poster #2177
Systems Engineering Approaches to Understanding and Improving Autism Screening Processes
James Benneyan and Nazanin Esmaili, Healthcare Systems Engineering Institute, Northeastern University
R. Christopher Sheldrick, Tufts Medical Center
Alice Carter, University of Massachusetts

Poster #2178
Predicting and Intervening on Dual High-Risk Patients (No-Shows and Poor-Outcomes)
James Benneyan and Demetri Lemonias, Healthcare Systems Engineering Institute, Northeastern University

Poster #2179
Maximizing Rehab Visits
Jill Anderson, Pamela Randolph and Sarah King, RWJ Barnabas Health System

Poster #2182
A Proven Way
David Fones, Universal Health Services

Poster #2183
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Poster #2185
Maximizing Rehab Visits
Jill Anderson, Pamela Randolph and Sarah King, RWJ Barnabas Health System
**EXHIBITOR BOOTH MAP**

The Exhibit Hall is located in Pacifica Ballroom 7.

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**Thursday, March 2**

- **11:15 a.m. – 6:15 p.m.** Exhibit Hall Open
- **11:15 a.m. – 12:15 p.m.** Dedicated Exhibit Time
- **5 – 6:15 p.m.** Networking Reception in the Exhibit Hall

**Friday, March 3**

- **7 a.m. – 3 p.m.** Exhibit Hall Open
- **7 – 7:50 a.m.** Breakfast with the Exhibitors
- **11:15 a.m. – 12:15 p.m.** Dedicated Exhibit Time

**IMPORTANT:** It is preferable that your booth is staffed at all times, but not mandatory. It is mandatory that all booths be adequately staffed during dedicated exhibit time. Please be in your booth and ready to go at least 15 minutes before dedicated exhibit time. Exhibitors may NOT dismantle their booths prior to the official closing of the Exhibit Hall.
EXHIBITORS

**Binghamton University | Booth #206**
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EwingCole, a national architecture, engineering, interior design, and planning firm believes that good design promotes healing and reduces the cost of healthcare delivery. EwingCole is dedicated to creating uplifting and encouraging experiences for patients, and inventing new healthcare delivery practices with our clients to improve the quality of care.

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www.flexsim.com

**Healthcare Systems Engineering Institute | Booth #205**
HSyE’s mission is to broadly impact healthcare improvement through education, research, and application in systems engineering methods. This is defined by undergraduate and graduate academic programs, national experiential co-op education and summer internship programs, three federally awarded healthcare IE centers, and competitive scholarships. We rely on industry-university partnerships to advance the shared missions of healthcare improvement and workforce development.
Healthcare Systems Engineering Institute
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Northeastern University
Boston, MA 02115
P: (617) 373-5662
www.hsye.org

**iVantage Health Analytics | Booth #204**
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**Ohio University Online Graduate Degree Programs | Booth #107**

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Society for Health Systems | Booth #303
The Society for Health Systems is a professional association that focuses on the needs and resources of health systems professionals and leaders who are charged with improving healthcare processes. SHS offers the latest in process analytics, tools, techniques and methodologies for performance improvement.

University of Central Florida | Booth #306
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- 2018 Healthcare Systems Process Improvement Conference Committee
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- Writing or editing Social Media posts or Newsletter articles

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