HEALTHCARE SYSTEMS PROCESS IMPROVEMENT

CONFERENCE 2016

Sponsored by: Society for Health Systems
LEADING HEALTHCARE IMPROVEMENT

FEB. 17-19, 2016
HILTON AMERICAS-HOUSTON
HOUSTON

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LEADING HEALTHCARE IMPROVEMENT
Improve Quality, Productivity and Efficiency
A Corporate Partnership with SHS Can Help

SHS can tailor a Corporate Partnership to your organization’s unique needs. Corporate Partnerships ensure your employees stay up-to-date on the latest developments and best practices in controlling healthcare costs and improving service level efficiently.

| UP TO 50% OFF membership dues |
| UP TO 40% OFF non-member rate for conference registration |
| 40% OFF job postings in the SHS online career center |
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With an SHS corporate partnership, your employees get all the benefits of individual membership, including free webinars on key industry topics, opportunities to connect with other SHS professionals and more.

To learn more, contact Doug Long at dlong@iienet.org or visit www.iienet.org/shs/partnership

The Society for Health Systems is happy to host this conference and facilitate important 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.

» Four half-day pre-conference workshops to build new skills or refresh your knowledge.

» Keynote presentation from Denis A. Cortese, foundation professor at Arizona State University and director of the university’s Health Care Delivery and Policy Program.

» 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 you can 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 2016 program will provide solutions and ideas to address your most challenging issues.
CONFERENCE COMMITTEE

Meet the 2016 Healthcare Systems Process Improvement Conference Committee.

Conference Chair
Thomas Roh, HDR

Conference Co-Chairs
Tarun Mohan Lal, Mayo Clinic (outgoing)
Lauren Cooper, Wake Forest Baptist Health (incoming)

Day Coordinators
Bianca Garcia, Florida Hospital
Eddie Perez-Ruberte, BayCare Health System
Lavana Ragavan, Montefiore Medical Center

Academic Activities
Eddie Perez-Ruberte, BayCare Health System

Blogging
Sameer Anand, GlaxoSmithKline Inc.

Keynotes and Panel Sessions
Tarun Mohan Lal, Mayo Clinic

Marketing
Bianca Garcia, Florida Hospital
Tarun Mohan Lal, Mayo Clinic

Poster Competition
Corey Balint, Northeastern University
Evelyn Brown, East Carolina University

Pre-conference Workshops
Lauren Cooper, Wake Forest Baptist Health

Social Events Planning
Lauren Cooper, Wake Forest Baptist Health

Social Media
Ashley Crofton, Mayo Clinic
Christopher Farnham, Spectrum Health

Sponsorship
Tarun Mohan Lal, Mayo Clinic

Student Case Study Competition
Mark Biscone, Texas Hospital Association
Brittany Hagedorn, SIMUL8 Corp.

Young Professionals
Lavana Ragavan, Montefiore Medical Center

Board Liaison
Mary Ellen Skeens, Philips Healthcare

Track Chairs
Sameer Anand, GlaxoSmithKline Inc.
Corey Balint, Northeastern University
Mehmet Erkan Ceyhan, Lahey Hospital and Medical Center
Brent Costa, San Francisco General Hospital
Brittany Hagedorn, SIMUL8 Corp.
Seth Hostetler, Geisinger Health System
Darrin Judkins, Boulder Community Health
Eddie Perez-Ruberte, BayCare Health System
Corbin Pozar, Mayo Clinic
Jim Rawson, Georgia Regents University
Tom Redding, St. Onge Company
Ben Schleich, Binghamton University
John Templin, Templin Management Associates
Kai Yang, Wayne State University

Reviewers
Evelyn Brown, East Carolina University
Lauren Cooper, Wake Forest Baptist Medical Center
Christopher Farnham, Spectrum Health
Bianca Garcia, Florida Hospital
Natalie Hagerty, EwingCole
John Jackson, University of Florida Health
Karl Kraebber, Indiana University Hospital
Murat Kurt, University at Buffalo
Jean Ann Larson, Jean Ann Larson & Associates
Isaac Mitchell, East Tennessee Children’s Hospital
Kevin Noonan, Johns Hopkins University
James Patsis, MITRE
Lavana Ragavan, Montefiore Medical Center
Joyce Siegle, Northside Hospital
Laura Silvoy, Array Architects
Mark Smith, Oregon Health & Science University
Michelle Taylor, BayCare Health System
Laura Tibor, Mayo Clinic
KEYNOTE SPEAKER

DR. DENIS A. CORTESE
Foundation Professor
Director, Health Care Delivery
Arizona State University
Thursday, February 18 | 8 – 9:30 a.m. | Grand Ballroom G-H

Dr. Denis A. Cortese is a foundation professor at Arizona State University (ASU) in the College of Health Solutions, director of ASU’s Health Care Delivery and Policy Program, and president of the nonprofit Healthcare Transformation Institute based in Phoenix. He is emeritus president and CEO of Mayo Clinic. Cortese also serves on the board of directors for Pinnacle West, Essence Global Holdings Corp., Dartmouth-Hitchcock Medical Center and Cerner Corp. His memberships in national and international organizations include the Institute of Medicine of the National Academy of Sciences, where he served as the original chair of the Roundtable on Value and Science-Driven Health Care; the National Associate designation with the National Research Council; and honorary member of the Royal College of Physicians (London) and the Academia Nacional de Medicina (Mexico). He formerly served in the following positions: member of the health advisory board of RAND; member and chair of the board of the Health Care Leadership Council in Washington, D.C.; member of the Harvard/Kennedy Health Policy Group; and member of the Division on Engineering and Physical Science (DEPS) of the National Academy of Engineering. He earned a B.S. from Franklin and Marshall, an M.D. from Temple University and received his residency training in internal medicine and pulmonary diseases at Mayo Clinic. Awards include an Ellis Island Award in 2007 and the National Healthcare Leadership Award in 2009.

DR. JAMES RAWSON
P.L., J. Luther, and Ada Warren Endowed Chair
Chair of the Department of Radiology and Imaging
Medical College of Georgia at Augusta University
Friday, February 19 | 10 – 11 a.m. | Grand Ballroom G-H

Dr. James Rawson serves as the P.L., J. Luther, and Ada Warren Endowed Chair and chair of the Department of Radiology and Imaging at the Medical College of Georgia at Augusta University. He has held this position for more than a decade. He graduated from Tufts Medical School in 1989. After an internship at Lemuel Shattuck Hospital, he completed his radiology residency at New York Medical College in 1994. Rawson completed his training at the Mallinckrodt Institute of Radiology at Washington University with a fellowship in body MRI. He joined the faculty at the Medical College of Georgia in 1995.
### Wednesday, February 17

<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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</table>
| 4 - 5 p.m.    | Student Welcome Reception | Room 330  
**Sponsored by the Healthcare Systems Engineering Institute at Northeastern University** |
| 5 - 6 p.m.    | Welcome Reception | Skyline Room – 24th Floor                                           |

### Thursday, February 18

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<td>7:45 – 7:55 a.m.</td>
<td>Welcome – Grand Ballroom G-H</td>
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<td>Keynote Presentation – Dr. Denis Cortese, Arizona State University</td>
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<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 - 1:35 p.m.</td>
<td>Strategic Imperatives for Healthcare – A Panel Discussion - Elizabeth Garcia, UT MD Anderson Cancer Center, Jean Ann Larson, Jean Ann Larson &amp; Associates, Denis Cortese, Arizona State University, Randall Moore, Mercy Virtual, James D. Buntrock, Mayo Clinic – Moderated by Victoria Jordan, UT MD Anderson Cancer Center and Janine Kamath, Mayo Clinic - Grand Ballroom GH</td>
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<tr>
<td>1:40 - 5 p.m.</td>
<td>Concurrent Sessions</td>
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<tr>
<td>5 - 6:15 p.m.</td>
<td>Networking Reception in the Exhibit Hall</td>
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<td>6:30 p.m.</td>
<td>Dutch Treat Dinners - Sign-up sheets will be available on-site</td>
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### Friday, February 19

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<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. - 3:30 p.m.</td>
<td>Exhibit Hall Open</td>
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<tr>
<td>7:50 - 9:55 a.m.</td>
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<tr>
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<td>Keynote Presentation – Dr. James V. Rawson, Chairman of the Department of Radiology and Imaging at the Medical College of Georgia at Georgia Regents University - Grand Ballroom G-H</td>
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<tr>
<td>11 a.m. - Noon</td>
<td>Dedicated Exhibit Time</td>
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<tr>
<td>Noon - 1 p.m.</td>
<td>Lunch Break</td>
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<td>1:30 - 5 p.m.</td>
<td>Concurrent Sessions</td>
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### Exhibit Hall Hours | Grand Ballroom J-L

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*Schedule subject to change*
SPECIAL EVENTS & MEETINGS

Wednesday, February 17

Facility Tours
1:30 – 4:30 p.m. | Depart from East Drive
University of Texas MD Anderson Cancer Center

1:30 - 4:30 p.m. | Depart from East Drive
The Texas Medical Center / Texas Children’s Hospital

Student Networking Reception
Sponsored by

Thursday, February 18

Dedicated Exhibit Time
11:15 a.m. – 12:15 p.m. | Grand Ballroom J-L
View the latest products and services to aid your organization. Meet exhibitors and view product demos, or peruse poster presentations.

Keynote Panel Session
12:15 – 1:35 p.m. | Grand Ballroom G-H
The panel will discuss: Strategic Imperatives for Healthcare; Patient Engagement; Talent Management; Pay for Value; Healthcare Digitization and Healthcare Analytics.

They will expand on Dr. Cortese’s morning keynote and the conference theme, inform you on how to operationalize some of these concepts from expert speakers that have made progress in other organizations and translate ideas presented at the conference into action in our organizations.

Moderated by: Victoria Jordan, UT MD Anderson Cancer Center, and Janine Kamath, Mayo Clinic

Networking Reception in the Exhibit Hall
5 – 6:15 p.m. | Grand Ballroom J-L
Meet with exhibit hall vendors, poster session presenters and your colleagues for continued networking.

Dutch Treat Dinners
6:30 p.m.
First come, first serve – sign up at the registration desk.

Friday, February 19

Breakfast with Exhibitors
7 – 7:50 a.m. | Grand Ballroom J-L

Dedicated Exhibit Time
11 a.m. – Noon | Grand Ballroom J-L

Awards Luncheon
Noon – 1 p.m. | Grand Ballroom G-H

Expert Panel Session
2:35 – 3:55 p.m. | Grand Ballroom G-H
The New IOM Reports on Access to Care and Diagnostic Error: Opportunities for Industrial Engineers – A Panel Discussion
This panel summarizes key findings and recommendations of each report and outlines local and national opportunities for industrial engineers to make important contributions.

The Institute of Medicine (National Academy of Medicine) recently released two new reports on access to care (“Transforming Health Care Scheduling and Access: Getting to Now,” June 2015) and diagnostic error (“Improving Diagnosis in Health Care,” September 2015), both emphasizing the role that systems approaches and industrial engineering can contribute in addressing these problems. Timeliness in providing access to healthcare varies widely and has multiple consequences affecting patient satisfaction, outcomes and utilization. Diagnostic errors are estimated to contribute to approximately 10 percent of patient deaths, 6 percent to 17 percent of hospital adverse events, and are the leading type of paid medical malpractice claims.

Moderated by: Jim Benneyan
PRE-CONFERENCE WORKSHOPS

8 a.m. – Noon

Activity Doesn’t Mean Achievement – Identifying Waste in Healthcare
Presenter: Todd Sperl, Lean Fox Solutions
Room: 328

Develop your understanding of waste and standard work in healthcare and identify opportunities for improvement. As waste is introduced through real-life healthcare case studies, the participants are introduced to standard work via a group exercise. This fun exercise is a great way to illustrate the value of standard work.

Be a More Effective Change Leader! Mastering Your EQ while Improving Your Ability to Manage Workplace Stress
Presenter: Jean Ann Larson, Jean Ann Larson & Associates
Room: 329

Developing emotional intelligence (EQ) and handling stress are critical to effectively facilitating continuous improvement and change in our organizations. However, EQ affects how we handle stress. And stress affects our EQ capabilities. This workshop helps participants assess and develop strategies to improve their own emotional intelligence while better handling workplace stress.

1 – 5 p.m.

Intensive Lean Huddle Board Workshop: Developing Local A3 Thinking Teams to Set Yourselves Up for Success
Presenters: Brock Husby, KBPI/University of Michigan; Jerry Berlanga, KBPI
Room: 328

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.

Creativity-Based Leadership in Healthcare
Presenter: Min Basadur, Basadur Applied Creativity
Room: 329

Participants experience leading-edge thinking skills in finding, defining and solving problems and engaging others with consensus and commitment. Participants assess their own unique creative problem-solving styles and discover how to help teams synergize their cognitive diversity.

All workshops will be held on Wednesday, February 17.
The Society for Health Systems is pleased to announce Kun Wang of Arizona State University won the 2016 Graduate Student Paper Competition. Don’t miss the presentation of the winning paper, Radiology Efficiency Dashboard: A Prototype for Radiology Quality Improvements, Thursday from 3:25-3:45 p.m. in Room 330.

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 IE skills in improving healthcare-related products, processes or services.

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 hear the finalist presentations Thursday, Feb 18:

**Mississippi State University**
1:40 p.m. | Room 330

**West Virginia University**
2:15 p.m. | Room 330

**Louisiana State University**
2:50 p.m. | Room 330

The winner of the 2016 SHS Scholarship, sponsored by Parallon, will be presented Friday, February 19, during the SHS Awards Luncheon in Grand Ballroom G-H. The amount of the scholarship is $1,000. The recipient also received complimentary registration to HSPIC 2016 and a travel stipend of $300.
### WEDNESDAY, FEBRUARY 17

Day Coordinator: Lavana Ragavan, Montefiore Medical Center

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### THURSDAY, FEBRUARY 18

Day Coordinator: Eddie Perez-Ruberte, BayCare Health System

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<td><strong>Track</strong></td>
<td><strong>Process Improvement - 1</strong></td>
<td><strong>Process Improvement - 2</strong></td>
<td><strong>Operations Research</strong></td>
<td><strong>Quality &amp; Safety</strong></td>
<td><strong>Change Management</strong></td>
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<td>Moderator</td>
<td>Kevin Noonan</td>
<td>Darrin Judkins</td>
<td>James Pattsis</td>
<td>Mehmet Erkan Ceyhan</td>
<td>Jean Ann Larson</td>
<td>Joyce T. Siegele</td>
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<td>9:10–10:10 a.m.</td>
<td>Lean Six Sigma in Healthcare: Making Progress Despite the Challenges</td>
<td>Developing Collaborative MD/NP-PA Teams: A Lean Six Sigma Approach</td>
<td>Optimally Designing Your Medical Office Building: A Discrete-Event Simulation Study</td>
<td>Reducing Surgical Site Infections</td>
<td>Sheena Butts, Lakeland Regional Health</td>
<td>A Systemwide Approach to Business Transformation</td>
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<td>Randy Boyd, Firefly Consulting</td>
<td>Roberta Maughan, Essentia Health</td>
<td>James Montgomery, Carilion Clinic</td>
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<td>Lean as a Growth Strategy for Healthcare</td>
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<td>Brittany Hagedorn</td>
<td>Marti Jordan</td>
<td>John Templin</td>
<td>Jeremy Lambert</td>
<td>Jean Ann Larson</td>
<td>Laura Sirvoy</td>
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<td>10:15–11:15 a.m.</td>
<td>Lean Six Sigma Design Approach to Accelerate Deployment of a Systemwide Telehealth Program</td>
<td>Working Smarter: Building a Culture of Everyday Problem Solving</td>
<td>An Effective Process for Scheduling Emergency Department Nurses</td>
<td>Sustain and Reinforce Standards with a Staff-Based Continuous Audit System</td>
<td>Darrin Judkins, Boulder Community Health, Karl Kraebber, Indiana University Health</td>
<td>The Real Lessons of Dr. Deming’s Red Bead Factory</td>
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<td>Nancy Tario, Essentia Health</td>
<td>Matthew D’Agostino, MedStar Franklin Square Medical Center</td>
<td>Bryan Norman and Anna Svirsko, University of Pittsburgh</td>
<td>Darrin Judkins, Boulder Community Health, Karl Kraebber, Indiana University Health</td>
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<td>Implementing an Emergency Department Patient Split Flow</td>
<td>Modeling Sociotechnical Systems: Capturing and Evaluating Information Flow</td>
<td>Improving Patient Access to Endocrine Program for Morbidly Obese Patients</td>
<td>Moses Chan, Amy Cohn and Amy Rothberg, University of Michigan</td>
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<td>James Rudy and Jordan Aronhalt, Long Island Jewish Medical Center</td>
<td>Sarah Bonzo, State University of New York at Oswego</td>
<td>Moses Chan, Amy Cohn and Amy Rothberg, University of Michigan</td>
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WEDNESDAY, FEBRUARY 17 - www.shsconference.org
## THURSDAY, FEBRUARY 18

11:15 a.m. – 12:15 p.m. | Dedicated Exhibit Time – Grand Ballroom J-L

### 12:15 – 1:35 p.m.

**Strategic Imperatives for Healthcare – A Panel Discussion**
- Elizabeth Garcia, UT MD Anderson Cancer Center
- Jean Ann Larson, Jean Ann Larson & Associates
- Denis Cortese, Arizona State University
- Randall Moore, Mercy Virtual
- James D. Buntrock, Mayo Clinic
  
  Moderated by Victoria Jordan, UT MD Anderson Cancer Center and Janine Kamath, Mayo Clinic
  
  **Grand Ballroom GH**

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<td>Isaac Mitchell</td>
<td>Jean Ann Larson</td>
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<td><strong>A Need for Speed:</strong> Improving Throughput in 25 Emergency Departments</td>
<td><strong>Improving Patient Access Processes to Enhance Patient Experience</strong></td>
<td><strong>Simulation Optimization Approach for Emergency Medical Service</strong></td>
<td><strong>Using Scorecards &amp; Registries to Improve HbA1c Control in Diabetics</strong></td>
<td><strong>A Year Later: Launching an Organization-wide Process Improvement Culture</strong></td>
<td><strong>Leaning Forward: Building a Culture of Leadership, Innovation and Improvement</strong></td>
<td><strong>Student Case Study Competition Presentations - Sponsored by FlexSim Software Products Inc.</strong></td>
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<td>Charles DeBusk and Paula Antognoli, Universal Health Services Inc.</td>
<td>Laura Burke and Freddie Weiss, MD Anderson Cancer Center</td>
<td>Carlos Escobar, New Mexico State University</td>
<td>Susan Seidensticker and Gina Butler, University of Texas Medical Branch</td>
<td>Cristina Galloway and Carla Rodriguez, UF Health Shands</td>
<td>Leaning Forward: Building a Culture of Leadership, Innovation and Improvement</td>
<td>1:40 p.m. Mississippi State University</td>
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<td><strong>Care Team Optimization in Specialty Practice</strong></td>
<td><strong>Measuring the Impact of Additional Capacity on ED Boarders</strong></td>
<td><strong>Real-Time Electronic Surveillance to Improve Glucose Control</strong></td>
<td><strong>Using Scorecards &amp; Registries to Improve HbA1c Control in Diabetics</strong></td>
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<td>Ann Thayer and Tarun Mohan Lal, Mayo Clinic</td>
<td>Natassia Taylor and Lori Pelletier, University of Massachusetts Memorial Healthcare, Bengawan Upatising, Purdue University</td>
<td>Carmen Adams and Elizabeth Scruth, Kaiser Permanente</td>
<td><strong>A Year Later: Launching an Organization-wide Process Improvement Culture</strong></td>
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<td><strong>Radiology Efficiency Dashboard: A Prototype for Radiology Quality Improvements</strong></td>
<td>3:45 – 4 p.m. Break - Grand Ballroom J-L</td>
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### THURSDAY, FEBRUARY 18

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**4 – 5 p.m.**

- Letting Workflow Drive Design (Instead of Working Around a Design Later On)
  - Melanie Lowther, Manny Hill and Ramsey Ibrahim, Texas Children’s Hospital
- New Breed of EHR Workflows-Pictorial SOPs
  - Charles DeBusk and Andrew Ganti, Universal Health Services Inc.
- Optimizing Obstetrics: Assessing Capacity and Improving Patient Flow
  - Jordan Aronhalt and James Rudy, Long Island Jewish Medical Center
- Structuring a Sepsis Program for Improved Patient Outcomes
  - Tina Schoen and Kersten Liebner, Carolinas Healthcare System
- A New Rx for Sustainable Cultural Global Transformational Change
  - Sameer Anand, MD Anderson Cancer Center
- Engaging Undergraduate and Master’s Students in Healthcare Systems Engineering
  - Amy Cohn, University of Michigan

**5 – 6:15 p.m.** Networking Reception – Grand Ballroom J-L

### FRIDAY, FEBRUARY 19

**7a.m. – 5p.m.** Registration Desk Open – Registration Desk – Grand Ballroom J

**7 – 8 a.m.** Breakfast with the Exhibitors – Grand Ballroom J-L

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<td>Michelle Taylor</td>
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<td>Jeremy Lambert</td>
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<td>John Templin</td>
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**7:50 – 8:50 a.m.**

- Increasing Volume in Interventional Radiology: A Lean Experiment
  - James Rawson, Georgia Regents University
- Designing a New Emergency Department through Lean Transformation
  - Brent Costa, San Francisco General Hospital
- Daily Emergency Department (ED) Arrival Forecast for Reducing ED Holds
  - Mohammed Aladeemy, Binghamton University
- Avoiding Readmissions: Hospitalists Using Multidisciplinary Collaboration to Stop the Revolving Door
  - Sandie Pressley and Tina Schoen, Carolinas Healthcare System
- Change Fatigue: Building Resilience in the Face of Accelerating Change
- Panel for Students and New to Healthcare: Academia, Government, and Industry Career Options
  - Ashley Benedict, VISN 8 Systems, Jordan Peck, MaineHealth, Evelyn Brown, East Carolina University
- RTLS Technology and Simulation Determines the Best Outpatient Clinic Model!
  - Rudolph Santacroce, RTKL Health+Science Practice Group, Ryan Fogarty, Stanley Healthcare

- LEANing by Doing: Results Fast Using Lean Six Sigma Beginners
  - Sara Woodbury, Penn State Hershey Medical Center
- Reducing Hospital Census Variation Through Rearranging Surgical Service Blocks
  - Aaron Lucas, UMass Memorial Health Care
- Assessing Hospital Vulnerability
  - Jeffrey Herrmann, Sorouh Bassam and Linda Schmidt, University of Maryland, Cham Dallas and Curt Harris, University of Georgia
- Part 1 of 2

Day Coordinator: Bianca Garcia, Florida Hospital
**FRIDAY, FEBRUARY 19**

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**8:55 – 9:55 a.m.**

- Operating Room Allocation Process Improvement in General Surgery
  - Dusty Kuchera, Mayo Clinic
  - Mehmet Erkan Ceyhan, Moderator

- TBA
  - TBA
  - Prediction of Room End Times for a Series of Surgical Cases
    - Robert Allen and Kevin Taaffe, Clemson University
  - Discrete-Event Simulation for Perioperative Growth and Capital Planning
    - Matthew Stabe and Gregory Servis, Sinai Health System

**10 – 11 a.m.**

- Keynote Presentation – Dr. James V. Rawson, Chairman of the Department of Radiology and Imaging at the Medical College of Georgia at Georgia Regents University – Grand Ballroom G-H

**11 a.m. – Noon**

- Dedicated Exhibit Time – Grand Ballroom J-L

**Noon – 1 p.m.**

- Lunch with Awards – Grand Ballroom G-H

**1:30 – 2:30 p.m.**

- Improving Outpatient Flow in a Chemotherapy Infusion Center
  - Matthew Rouhana, Donald Richardson and Amy Cohn, University of Michigan

- OR Quick Turnover Events: Utilizing Principles of TPS/Lean SMED to Improve Operating Room Effectiveness and Safety
  - Brock Husby, KBPI/University of Michigan, Jerry Berlanger, KBPI

- Patient Flow Analysis and Utilization of Outpatient Department (OPDS) of a Local Hospital through Simulation Technique
  - Khawar Naem, University of Engineering and Technology Peshawar

**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)**
## FRIDAY, FEBRUARY 19

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<td>2:35 – 3:55 p.m.</td>
<td><strong>The New IOM Reports on Access to Care and Diagnostic Error: Opportunities for Industrial Engineers - A Panel Discussion</strong>&lt;br&gt;Jim Benneyan, Northeastern University</td>
<td>Grand Ballroom G-H</td>
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<td><strong>Track</strong>&lt;br&gt;Process Improvement - 1 Process Improvement - 2 Operations Research Quality &amp; Safety Change Management Leadership Potpourri</td>
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<td><strong>A Graphical Network Theory Approach to Analyzing Inpatient Movement and Cohorting</strong>&lt;br&gt;Gregory Servis and Andrew Nenos, Mount Sinai Health System, Ying Han, Binghamton University</td>
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HEALTHCARE MANAGEMENT
ENGINEERING TRAINING

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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 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:
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» 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

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THURSDAY, FEBRUARY 18
Day Coordinator: Eddie Perez-Ruberte, BayCare Health System

9:10 - 10:10 a.m.  .................................................................

Lean Six Sigma in Healthcare: Making Progress Despite the Challenges
Room: Grand Ballroom A
Randy Boyd, Firefly Consulting
All levels

Lean Six Sigma continues to provide a significant opportunity to improve quality and eliminate waste within the complex environment of healthcare. This presentation takes a look at the continued role of process improvement, discussing the challenges and opportunities via successful examples from nine core healthcare processes.

Developing Collaborative MD/NP-PA Teams: A Lean Six Sigma Approach
Room: Grand Ballroom D
Roberta Maughan, Essentia Health
Basic level

To achieve the Triple Aim in an ACO environment, healthcare depends on the utilization of team-based care and better stewardship of resources. This session will present principles, analysis and tools illustrating development of a collaborative provider team model, clinic capacity/demand and provider staffing ratios to support a team model.

Optimally Designing Your Medical Office Building: A Discrete-Event Simulation Study
Room: 339
James Montgomery, Carilion Clinic
All levels

Discrete-event simulation (DES) is making inroads in facility design because it promotes risk-free assessment of physical space, equipment and staffing alternatives. This case study demonstrates how DES answered myriad research questions during the design phase of a 120,000 sq. ft. neuro-musculoskeletal center with recommendations subsequently incorporated into architectural drawings.

Reducing Surgical Site Infections
Room: 327
Sheena Butts, Lakeland Regional Health
Intermediate level

Learn how Lakeland Regional Health has worked to reduce surgical site infections by standardizing care processes through the continuum of the patient’s care.

10:15 – 10:45 a.m.  .................................................................

Lean Six Sigma Design Approach to Accelerate Deployment of a Systemwide Telehealth Program
Room: Grand Ballroom A
Nancy Tario, Essentia Health
All levels

A cross-functional team consisting of clinical and operations staff used lean Six Sigma design methodology to develop a deployment process for telehealth in a timely and strategic manner across the system and in all levels of care. Implementation of telehealth programs were increased from five to 59 per year.
Working Smarter: Building a Culture of Everyday Problem Solving  
Room: Grand Ballroom D  
Matthew D'Agostino, MedStar Franklin Square Medical Center  
Basic level

To ingrain continuous improvement in hospital culture, problem solving must be practiced by the front-line associates, not just PI specialists. To facilitate this, we designed a simple problem-solving tool to tackle smaller problems. By training and coaching on the tool, staff became engaged and empowered, achieving robust results autonomously.

Sustain and Reinforce Standards with a Staff-Based Continuous Audit System  
Room: 327  
Darrin Judkins, Boulder Community Health  
Karl Kraebber, Indiana University Health  
Basic level

The Joint Commission raved about this staff-based continuous audit system (kamishibai). Learn about how to successfully use this classic lean tool to sustain new process implementations as well as to continuously reinforce and educate to standards.

A Framework for Pediatrics Clinic No-Show Prediction Using Elastic Net and Bayesian Belief Network  
Room: 330  
Kazim Topuz, Wichita State University  
Intermediate level

Create a framework to predict no-shows at pediatric clinics. First, use elastic net and lasso to select the most prominent variables that affect the no-show. Second, use the selected variables with state-of-art structural learning methods for the Bayesian Belief Network Model to predict no-show probabilities.

10:15 – 11:15 a.m.

An Effective Process for Scheduling Emergency Department Nurses  
Room: 339  
Bryan Norman and Anna Svirsko, University of Pittsburgh  
Intermediate level

This presentation will illustrate the advantages of using a systematic approach for designing emergency department nurse schedules. Audience members will leave the presentation with knowledge of key emergency department nurse capacity planning and scheduling strategies that can be used to schedule emergency department nurses more effectively.

A Change Management Playbook - Coaching Leaders into Role-Model Project Champions  
Room: 328  
Jacquie Maupin, Medstar Georgetown University Hospital  
Intermediate level

Medstar Georgetown University Hospital launched a lean Six Sigma project to address chronic throughput issues but faced a greater challenge – introducing performance improvement and change management to an organization with limited exposure to both. A robust playbook of tools – plus decreased length of stay and increased discharges – convinced skeptics.

The Real Lessons of Dr. Deming’s Red Bead Factory  
Room: 329  
Mark Graban, KaiNexus  
Basic level

Experience W. Edwards Deming’s Red Bead Factory simulation and discover the true lessons behind the demonstration. We will go beyond demonstrating the differences between random and special cause variation to discuss transformation of management.

10:45 – 11:15 a.m.

Implementing an Emergency Department Patient Split Flow  
Room: Grand Ballroom A  
James Rudy and Jordan Aronhalt, Long Island Jewish Medical Center  
Intermediate level

With Emergency Department volume doubling the past 5 years, Long Island Jewish Medical Center (LIJMC) was faced with the decision to invest $30 million to expand their ED or develop an improved process within the existing environment. LIJMC chose the latter and implemented a split flow process with dramatic results.
Modeling Sociotechnical Systems:
Capturing and Evaluating Information Flow
Room: Grand Ballroom D
Sarah Bonzo, State University of New York at Oswego
Intermediate level

Many traditional process modeling techniques focus on the technical process steps. In healthcare, tremendous opportunity lies in simultaneously evaluating (1) trigger communication that guides the process and (2) feedback communication for error identification and problem solving. We present a methodology for modeling both aspects of the sociotechnical system.

Improving Patient Access to Endocrine Program for Morbidly Obese Patients
Room: 327
Elizabeth Olin, Moses Chan, Amy Rothberg and Amy Cohn, University of Michigan
All levels

This presentation will provide a series of effort to evaluate the endocrinology clinic operations and increase access to and improve compliance with an intensive weight management program for morbidly obese patients.

Rethinking Principal Component Analysis in EEG Signal Classification
Room: 330
Xiaoxia Li and Canan Bilen-Green, North Dakota State University
Basic level

This presentation illustrates the validity of using the Principal Component Analysis (PCA) method to reduce data dimensions in the process of EEG signal processing, and it also shows the results of classification performance in two EEG data sets for alcoholic and control subjects.

Improving Patient Access Processes to Enhance Patient Experience
Room: Grand Ballroom D
Freddie Weiss and Laura Burke, MD Anderson Cancer Center
Basic level

The goal of the project is to improve the patient experience through ease of access and to reduce the time between initial contact and the new patient appointment. Through the creation and implementation of algorithms, the team improved cancellation rates and the time required to offer an appointment.

Simulation Optimization Approach for Emergency Medical Service
Room: 339
Carlos Escobar, New Mexico State University
All levels

Application of operations research theories to analyze and improve emergency medical service (EMS) systems.

Using Scorecards and Registries to Improve HbA1c Control in Diabetics
Room: 327
Susan Seidensticker and Gina Butler, University of Texas Medical Branch (UTMB)
Intermediate level

Diabetes HbA1c control is critical to the ambulatory management of this chronic disease. UTMB’s efforts to utilize data from the EMR to support this are leading to improved outcomes.

1:40 – 2:10 p.m.

A Need for Speed: Improving Throughput in 25 Emergency Departments
Room: Grand Ballroom A
Charles DeBusk, Universal Health Services Inc.; Paula Antognoli, UHS of Delaware
All levels

In the future, the emergency department needs to continue being more efficient and effective in the provision of care. In our 25 EDs, we have designed processes that have been implemented and sustained reducing leave-without-being-seen rates by 70 percent and improving length of stay.

A Year Later: Launching an Organizationwide Process Improvement Culture
Room: 328
Cristina Galloway and Carla Rodriguez, University of Florida Health Shands
All levels

A shift in culture toward continual process improvement is no easy task, requiring strategic permeation of a new mindset at all levels of the organization. We will discuss our team’s journey after initial implementation and lessons learned thus far in the cultural change at UF Health Shands in Gainesville, Fla.
1:40 – 3:15 p.m.

**Leaning Forward: Building a Culture of Leadership, Innovation and Improvement**

Room: 329  
Sarah Padfield and Zoja Holman, Chatham-Kent Health Alliance; Todd Sperl, Lean Fox Solutions  
All levels

Leaning Forward is a comprehensive leader development training program in which participants learn the techniques of establishing and sustaining operational excellence and overall continuous improvement. Through this process, participants learn and apply tools and concepts of change management, conflict resolution, and continuous improvement to achieve their improvement goals and change how they manage.

2:10 – 2:40 p.m.

**Care Team Optimization in Specialty Practice**

Room: Grand Ballroom D  
Ann Thayer and Tarun Mohan Lal, Mayo Clinic  
Basic level

With the growing trend and concern surrounding physician shortages, there is an increasing call for the redesign of office practices to reduce process inefficiencies and improve capacity through better use of clinical allied health staff. In this presentation, we will discuss the best use of care teams for operational performance.

**Measuring the Impact of Additional Capacity on ED Boarders**

Room: 339  
Natassia Taylor and Lori Pelletier, University of Massachusetts Memorial Healthcare; Benjavan Upatising, Purdue University  
Intermediate level

Boarding admitted patients in the emergency department for long periods of time negatively impacts patient flow through hospitals and can have negative impacts on patient care. The purpose of this study was to evaluate the impact of adding permanent and surge space bed capacity on ED boarding hours.

2:45 – 3:15 p.m.

**Executing a Virtual National Collaborative – Improving Veteran Hepatitis C Care**

Room: Grand Ballroom D  
Angela Park, Department of Veterans Affairs, New England Veterans Engineering Resource Center; Timothy Morgan, William Lukesh, Rachel Gonzalez and Whitney Rockefeller, Department of Veterans Affairs  
Intermediate level

This presentation will highlight keys to success and lessons learned in executing a virtual nationwide collaborative geared toward improving the process of delivering hepatitis C care in the era of highly effective direct acting agents. Twenty regional teams participated in a dynamic collaborative that greatly improved veteran hepatitis care.

**Florida Hospital’s Implementation of CHG Bathing and Perineal Care**

Room: 327  
Jennifer Waterbury and Lisa Campbell, Florida Hospital  
Intermediate level

In an effort to reduce catheter-associated urinary tract infections (CAUTIs), Florida Hospital implemented a systemwide strategy for daily patient bathing and twice daily perineal care. This standardized process has shown improvement in CAUTI SIR risk-adjusted rates. Quality, project management, change management and performance improvement are incorporated within the strategy.

2:45 – 3:45 p.m.

**Pull Education: Teaching ‘The Why’ Will Transform Your Classroom**

Room: Grand Ballroom A  
Isaac Mitchell and Marti Jordan, East Tennessee Children’s Hospital  
Basic level

Is your training filled with dense PowerPoint slides and definitions? Are your colleagues leaving engaged or just checking off a completion box? Come see how we’ve transformed our lean education to engage staff in situational training that pulls information to create a better understanding of “The Why” for improvement.
Scheduling Healthcare Providers  
Room: 339  
William Pozehl and Amy Cohn, University of Michigan  
All levels  
This presentation will provide an overview of models and strategies that can be used to improve the schedules of healthcare providers. Insights regarding challenges and opportunities from a variety of projects will be explored.

The Process of Process-Led Design: Two Case Studies  
Room: 328  
Laura Silvoy and Jonathan Bykowski, Array Architects  
Basic level  
Process, data and expertise are the three pillars of a successful healthcare architecture simulation. Using discrete-event simulation, we experiment with process flow options and determine the appropriate amount of space, saving our healthcare clients capital and supporting processes focused on improving the value and quality of care.

Using Learning Collaboratives to Facilitate Process Design/Redesign Efforts  
Room: Grand Ballroom D  
Jamison Kovach, University of Houston; Adrian Choo, Georgia State University; Larry Fredendall, Clemson University  
Basic level  
Improvement activities often involve developing new ways of doing things. To support healthcare practitioners while they simultaneously learn and use a structured improvement approach to design/redesign operational processes within their agencies, a learning collaborative approach was developed. Others may find this approach useful to help guide their future improvement efforts.

Reduce Perioperative Charge Lag by 50 Percent  
Room: 327  
Lavanavijit Ragavan and Doretta Tarangioli, Montefiore Medical Center  
Basic level  
Revenue cycle department reported OR charge lag of 13 days (date of surgery to date of billing) in March 2014. The team reduced OR charge lag to 7 days by March 2015 by analyzing processes, identifying bottlenecks and implementing simple, sustainable solutions that reduce waste and decrease lag.

Developing Culture in a New Tertiary Hospital  
Room: 329  
Catherine Li and Greg Sweetman, Fiona Stanley Hospital  
All levels  
Staff engagement is powerful in driving better clinical outcomes. At a newly opened tertiary hospital in Perth, Western Australia, a 3-E (engaging, enhancing and embedding) model and associated structure and processes have been developed to enable and empower staff to undertake and participate in quality activities, shaping a culture of quality improvement.

Letting Workflow Drive Design (Instead of Working Around a Design Later On)  
Room: Grand Ballroom A  
Melanie Lowther, Manny Hill and Ramzey Ibrahim, Texas Children’s Hospital  
All levels  
Historically, we built buildings without an engineering focus incorporating workflow into design. Results required workflow workarounds, produced surges of change orders after move-in, and potential for delays, rework, and safety concerns. We turned that process around and want to share our methodology and experiences to help others build effective spaces.

New Breed of EHR Workflows- Pictorial SOPs  
Room: Grand Ballroom D  
Andrew Ganti and Charles DeBusk, Universal Health Services Inc.  
All levels  
Eligible hospitals (EH) and eligible providers (EP) strive hard not to return millions of dollars of CMS incentive payments already received after EHR implementation. Workflows impact the meaningful use (MU) of EHRs. Pictorial SOP-based EHR workflows will keep them current, complete and effective in a dynamic environment.

Optimizing Obstetrics: Assessing Capacity and Improving Patient Flow  
Room: 339  
Jordan Aronhalt, Long Island Jewish Medical Center; James Rudy, North Shore LIJ Health System  
All levels  
Due to unanticipated volume within Long Island Jewish Medical Center’s Obstetrics (OB) department, the IE team was brought in to assess the capacity of each OB department and provide recommendations on improving process efficiency. Through data analysis and observations, the team
identified improvements that allowed for additional capacity without capital improvements.

**Structuring a Sepsis Program for Improved Patient Outcomes**  
Room: 327  
Tina Schoen and Kerstin Liebner, Carolinas Healthcare System  
Basic level

Our healthcare system utilizes Donabedian’s model of structure, process and outcomes. As a system, we are focused on the urgency in care and lethality of sepsis. Using the principles of the model, we created a platform for structure to aid our processes in excellent patient outcomes for sepsis.

**A New Rx for Sustainable Cultural Global Transformational Change**  
Room: 328  
Sameer Anand, GlaxoSmithKline  
All levels

Disparate initiatives around lean Sigma, change management and project management had not driven sustainable business performance. Our approach combined these concepts into simple leadership fundamentals, bolstered with local change agents and engaged role model leaders. After proving the business value through pilots, we have embedded this across the globe.

**Implementing the Toyota Production System in the OR**  
Room: 329  
Rachel Douglas Hodge, MD Anderson Cancer Center  
Intermediate level

Operating room utilization, appropriate staffing, increasingly complex procedures, increase in multiservice cases and higher acuity patients have had an impact on surgical productivity both within and outside the operating room environment. Learn how we are meeting this challenge by implementing the Toyota Production System in the operating room.

**Engaging Undergraduate and Master’s Students in Healthcare Systems Engineering**  
Room: 330  
Amy Cohn, University of Michigan; Julie Ivy; Maria Mayorga; Harriet Nembhard  
All levels

In this panel, faculty and students from North Carolina State, Penn State and the University of Michigan will discuss their experiences, challenges and successes in launching programs to provide undergraduate and master’s degree students hands-on experience in solving real-world healthcare problems.

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**FRIDAY, FEBRUARY 19**  
Day Coordinator: Bianca Garcia, Florida Hospital  
7:50 – 8:20 a.m.

**Designing a New Emergency Department through Lean Transformation**  
Room: Grand Ballroom I  
Brent Costa, San Francisco General Hospital  
Basic level

San Francisco General Hospital’s emergency department began its lean journey in 2014 and has completed multiple 3P kaizen events in preparation for the move to a new acute-care hospital. This presentation will highlight the results of these workshops and introduce the beginning phase of a lean management system.

**Daily Emergency Department (ED) Arrival Forecast for Reducing ED Holds**  
Room: 339  
Mohammed Aladeemy, Chun-An Chou, Xiaojun (Gene) Shan, Mohammad Khasawneh and Srikanth (Sri) Poranki, State University of New York, Binghamton; Amy Booth, UHS Inc.  
Intermediate level

This presentation describes how the problem of ED holds can be alleviated by providing the ED management with a user-friendly interface of an accurate forecasting model that can be used on a daily basis.

**Avoiding Readmissions: Hospitalists Using Multidisciplinary Collaboration to Stop the Revolving Door**  
Room: 327  
Sandie Pressley and Tina Schoen, Carolinas Healthcare System  
Intermediate level

To stop the revolving door, acute care, ambulatory care, clinical case management and emergency departments worked synergistically to drive down readmissions. A multidisciplinary collaboration is needed to continue to show positive changes for reducing readmissions. Keys to success were using ingenuity and direct scheduling software for high-risk patients.
7:50 – 8:50 a.m.

**Increasing Volume in Interventional Radiology: A Lean Experiment**
Room: Grand Ballroom F
James Rawson, Georgia Regents University
Intermediate level

Discuss multiyear effort to improve workflow in interventional radiology to increase capacity without adding additional interventional radiology suites.

**Panel for Students and New to Healthcare: Academia, Government and Industry Career Options**
Room: 329
Ashley Benedict, VISN 8 Systems; Jordan Peck, MaineHealth; Evelyn Brown, East Carolina University
Basic level

A panel of professionals will share their experiences and insights into the opportunities and positions within the academia, industry and government sectors. There will be a recent graduate, a middle career professional and a tenured professional as the speakers. This session will be interactive with time for questions.

**RTLS Technology and Simulation Determines the Best Outpatient Clinic Model!**
Room: 330
Rudolph Santacroce, RTKL Health+Science Practice Group; Ryan Fogarty, Stanley Healthcare
All levels

By collecting patient- and provider-specific data in real time, this presentation will show how the use of RFID/RTLS (real-time location tracking) and simulation enabled a large outpatient clinic in the Midwest to develop the “right DNA” for a clinic model that will be used to design future clinics in the region.

7:50 – 9:55 a.m.

**Change Fatigue: Building Resilience in the Face of Accelerating Change**
Room: 328
Julie Rennecker, The Management Doc LLC; Jean Ann Larson, Jean Ann Larson & Associates
All levels

Change has changed, and few industries have undergone more change – or more involuntary change – recently than healthcare. Consequently, many healthcare leaders and staff are suffering from “change fatigue.” This session offers strategies for both individual and team renewal, as well as prevention of future episodes of change fatigue.

8:20 – 8:50 a.m.

**LEANing by Doing: Results Fast Using Lean Six Sigma Beginners**
Room: Grand Ballroom I
Sara Woodbury, Penn State Hershey Medical Center
All levels

Deploying lean Six Sigma methodology in an academic medical center doesn’t have to be as resource-intensive as you think. Using expert facilitators with some training in the methodology, business results can be achieved rapidly by beginners to solve problems that need attention now.

**Reducing Hospital Census Variation through Rearranging Surgical Service Blocks**
Room: 339
Aaron Lucas, UMass Memorial Health Care
Intermediate level

High weekday census variation in hospitals may negatively impact the flow of patients. This variation may be reduced through rearrangement of the perioperative block schedule. Using a mixed-integer linear program, we projected a significant reduction in weekday census variation through manipulating the current block schedule.

**Assessing Hospital Vulnerability**
Room: 327
Jeffrey Herrmann, Soroush Bassam and Linda Schmidt, University of Maryland; Cham Dallas and Curt Harris, University of Georgia
Intermediate level

Hospital security requires protecting patients from harm and safeguarding valuable assets. This talk will discuss vulnerability assessment and illustrate its use to evaluate the vulnerability of a hospital in three scenarios: infant abduction, theft of narcotics and theft of radioactive medical waste from a treatment unit.
8:55 – 9:25 a.m.

Operating Room Allocation Process Improvement in General Surgery
Room: Grand Ballroom F
Dustin Kuchera, Mayo Clinic
Intermediate level

At a large medical center, the process for allocating operating rooms within the Division of General Surgery was improved to increase the utilization of surgeons and operating rooms. The process changes have resulted in three to five more operative days per month without adding more surgeons or operating rooms.

Model Cells - Driving Improvement to the Front Lines
Room: Grand Ballroom I
Todd Schneider and Sabrina Gilbert, OhioHealth
Intermediate level

OhioHealth sought to develop a continuous improvement mindset among all levels of staff. To begin this work, a “Model Cell” approach was used to develop staff and provide opportunities for executives to practice coaching. The first round included 15 front-line staff to practice A3 problem solving.

Discrete-Event Simulation for Perioperative Growth and Capital Planning
Room: 339
Matthew Stabe and Gregory Servis, Mount Sinai Health System
All levels

In today’s cost-conscious healthcare environment, proper space and resource planning is essential for future success. At a large hospital in NYC, discrete-event simulation was used to assess and plan for the need of additional operating rooms and PACU beds due to projected perioperative volume growth and capital investment.

Paradigm Shift in Delivery of Anticoagulation Care to Community Population
Room: 330
Rohit Bobade, Amerett (Amy) Donahoe-Anshus, Thomas Jaeger and Richard Helmers, Mayo Clinic
Intermediate level

Mayo Clinic has applied the time-driven activity-based costing (TDABC) approach to community care programs and patient care cycles. TDABC is an objective method of determining value based on total resource costs. This presentation explains its application to an anticoagulation program for community patients at Mayo Clinic in Rochester, Minnesota.

8:55 – 9:55 a.m.

Discovering Business Value in Near-Miss Reporting and Analysis
Room: 327
Cory Worden, Memorial Hermann Health System; Norman Ritchie, vPSI Group LLC
Intermediate level

Within healthcare, reliance on regulatory compliance in workplace safety has yielded an industry average recordable injury rate of 6.4 per 100 employees compared to Oil and Gas’s average of 1.4. With this, best practices in near-miss analyses allow for a business value and increases in quality, productivity and overall safety.

SHS Young Professionals Panel Discussion
Room: 329
Lavanavarjit Ragavan, Montefiore Medical Center
Intermediate level

9:25 – 9:55 a.m.

TBA
Room: Grand Ballroom F

TBA
Room: Grand Ballroom I

Prediction of Room End Times for a Series of Surgical Cases
Room: 339
Robert Allen and Kevin Taaffe, Clemson University; Mark Pruitt, Greenville Health Systems
All levels

Predictive linear regression modeling is used to better predict room end time for a series of surgical cases. More accurate predictions of room end time lead to less overutilized OR time.

An RTLS-Enabled Time Study in an Outpatient Clinic
Room: 330
Seth Hostetler, Geisinger Health System
Basic level

Traditional time study methods are often resource-intensive undertakings. This presentation describes an alternative to direct observations, which utilizes a real-time location system (RTLS). The methods and results from this study will be presented, with emphasis on lessons learned and recommendations to others interested in performing a similar study.
1:30 – 2 p.m.

**Quantitative Decision-Making Tool for Prioritizing Biopsychosocial Needs of Cancer Patients**

Room: Grand Ballroom F
Valentine Boving, Donna Suckow, Wendy Griffith and Sarah Cook, University of Texas MD Anderson Cancer Center
All levels

Distressed cancer patients are referred to social workers for biopsychosocial needs assessments. If several social workers assess the same patient using existing qualitative methods, the results can vary widely. We have designed a quantitative tool that reduces that variation and prioritizes the needs to be addressed.

**A Conceptual Framework for Developing a Staffing Model for Anticoagulation Clinics**

Room: Grand Ballroom I
Desta Hailemariam, Xiaojun (Gene) Shan, Sung hoon Chung, Mohammad Khasawneh, Binghamton University; William Lukesh and Angela Park, Department of Veterans Affairs, New England Veterans Engineering Resource Center
Intermediate level

Optimal staff mix is imperative to effectively and efficiently deliver care. This presentation reviews a staffing model for anticoagulation clinics.

**Better Staffing through Simulation**

Room: 339
Jeffrey Brelsford, MOSIMTEC
Intermediate level

Simulation can be used to determine the best staff schedule, including both the number of staff and their schedules. Traditional methods include mathematical optimization, but does not account for variability or real system complexity. Simulation along with some novel techniques can provide better staff planning.

**Successful Strategies to Reduce Mortality in Children with Heart Disease**

Room: 327
Leslie Doyle and Kshitij Mistry, Carolinas HealthCare System
Basic level

Survival for children born with structural heart disease has improved over the past two decades. However, given the increasing complexity of newborn patients, mortality rates for this cohort remains high relative to other age groups. This presentation will discuss approaches used to create structure and develop processes to improve survival.

1:30 – 2:30 p.m.

**Soft Skills for Leaders of Change in Healthcare**

Room: 328
Christopher Farnham, Spectrum Health; Jean Ann Larson, Jean Ann Larson & Associates
All levels

Leading change in healthcare requires more than just technical skills and tools to ensure improvement. In this session, we will provide strategies and hands-on approaches to help leaders manage themselves and a team through change. Managing one’s self and the ability to influence those around you is the challenge.

**Implications and Applications of a Systems Approach in Healthcare**

Room: 329
Kevin Nortrup, Sugar Creek Solutions
All levels

What happens when we take a systems approach to everyday complexity, and what are practical examples of utilizing it to grapple with real-life situations in healthcare? How can a systems approach improve strategy, tactics and outcomes? This presentation will extrapolate the theoretical and familiar into practical and innovative applications.

**Developing an Analytics Structure to Support Performance Improvement Activities**

Room: 330
Vanda Ametlli, Henry Ford Health System
Intermediate level

This presentation will provide an overview of how utilization of process improvement methodology in collaboration with analytics assisted in developing a robust analytic structure to support performance improvement activities within surgery and anesthesia enterprise business units.

2 – 2:30 p.m.

**Improving Outpatient Flow in a Chemotherapy Infusion Center**

Room: Grand Ballroom F
Matthew Rouhana, Donald Richardson and Amy Cohn, University of Michigan
All levels

We present work done in collaboration with the University of Michigan’s Comprehensive Cancer Center toward improving the experience of infusion patients. We focus on reducing patient delays, improving staff workload balance.
and resource utilization. We summarize the overall process flow, data analysis and proposed alternatives to improve the patient experience.

**OR Quick Turnover Events: Utilizing Principles of TPS/Lean SMED to Improve Operating Room Effectiveness and Safety**

Room: Grand Ballroom I
Brock Husby, KBPI/University of Michigan; Jerry Berlanga, KBPI
Advanced level

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 percent-plus in as little as one week of dedicated effort. Multiple case studies discussed.

**Patient Flow Analysis and Utilization of Outpatient Department (OPDS) of a Local Hospital through Simulation Technique**

Room: 339
Khawar Naeem, University of Engineering and Technology Peshawar Khyber Pakhton Khwa
Intermediate level

Facilitation of patients in terms of reduced waiting time is performed at a healthcare unit of Peshawar, Pakistan. Process modeling, analysis and improvement through simulation is performed using SIMIO.

**Predicting 30-Day Hospital Mortality in Patients with Congestive Heart Failure**

Room: 327
Neel Khurjekar, Mohammed Aladeemy, Chun-An Chou, Xiaojun (Gene) Shan, Mohammad Khasawneh, Srikanth (Sri) Poranki, State University of New York, Binghamton
Intermediate level

The presentation aims at addressing the issue of hospital mortality using a data mining framework that predicts the risk of death within 30 days of being admitted in the hospital.

4 – 4:30 p.m.

**Process Flow Optimization for Improved Delivery of Surgical Instruments**

Room: Grand Ballroom F
Nina Scheinberg, Center for Healthcare Engineering and Patient Safety
Basic level

The Surgical Instruments team at the Center for Healthcare Engineering and Patient Safety has been working with a university hospital to address efficiency challenges associated with the reprocessing of surgical instruments. The team has focused on reconfiguring instrument sets to mitigate problems related to insufficiently cleaned instruments.

**Improving Food and Nutrition Productivity and Increasing Retail Cafeteria Sales**

Room: Grand Ballroom I
James Rudy, North Shore LIJ Health System; Jordan Aronhalt, Long Island Jewish Medical Center
Basic level

The food and nutrition department at Long Island Jewish Medical Center (LIJMC) was facing budget constraints, workflow inefficiencies within the inpatient meal service and stagnant retail cafeteria revenue. Through process redesigns, standardization and targeted analytics, LIJMC was able to realize significant productivity gains and increased cafeteria sales.

**Risk Factors of Invasive Medical Technologies in Nonclinical Environments**

Room: 327
Joshua Gray, Mary Lawlor and Greg Placencia, University of Southern California; Glenn Takata, Children’s Hospital Los Angeles
Intermediate level

Study explores risk factors of invasive medical therapies in nonclinical environments. Participatory ergonomics is utilized to facilitate the discovery of cognitive, physical and macro-ergonomic risk factors to address the sociopsychological, technological and organizational perspectives. This research will result in a patient safety template and quality of care model.

**From the Red to the Blue: A Mexican Hospital Experience**

Room: 329
Marco Solis, Hospital San Javier
All levels

This project was established in a Mexican hospital with 13 years on the market at the time of intervention, where the real status of this hospital was technically bankruptcy. This project shows that proper business alignment and focus on critical processes can reverse results and achieve significant improvements.
A Graphical Network Theory Approach to Analyzing Inpatient Movement and Cohorting
Room: 339
Gregory Servis and Andrew Nenos, Mount Sinai Health System; Ying Han, Binghamton University
Intermediate level

This study examines the use of graphical network theory as an approach for quickly accessing how inpatients move between admission sources and units within a hospital. Open source software is used to analyze patient movement and identify targeted areas for improvement.

A Customer Service Conundrum: Making Subjective Notions Measurable - Secret Shopper
Room: 328
Roque Perez-Velez and Janna Browning, University of Florida Health Shands
All levels

The admissions department at UF Health Shands Hospital trains employees extensively in customer service and hospitality. However, there was no objective way to measure training effectiveness. MECS determined a way to observe and analyze behaviors using statistics and Six Sigma, leading to implementation of new, quantifiable service standards.

Home-Based Palliative Care for Patients with Heart Failure
Room: 330
Brian Galli, North Shore LIJ Health System
All levels

A home-based palliative care program for patients with advanced heart failure can be used to reduce unwarranted readmissions, improve transitions of care, and improve alignment of care interventions with the preferences of the patient and family. Lean Six Sigma can be utilized to implement and optimize this program.

Quality Management Plan for Community Information Exchange San Diego
Room: Grand Ballroom F
Timothy Dougherty, Lehigh University
Intermediate level

A quality management plan for Community Information Exchange San Diego was created. CIE San Diego is a not-for-profit health information exchange of non-Protected Health Information, which partners with local social health agencies to capture and share social determinants of health data.

Effective Visual Displays & Dashboard in Reducing Ventilator Hours
Alexandris Aman, UT Health
Room: Grand Ballroom I
Intermediate level

Prolonged mechanical ventilation is associated with increased risk of ventilator-related complications and mortality. More ventilator days leads to increased length of stay and, subsequently, higher total costs for both the patient and the hospital.

Data-Driven Approach to Balance Readmission Data and Reduce Sample Overlap
Room: 327
Xiaojun (Gene) Shan, Christina Mouradian, Chun-An Chou, Mohammad Khasawneh, Srikanth (Sri) Poranki, State University of New York, Binghamton
Advanced level

Previous prediction models in finding high-risk patients for readmission obtain low sensitivity rates because of imbalanced data sets (significantly more high-risk patients than low-risk ones), and sample overlap (certain high-risk patients share similar characteristics to low-risk ones).

A New Method to Forecast Demand in the Emergency Department of a Hospital
Room: 329
Sankar Sengupta and Victor Daogaru, Oakland University
Intermediate level

A new method to forecast demand in the emergency department of a hospital is presented. The method is based on predicting inter-arrival time of a patient based on clinical variables as well as compliance history of the patient. The proposed approach includes both rules set by the physicians and mathematical models.
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.

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

**Thursday, February 18, 11:15 a.m. – 12:15 p.m.**
**Friday, February 19, 11 a.m. – Noon**

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

### Abstract #1009
**Optimally Designing Your Medical Office Building: A Discrete-Event Simulation Study**
James Montgomery, Carilion Clinic

### Abstract #1015
**A Systemwide Approach to Business Transformation**
Lori Fannin and Chris Luckett, Kettering Health Network

### Abstract #1017
**The Process of Process-Led Design: Two Case Studies**
Laura Silvoy and Jonathan Bykowski, Array Architects

### Abstract #1018
**Using Scorecards & Registries to Improve HbA1c Control in Diabetics**
Susan Seidensticker and Gina Butler, University of Texas Medical Branch (UTMB)

### Abstract #1019
**Better Staffing through Simulation**
Jeffrey Brelsford, MOSIMTEC

### Abstract #1048
**Improving On-Time Starts and Efficiency in the Operating Room**
Sheena Butts, Lakeland Regional Health

### Abstract #1073
**Prediction of Room End Times for a Series of Surgical Cases**
Robert Allen and Kevin Taaffe, Clemson University
Mark Pruitt, Greenville Health Systems

### Abstract #1075
**High-Reliability Workplace Safety Culture Development**
Cory Worden, Memorial Hermann Health System

### Abstract #1082
**A Need for Speed: Improving Throughput in 25 Emergency Departments**
Charles DeBusk and Paula Antognoli, Universal Health Services Inc.

### Abstract #1085
**Implications & Applications of a Systems Approach in Healthcare**
Kevin Nortrup, Sugar Creek Solutions

### Abstract #1115
**Incremental Improvement and Creative Destruction: A Symbiosis**
Brian D. Gregory, ORTimes LLC

### Abstract #1120
**Overcoming Lack of Resources While Supporting Innovative Cultural Changes**
Roque Perez-Velez and Adele Braun, UF Health Shands

### Abstract #1140
**Florida Hospital’s Implementation of CHG Bathing and Perineal Care**
Jennifer Waterbury and Lisa Campbell, Florida Hospital

### Abstract #1143
**Outpatient Exam Room Allocation Process**
Ashley Robinson, MD Anderson Cancer Center

### Abstract #1149
**Improving Patient Access Processes to Enhance Patient Experience**
Freddie Weiss and Laura Burke, UT MD Anderson Cancer Center

### Abstract #1159
**Simulating Day-of-Surgery Decision Making via Simulation: A Healthcare Professional Training Tool**
Nazanin Zinouri, Kevin Taaffe, Larry Fredendall and Joel Greenstein, Clemson University
Nathan Huynh and Jose Vidal, University of South Carolina

### Abstract #1160
**A Vertical Workshop for Red Cross Unit Re-engineering**
Agustin Perez-Araos, ITESM Campus Guadalajara

### Abstract #1162
**Ambulance Location in a Development Country**
Araceli Zavala, Efrain Olmos and Francisco Solis, ITESM Campus Guadalajara

### Abstract #1166
**Process Improvement in Scheduling CT Scans for Inpatients**
Ying Han, Xiaojun (Gene) Shan and Mohammad Khasawneh, Binghamton University

### Abstract #1177
**Scheduling Healthcare Providers**
William Pozehl and Amy Cohn, University of Michigan
POSTER SESSIONS

Abstract #1181
Improving Patient Access to Endocrine Program for Morbidly Obese Patients
Elizabeth Olin, Moses Chan and Amy Cohn, University of Michigan

Abstract #1184
Reducing Clostridium Difficile Infections at Piedmont Atlanta Hospital
Amanda Mewborn, Piedmont Atlanta Hospital

Abstract #1185
Improving On-Time First Starts in the Operating Room
Cathy Modaro, MD Anderson Cancer Center

Abstract #1186
Inpatient Pharmacy IV Bag Recycling Initiative
Dalia Farhat, MD Anderson Cancer Center

Abstract #1187
Standardized Device Screening for Improved Patient Care Delivery and Outcomes
Maghee Disch, Society of Cardiovascular Patient Care

Abstract #1188
Continuing Care after the Emergency Department Discharge
Kayla Cole, Inova Health System

Abstract #1189
Estimating Panel Size of Patients Using One Server Queuing Model, Considering No-Show and Rescheduling Rates
Mahsa Kiani and Kenneth Currie, West Virginia University

Abstract #1190
Commonalities in Genetic Signatures and Signaling Pathways in Neurological Disorders
Nicole Ortiz, Mauricio Cabrera, Clara Isaza and Janice Garcia, University of Puerto Rico

Abstract #1192
The Children’s Hospital of Philadelphia Improvement Spread Tool
Eric Branning and Tyshawn Toney, The Children’s Hospital of Philadelphia

Abstract #1194
Recursive Method for Finding Pareto-Dominant Shift Schedules for a Pediatric Emergency Department
Jonathan Mogannam, University of Michigan Center for Healthcare Engineering and Patient Safety

Abstract #1195
Reducing Time to Antibiotic Administration in Patients with Sepsis
Alexandris Aman, Denise Jackson, Todd Johnson, Michelle Narat, Bela Patel and Shekhar Patil, The University of Texas Health Science Center at Houston
Kristy Gomez and Kavitha Gopal, Memorial Hermann Healthcare System

Abstract #1196
Effective Visual Displays and Dashboard in Reducing Ventilator Hours
Alexandris Aman, Denise Jackson, Todd Johnson, Michelle Narat, Bela Patel and Shekhar Patil, The University of Texas Health Science Center at Houston
Kristy Gomez, Kavitha Gopal and Adam Mullaly, Memorial Hermann Healthcare System

Abstract #1197
Phlebotomy Clinic Simulation – University of Michigan Comprehensive Cancer Center
Jonathon McCormick, University of Michigan Center for Healthcare Engineering and Patient Safety

Abstract #1198
Tableau Dashboard to Improve the Compliance of Deep Venous Thrombosis (DVT) Prophylaxis
Shekhar Patil, Bela Patel, Michelle Narat, Denise Jackson, Alexandris Aman and Todd Johnson, The University of Texas Health Science Center at Houston
Kavitha Gopal and Kristy Gomez, Memorial Hermann Healthcare System

Abstract #1199
Implementing Kanban 2 Bin System in Respiratory Care Unit
Martha Gonzalez and Nahyan Ahmed, University of Texas MD Anderson Cancer Center

Abstract #1200
Implementation of a Computer-Aided Employee Suggestion Management System in Healthcare Organizations
Julie Charron-Latour, Polytechnique Montréal

Abstract #1201
Duke Provider Schedule Editing Process Improvement Project
Zachary Fleming, Premier Inc.

Abstract #1202
Process Flow Optimization for Improved Delivery of Surgical Instruments
Nina Scheinberg, James Bagian, Joseph DeRosier and Leah Raschid, Center for Healthcare Engineering and Patient Safety
Amy Cohn, University of Michigan

Abstract #1203
Coronary Heart Disease Policy Analysis: A Simulation of Medicare Patients
Christine Tang, Worcester Polytechnic Institute
Abstract #1204
Patient Information Management System Case Study at Healthcare Facility
Helen Nguyen, East Carolina University
Roytesa Savage, Brody School of Medicine

Abstract #1206
Simulating a Medical Observation Unit for a Pediatric Emergency Department
Bill Zhang and Gabriel Zayas-Caban, University of Michigan CHEPS
Mark Grum, University of Michigan

Abstract #1207
Improving the Communication Process in the East Baton Rouge Emergency Medical Services Community Paramedic Program
Briana Saul and Laura Ikuma, Louisiana State University

Abstract #1208
Bringing Science to the Bedside – GDMT NOW Not Later
Alpesh Amin, University of California, Irvine
Steven Deitelzweig, Ochsner Health System
Elizabeth Stokes, Society of Cardiovascular Patient Care

Abstract #1209
Clinic Access – Standardized Provider Schedule Templates to Increase Capacity
Ben Wilk and Todd Schneider, OhioHealth

Abstract #1210
Process Analysis, No-Show Impacts and Policy Recommendations: Family Medicine Clinic
John Kros, ECU Department of Marketing & Supply Chain Management

Abstract #1211
Improved Block Scheduling for Treatment Planning Simulation in a Radiation Oncology Department
Spyros Potiris and Robert Mersereau, Dana-Farber Cancer Institute
Mark J. Mackin, Kristopher Nissen and Paul Linh Nguyen and Neil E. Martin, Dana-Farber/Brigham and Women’s Cancer Center
Barbara A. Jaehn, Partners Information Systems

Abstract #1215
Reducing Observation Rates through Process Mapping
Emily Swaney and Todd Schneider, OhioHealth

Abstract #1216
Accommodating Patient Parking Demand and Capacity through Trending and Historical Analysis
Melanie Yoder and Todd Schneider, OhioHealth
The Exhibit Hall is located on Level Four in Grand Ballrooms J-L

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**EXHIBIT HALL HOURS**

**Thursday, February 18**
- 11:15 a.m. – 6:15 p.m. Exhibit Hall Open
- 11:15 a.m. – 12:15 p.m. Dedicated Exhibit Time
- 5 p.m. – 6:15 p.m. Networking Reception in the Exhibit Hall

**Friday, February 19**
- 7 a.m. – 3:30 p.m. Exhibit Hall Open
- 7 a.m. - 7:50 a.m. Breakfast with the Exhibitors
- 11 a.m. – Noon Dedicated Exhibit Time

**IMPORTANT:** It is preferable that your booth be 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 prior to dedicated exhibit time. Exhibitors may NOT dismantle their booths prior to the official closing of the Exhibit Hall.
Binghamton University | Booth #113
With so very few engineering-based healthcare degrees in existence, Binghamton University is proud to offer an accelerated Executive Master of Science in Health Systems degree program in Manhattan. Students can learn from award-winning professors and industry professionals from various allied health systems and complete their degree in one year.

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CreateASoft | Booth #202
Next Generation Dynamic Simulation, Simcad Pro Health, offers an intuitive on-the-fly simulation environment to improve, optimize, and visualize healthcare systems. From ED and OR to hospital logistics and resource planning, Simcad Pro Health integrates with live and historical data to provide the most effective simulation system on the market today. Check out SimTrack w/SmaRTLS for live EMR connectivity, schedule adherence, and real-time dashboards with forecasting.

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Aurora, IL 60504
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FlexSim Healthcare | Booth #209
FlexSim HC is the leading software choice for modeling healthcare systems. Come see how you can use FlexSim HC to design more effective and efficient solutions to your complex healthcare management problems. You’ll love the 3D animation and will be surprised at how quick and easy you can build a simulation model of your operations to get the statistical information you want!

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www.flexsim.com

Healthcare Systems Engineering Institute | Booth #103
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
177 Huntington Avenue
Northeastern University
Boston, MA 02115
P: (617) 373-5662

Lehigh University | Booth #204
The Healthcare Systems Engineering program at Lehigh provides students with the necessary background, specialized knowledge and management skills required to identify inefficiencies in healthcare systems and propose appropriate alternatives to reduce cost, increase efficiency and improve the overall quality of our healthcare system.

Lehigh University Healthcare Systems Engineering
200 West Packer Ave.
Bethlehem, PA 18015
P: (610) 758-5867 | F: (610) 758-6766

McKesson | Booth #208
McKesson Capacity and workforce management solutions can help you achieve sustainable operating margins by:
• Aligning staffing with predicted patient demand
• Optimizing workforce efficiency and productivity
• Improving patient flow and care quality

McKesson
5995 Windward Parkway
Alpharetta, GA 30005
P: (404) 338-6000
www.McKesson.com

MOSIMTEC | Booth #203
MOSIMTEC provides consulting services and software for predictive analytics, data visualization and analysis. We have extensive experience in developing simulation and analytical models to help healthcare professionals better design their systems and processes, reducing waste and wait times, increasing patient throughput, and improving staff utilization.

MOSIMTEC
297 Herndon Parkway
Herndon, VA 20170
P: (410) 258-0298
www.mosimtec.com

North Carolina State University ISE | Booth #102/104
As one of the nation’s top academic programs, we seek to lead the profession by providing tomorrow’s leaders. Not only are we developing revolutionary ideas in traditional areas, we are pioneering breakthroughs in new ones such as Health Systems Engineering. Check out booth 102/104 to see how we are changing the world.

North Carolina State University Campus
111 Lampe Drive, Campus Box 7906
Raleigh, NC 27695
P: (919) 515-6401 | F: (919) 515-5281
www.ise.ncsu.edu

CreateASoft.com
Process Improvement Solutions
Parallon | Booth #115
Parallon is a leading provider of healthcare business and operational services. Parallon partners with hospitals, healthcare systems and non-acute care providers to improve their business performance through our deep knowledge and proven practices in revenue cycle; technology; workforce management; consulting; and group purchasing and supply chain via HealthTrust.

Parallon
6640 Carothers Parkway, Suite 500
Franklin, TN 37067
P: (615) 807-8000
www.parallon.com

Phase 5 Group | Booth #105
Phase 5 Group is the pioneer of EON®, the first ever Collaborative Business Improvement Platform. EON® drastically improves the way multisite organizations, including diversified healthcare providers, scalably and reliably improve their business. By integrating strategies, improvement projects, performance analytics, and best practices execution into one holistic cloud platform, EON® drives unparalleled accountability, visibility, and results.

Phase 5 Group
1420 Spring Hill Rd.
McLean, VA 22102
P: (202) 796-3106
www.phase5group.com

ProcessPlan.com | Booth #206
ProcessPlan is a solution that manages every process in your organization and ensures that every process is followed and executed perfectly every time. With many one-of-a-kind features, powerful automation and management reporting, ProcessPlan will have your organization running like a well-oiled machine in no time.

ProcessPlan.com
3256 North Valdosta Rd.
Valdosta, GA 31602
P: (855) 336-2399
www.processplan.com

QGenda Inc. | Booth #108
QGenda is the industry leader in automated physician scheduling. QGenda provides Software-as-a-Service that automatically generates optimized physician work schedules to accommodate complex business rules via QGenda’s high-powered algorithm. In addition, QGenda accurately schedules the appropriate medical provider based on his or her skill level, specialty, availability, and preferences. Please stop by the QGenda booth to learn more about us or visit our website http://www.QGenda.com.

QGenda Inc.
3340 Peachtree Rd., NE, Suite 1100
Atlanta, GA 30326
P: (770) 399-9945
www.QGenda.com

Simio Simulation and Scheduling Software | Booth #212/214
Critical facility design/process improvement decisions can drag on for years while stakeholders struggle to reach consensus. Simio Simulation Software helps you build evidence and “buy-in” by coupling stunning 3D visualizations with powerful predictive analysis. Patented rapid modeling technology with unprecedented flexibility helps you build realistic models without writing computer code.

Simio Simulation and Scheduling Software
504 Beaver St.
Sewickley, PA 15134
P: (412) 259-5295 | (412) 253-9378
www.simio.com

SIMUL8 Healthcare | Booth #114
From strategic to operational planning, SIMUL8’s intuitive healthcare simulation software has helped transform healthcare delivery, reduce costs and improve patient outcomes worldwide. Our specialized healthcare team is dedicated to improving healthcare with simulation and is already working with organizations including Geisinger, Johns Hopkins, BJC, and the UK’s NHS.

SIMUL8 Healthcare
225 Franklin Street
Boston, MA 02110
P: (800) 547-6024
www.SIMUL8Healthcare.com

Society for Health Systems | Booth #107/109
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.

Society for Health Systems
3577 Parkway Lane, Suite 200
Norcross, GA 30092
P: (770) 449-0461 | F: (770) 263-8532
www.societyforhealthsystems.org

Society of Cardiovascular Patient Care | Booth #211
The Society of Cardiovascular Patient Care assists facilities in their efforts to create cardiovascular centers of excellence that delivers quality care and patient satisfaction in a cost-sensitive environment. SCPC offers hospitals the support needed to effectively reduce variations of care and bridge existing gaps in treatment.

Society of Cardiovascular Patient Care
6161 Riverside Drive
Dublin, OH 43017
P: (614) 408-1303 | F: (614) 442-5953
www.scpc.org
Texas A&M University MS Analytics | Booth #106
The Department of Statistics in partnership with Mays Business School at Texas A&M University offers an M.S. degree in Analytics, which prepares working managers and professionals to optimize business performance and identify new business opportunities. A part-time program for working professionals at Houston CityCentre and via live video.

Texas A&M University
MS Analytics
155 Ireland, 3143 TAMU
College Station, TX 77843-3143
P: (979) 845-6855
http://analytics.stat.tamu.edu/snapshot.php

Truven Health Analytics | Booth #112
Truven Health Analytics delivers leading performance improvement solutions built on data integrity, advanced analytics, and domain expertise. Our insights and solutions have been providing hospitals and clinicians the facts they need to make confident decisions that positively affect the health and well-being of people and organizations around the world.

Truven Health Analytics
6200 S. Syracuse Way
Greenwood Village, CO 80111
P: (817) 442-1662  | F: (303) 486-6464
www.truvenhealth.com

University of Tennessee (UT) Graduate & Executive Education | Booth #201
UT offers CME-certified leadership programs for healthcare professionals and teams. We design and deliver on-site Lean for Healthcare courses and PI/QI event facilitation. We are home to the nation’s #1 physician executive MBA and the MBA in Healthcare Leadership, which deliver a lifetime of benefits for a one-year investment while you work.

University of Tennessee
Graduate & Executive Education
1000 Volunteer Blvd., Suite 504
Knoxville, TN 37996
P: (865) 974-5001
http://ExecEd.utk.edu
Want to get involved with SHS?

Stop by the Membership Booth (#107-109) and let us tell you more about SHS Volunteer Opportunities.

- Academic and Student Committee
- 2017 Healthcare Systems Process Improvement Conference Committee
- Education Committee
- Membership Recognition Committee
- Content and Connections Committee
- Young/Early Career Professionals Committee
- Writing or editing Social Media posts or Newsletter articles

VOLUNTEER AND WIN!

Join the corps of volunteers that keeps SHS moving ahead. Sign up for a committee by dropping this sheet off at the SHS Membership Booth, and you’ll be entered into a drawing to win a GoPro HERO!
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