# Healthcare Systems Process Improvement Conference 2014

**Friday, February 21**

<table>
<thead>
<tr>
<th>Time</th>
<th>Meeting Room/Time</th>
<th>Orange A</th>
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</thead>
</table>
| 7 a.m. – 5 p.m. | Registration Desk open – Orange Ballroom Foyer | Pre-Conference Workshop –  Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation  
  Karen Martin,  
  Karen Martin and Associates | Pre-Conference Workshop –  Maximizing Healthcare Process Redesign Engagements – Improving Processes, Getting Results and Engaging Others  
  Jean Ann Larson,  
  Jean Ann Larson and Associates | Pre-Conference Workshop –  Discrete Event Simulation for Process Redesign/Re-engineering in Healthcare  
  Thomas Roh and Tarun Mohan Lal,  
  Mayo Clinic | Pre-Conference Workshop –  Measurement Systems Analysis (MSA) in Healthcare  
  Keith Poole, khrusallis.org,  
  Nimish Patel, HCA Healthcare,  
  Joseph Swartz,  
  Franciscan St. Francis Health |  |
| 8 a.m. – Noon |  |  |  |  |  |  |
| 1 – 1:20 p.m. | Welcome - Florida Ballroom 1-4 | Operations Research for Process Improvement Track  
  Moderator –  Christine Tang | Potpourri Track  
  Moderator –  John Templin | Applied Research Track  
  Moderator –  Taryn Lee | Healthcare Reform Track  
  MODERATOR | Information Technology Track  
  Moderator –  Leang Chhun |  |
| 1:30 – 2:20 p.m. | Operations Research for Process Improvement Track  
  Moderator –  Christine Tang | Operations Research for Process Improvement Track  
  MODERATOR | Potpourri Track  
  Moderator –  Taryn Lee | Applied Research Track  
  Moderator –  Brittany Hagedorn | Healthcare Reform Track  
  Moderator –  Julie Yazici | Information Technology Track  
  Moderator –  Sabrina S. Gilbert |  |
| 2:30 – 3:20 p.m. |  | Applications of Analytics at the Mayo Clinic  
  Jeannie Huddleston,  
  Mayo Clinic | Establishing Relationships, Improving Patient Safety and Patient and Staff Satisfaction  
  Judith Ann Pauley and Joseph F. Pauley,  
  Process Communications Inc. | Impact of Propofol on Endocopy Unit Efficiency: A Discrete Event Simulation Model  
  Javad Taheri,  
  North Carolina State University,  
  Ziad Gellad,  
  Duke University Medical Center | Using Industrial and Systems Engineering to Drive the Triple Aim  
  James Benneyan,  
  Northeastern University,  
  Susan Goldstein Healthcare Systems Engineering Institute | Process Design Implications Of Using Tablet Computers for Patient Intake  
  Bryan Norman and Rachel Hess,  
  University of Pittsburgh |  |
<p>| 3:30 – 4:30 p.m. | Keynote Speaker - Florida Ballroom 1-4 - R. Alan Gleghorn – CEO, Christie Clinic |  |  |  |  |  |
| 4:30 – 5 p.m. | SHS Business Meeting - Florida Ballroom 1-4 |  |  |  |  |  |
| 4:30 – 5 p.m. | Student Networking Reception Sponsored by Northeastern University Healthcare Systems Engineering Institute - Florida Ballroom 5 |  |  |  |  |  |
| 5 – 6 p.m. | Welcome Reception - Exhibit Hall - Poster Session – Orange Ballroom D |  |  |  |  |  |</p>
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<tr>
<td>7 a.m. – 5 p.m.</td>
<td>Keynote Follow-Up</td>
<td>Lean Six Sigma Track</td>
<td>Applied Research Track</td>
<td>Healthcare Reform Track</td>
<td>EMR/EHR Workflow Track</td>
<td>Change Management Track</td>
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<td>8 – 8:50 a.m.</td>
<td>Keynote Follow-Up – R. Alan Gleghorn, Christie Clinic</td>
<td>Hardwiring Nursing Bedside Report across Phases of Care</td>
<td>Assessing Surgical Team Awareness and Resiliency through Recurrence of Communications</td>
<td>Value-Based Purchasing: Achieving STEEEP Care at Baylor Health Care System</td>
<td>Ambulatory Clinic Blitz Program</td>
<td>ME as a Program Manager: Collaborative Approach to Relocation Planning</td>
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<td>Keynote Follow-Up – R. Alan Gleghorn, Christie Clinic</td>
<td>John Green and Sharon Hickman, Bon Secours Richmond St. Mary’s Hospital</td>
<td>Amanda Baty and Timothy Malis, Texas Tech University</td>
<td>Sheri Wispers, The STEEEP® Global Institute, Baylor Scott and White Health</td>
<td>Jose Rivera, The Nebraska Medical Center</td>
<td>Roque Perez-Velez and John Jackson, Shands Healthcare</td>
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<td>Operations Research for Process Improvement Track</td>
<td>Lean Six Sigma Track</td>
<td>Applied Research Track</td>
<td>Healthcare Reform Track</td>
<td>Patient Flow Track</td>
<td>Change Management Track</td>
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<td>9 – 9:50 a.m.</td>
<td>Improving the Process Before It Exists: IEs &amp; Architects Working Together</td>
<td>Redefine Expert: Engaging Frontline Staff in Lean Continuous Improvement</td>
<td>Use of Lean Tools in Architectural Design to Develop Ergonomic Healthcare Work Environments</td>
<td>Beyond the Hospital: Ambulatory Care's Role in the Readmission Challenge</td>
<td>Systems Analysis and Flow Controls to Increase the Efficiency of an Operating Suite</td>
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<td>Jonathan Bykowski, Array Architects</td>
<td>Isaac Mitchell, East Tennessee Children’s Hospital</td>
<td>Amanda Mewborn, Perkins + Will</td>
<td>Maj-Britt Liewellyn, California Quality Collaborative</td>
<td>Mark Biscone, Michael E. DeBakey VA Medical Center, Susan Seidensticker, University of Texas Medical Branch</td>
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<td></td>
<td>Moderator – Thomas Roh</td>
<td>Moderator – James Swisher</td>
<td>Moderator – Sumeet Kumar</td>
<td>Moderator – Lauren Haile</td>
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<td>Rachel Miller and James Benneyan, Northeastern University, Susan Freeman, Healthcare Systems Engineering Institute, Serpi Mutlu</td>
<td>Joshua Gray, University of Southern California</td>
<td>Jonathan Inselman, Mayo Clinic</td>
<td>Lauren Cooper, Wake Forest Baptist Health</td>
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<td>Accuracy and Precision, Altered Levels of Measurement in Healthcare</td>
<td>Reducing Patient Wait Time with Simulation Modeling</td>
<td>Visualizing, Analyzing, and Optimizing OR and PACU Staffing Schedules</td>
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<td>Janet Sanders, East Carolina University, Tedd Karr, Vidant Medical Center</td>
<td>Mary Coniglio and Senthil Balasubramanian, Penn Medicine</td>
<td>Todd LeBaron and Dusty Clegg, Intermountain Healthcare</td>
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<td>Strategies to Accelerate Learning, Promote Acceptance and Prevent Skill Decay</td>
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<td>Matthew Johnston and David Jones, Design Interactive Inc.</td>
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<td>Implementing Andon in Healthcare Delivery, Kambiz Farahmand, North Dakota State University</td>
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11 a.m. – Noon | Dedicated Exhibit Time – Poster Session – Book Signing - Exhibit Hall - Orange Ballroom D
<table>
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<tr>
<th>Noon – 1:15 p.m.</th>
<th>Keynote Presentation/Lunch- Florida Ballroom 1-4 - Darryl Greene, Executive Director of Continuous Improvement, Cleveland Clinic</th>
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<tr>
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<tr>
<td>Leadership &amp; Management Track</td>
<td>Lean Six Sigma Track</td>
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<tr>
<td>Moderator – Aaron Kanne</td>
<td>Moderator – Brian Gregory</td>
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<tr>
<td>4:30 – 6 p.m.</td>
<td>Reception - Exhibits – Book Signing – Orange Ballroom D</td>
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| 8 – 8:50 a.m. | **Moderator** – Aaron Kanne  
Shifting Over 50 Clinics to Patient Center Medical Home Model  
Michael Parris and Jean Donie, Banner Health  
How to Conduct an Effective Lean [hands-on] Simulation  
Matt Morissette, More Effective Consulting  
Reducing Expenses in Non-variable Cost Centers  
Jeff Ratliff and Todd Schneider, OhioHealth  
Using Lean and Six Sigma Tools to Reduce 30 day Readmission Rates  
Derek Murray and Roque Perez-Velez, Shands Health Care  
Process Improvements in Hospital Supply Chain Logistics  
Seth Hostetler and Aaron Homiak, Geisinger Health System  
Reducing Clinical Variation and Testing in the Head & Neck Center  
Laura Burke, MD Anderson Cancer Center  
Morphing the Classroom into the "Real World": A Five-year Review of a Lean Six Sigma Course  
Darrell Burke, J. Mickey Trim and Jose Quintana, University of Alabama at Birmingham |
| 9 – 10 a.m. | Keynote Presentation - Florida Ballroom 1-4 - Karen Martin, Karen Martin and Associates |
| 10 – 11 a.m. | Dedicated Exhibit Time – Exhibits – Book Signing – Orange Ballroom D  
Leadership & Management Track  
Management Track  
Scalable LEAN: A Lean Six Sigma Course – Truven Health Analytics  
Paul Beechner  
Good Accounting Augments Systems Engineering  
Brian D. Gregory, ORTimes, LLC, Deborah W Gregory, Bentley University  
Pharmacy Go Lean: An Initiative in Lean Culture  
Parviz Kheirkhah, Miguel Lozano, Dalia Farhat and Laura Burke, MD Anderson Cancer Center  
Functional Tree Structures “FTS”  
The Path to Sustainable Improvements  
James Bologna, Truven Health Analytics  
Evaluating Existing Safe Patient Handling Programs - Key Learnings and Pointers  
Elise Condle, EORM Inc.  
Centralized Resource Management System (CRSM): A Case Study from Turkey  
Mustafa Yildiz and M.Mahmud Khan, University of South Carolina  
Bundled Payment Models & Process Improvement Opportunities  
Brenton Faber, Worcester Polytechnic Institute  
Quality Track |
| 11:10 a.m. – Noon |  
Leadership & Management Track  
Leadership & Management Track  
Leadership & Management Track  
Leadership & Management Track  
Daily Huddles Achieve Strategic Results  
Sherida Harvey, OhioHealth  
Two Data Points Are Not a Trend: Using SPC to Manage Better Mark Graban, KaiNexus  
Functional Tree Structures “FTS”  
The Path to Sustainable Improvements  
James Bologna, Truven Health Analytics  
Google Glass and Healthcare Information & Workflow  
Charles Webster, EHR Workflow Inc.  
Developing a Process for Expired Materials Management and Prevention  
Elia Cole and Zachary Gersten, Boston University School of Public Health  
Safe Patient Transport and Handoffs to Non-Invasive Cardiology Laboratory  
Susan Seidensticker, University of Texas Medical Branch  
Quality Track |
| 12:10 – 1 p.m. |  
Leadership & Management Track  
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Quality Track |
Posters will be on display in the Exhibit Hall during exhibit hours. Authors will be at their posters between 11 a.m. and noon on Saturday, Feb. 22 to answer questions from attendees.

Operational Strategy Deployment and Sustainment to Improve Patient Flow, Quality, and Patient Experience
Abstract #4
Sang Yoon, Providence Health & Services

Reduce Time Spent on Diversion: Creating a Proactive Surge Capacity Plan
Abstract # 15
Lara Wheelhouse, HCA Healthcare

Developing a Process for Expired Materials Management and Prevention
Abstract # 21
Elia Cole and Zachary Gersten, Boston University School of Public Health

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Developing a Process for Expired Materials Management and Prevention
Abstract # 21
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Reducing Wasted Unused Supplies in Medical Units
Abstract # 44
Nadia Lahrchi, Sir Mortimer B. Davis Jewish General Hospital, Elliott Silverman, Rita Di Girolamo and Lawrence Rosenberg, McGill University

Applications for Real Time Location System Technology in the Operating Room
Abstract # 45
Susan Seidensticker, University of Texas Medical Branch

Embedding Safety and Efficiency into the Design of a New Inpatient Facility
Abstract # 46
Susan Seidensticker, University of Texas Medical Branch

Reducing Length of Stay and Improving Bed Allocation with Dynamic Simulation
Abstract # 48
Hosni Adra, CreateaSoft

Creating a Quality Culture - Diaries of Performance Improvement Consultants
Abstract # 49
Sophie Clyne, Meghan MacLeod, Camille Rozon and Francisco Velazquez, Providence Health Care

Integrating Process Simulation into Standard Lean Six Sigma Practice
Abstract # 52
Brittany Hagedorn, Simul8, Todd Roberts, Memorial Health System

Examples of Physicians Daily Integration of Systems Engineering and Finance
Abstract # 62
Brian D. Gregory, ORTimes, LLC and Deborah W Gregory, Bentley University

Optimizing Personnel Fungibility to Increase Throughput
Abstract # 63
Brian D. Gregory, ORTimes, LLC and Deborah W Gregory, Bentley University

Efficient OR with Dynamic Simulation and Live Data
Abstract # 66
Hosni Adra, CreateaSoft
Effective Emergency Department Simulation
Abstract # 67
Hosni Adra, CreateaSoft

Detecting Physiological Deterioration and Alerting Hospital Physicians: Can it Work?
Abstract # 68
Santiago Romero-Brufau, Jeanne Huddleston, James Naessens, Bruce Morlan and Matthew Johnson, Mayo Clinic

Using Data Analysis to Determine the Impact of Resource Allocations
Abstract # 69
John Kros and Evelyn Brown, East Carolina University

The High Cost of Quality in an Automated Environment
Abstract # 88
Matthew Clark, Rebecca Wortman, Shawn Donahue, Melissa Ward and Alicia Algeciras-Schimnich, Mayo Clinic

Morphing the Classroom into the "Real World": A Five-year Review of a Lean Six Sigma Course
Abstract # 94
Darrell Burke, J. Mickey Trim and Jose Quintana, University of Alabama at Birmingham

Increasing Accuracy of Postings in the Operating Room
Abstract #100
Rachel Douglas, MD Anderson Cancer Center

Professional Development A3 - Do You Have Yours?
Abstract # 101
Darrin Judkins, Boulder Community Hospital

Operational Modeling and Simulation: Analyze and Optimize Healthcare System Performance
Abstract # 102
David Morgareidge, RTKL Associates Inc.

Tracking Patient Flow Using RFID
Abstract # 114
John Jackson and Weston Bryant, University of Florida Health Shands

Translation/Implementation Science: Can Research and Practice Come to a Middle Ground?
Abstract # 118
Tarun Mohan Lal, Mayo Clinic

Value Streams at the Indianapolis VA Hospital
Abstract # 126
Chris Tucker and Lindsay Hopkins, Richard L. Roudebush Veterans Affairs Hospital

Development and Implementation of an Integrated Care Transition Pilot Program
Abstract # 141
Samira Qadir, Laura Kneale and Eric Beck, University of Chicago Medicine

Virtual SS: Reducing Risk through Better Tools Use
Abstract # 143
Michele Stuart, Efficiency Engineers and Kristin May, Ellis Medicine

Prioritization of Performance Improvement Efforts for Medical Image Viewing System Using Kano Model
Abstract # 147
Mohd Ragheb El-Sharo, Jacob Elo, Md Rana and Dorothy Larsen, Mayo Clinic

Right Patient, Right Place, Right Time - Patient Centered Flow
Abstract # 148
Dayna Roberts and Brenda Kenefick, University Health Network

Assessing and Maintaining Quality of Care for Veterans with Mental Health Disorders
Abstract # 151
Christine Tang, Renata Konrad and Andrew Trapp, Worcester Polytechnic Institute

The Seven Tenets of Healthcare Process Improvement
Abstract # 154
Lucien (Lou) Keller, Flexsim Software Products, Inc.

Failure Mode and Effects Analysis (FMEA): Proactive Risk Analysis for Bedside Patient Rescue
Abstract # 161
Yue Dong, Jennifer Elmer, Julie Schmidt, Lynn Loynes, Sean Caples, Jeff Jensen and Jeanne Huddleston, Mayo Clinic

The CMS Healthcare Industrial Engineering Center Summer Internship Program
Abstract # 162
James Benneyan, Northeastern University; Corey Balint and Thomas Cullinane, Healthcare Systems Engineering Institute; Laura Hyde
Healthcare Systems Process Improvement Conference 2014

Modeling the Connectedness and Spread Potential of Healthcare Quality Improvement Networks
Abstract # 165
James Benneyan, Northeastern University; Corey Balint, Dayna Martinez, Nicholas Andrianas, and Cory Stasko, Healthcare Systems Engineering Institute

An Industry-University Collaborative Research Center Approach to Healthcare Transformation
Abstract # 169
James Benneyan, Northeastern University; Dayna Martinez and Susan Goldstein, Healthcare Systems Engineering Institute

It’s All About What You Leave Behind – Value and Sustainment
Abstract # 172
Keith Poole, khrusallis.org, Nimish Patel, HCA, Joseph Swartz, Franciscan St. Francis Health

Tools for Improving ED Observation Units and Urgent Care Center Operations
Abstract # 174
James Benneyan, Northeastern University; Kendall Sanderson and Cory Stasko, Healthcare Systems Engineering Institute; Laura Hyde

Benetravel Conversion from Cash
Abstract # 177
Rick Lawson, Department of Veteran Affairs

Analysis of Real Time Hospital Needs and RFID Benefits
Abstract # 182
Hulya Yazici, Florida Gulf Coast University

Integrating Interventions in CPOEs to Reduce Laboratory Test Request Errors
Abstract # 184
Gouri Prakash, CitiusTech Inc

Use of Simulation to Optimize Pediatric Scheduling Templates
Abstract # 185
Molly Williams, University of Wisconsin Medical Foundation

Behavioral and Cognitive Performance Information Baselines for Improved TBI Rehabilitation
Abstract # 186
Siobhan Heiden and Barrett Caldwell, Purdue University

Simulation Modeling of System Performance for University of Colorado’s Emergency Department
Abstract # 188
Michelle Boyd and Allyson Robbins, Analytical Decision Services LLC

Improving Patient Safety and Cutting Costs in the UK: A Sticky Business
Abstract # 189
Kelvin Yan, Imperial College London

Technology-Aided Transformation of Mobile Equipment Management Processes
Abstract # 190
Alexandra McCaffrey, Virtua

Automated Tools to Schedule Residents: Improving Training and Patient Care
Abstract # 191
Amy Cohn, Jennifer Zank, Young-Chae Hong, Ishan Mukherjee, Elizabeth Perelstein and Zachary Veshure, University of Michigan

Improving Patient Flow in an Outpatient Infusion Center
Abstract # 192
Amy Cohn, Brian Denton, Louise Salamin, Spyros Potiris, Jeremy Castaing, Autumn Heiney and Christopher Friese, University of Michigan

A Simulation-Based Tool to Improve Matching of Residents to Surgical Training Opportunities
Abstract # 193
Amy Cohn, Mark Daskin, Rishindra Reddy, Frank Seagull, Ryan Chen, Asher Perlmutter, William Pozehl and Andrea Obi, University of Michigan