LEARN BEST PRACTICES TO BETTER YOUR HEALTHCARE ORGANIZATION THROUGH IMPROVED EFFICIENCY.

Healthcare Systems Process Improvement Conference 2014

Sponsored by: Society for Health Systems
LEADING HEALTHCARE IMPROVEMENT

February 21-24, 2014 Orlando

On-Site Brochure

Sponsors

MAYO CLINIC
MicroAutomation
HSyE Healthcare Systems Engineering
Northeastern University
ise NC State University

Society for Health Systems
LEADING HEALTHCARE IMPROVEMENT

HIMSS

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Welcome to Orlando, Fla., where the Society for Health Systems is proud to present the **2014 Healthcare Systems Process Improvement Conference**. As a healthcare professional, you know that health systems must focus on process improvement to ensure better quality, productivity, and efficiency. Be inspired and challenged to improve your facilities during three keynote presentations and share best practices in dozens of sessions with peers from around the country. Highlights for this year’s conference include:

» **Ten tracks of sessions** covering topics like patient flow, IT, change management, lean Six Sigma and quality

» **Networking** receptions, lunches and dinners

» **Keynote speakers** R. Alan Gleghorn, CEO of Christie Clinic; Darryl Greene, former executive director of continuous improvement at Cleveland Clinic; and Karen Martin, president of The Karen Martin Group Inc.

» **Four pre-conference workshops**

» **Expanded poster sessions** to learn the latest applications and improvement methodologies from even more organizations

» **Student activities and competitions**, including a case study competition

» **Exhibits** from top healthcare service providers and health systems academic programs

We’re glad you joined us to learn the latest in operational and quality improvement tools, methods and concepts, and industry best practices. We are sure you will return to work with countless ideas and solutions to address your most challenging issues!

**Karl Kraebber**
Indiana University Hospital
Chair
Be inspired and challenged to improve your own facilities by healthcare process improvement and quality leaders during keynote presentations at the conference.

**R. ALAN GLEGHORN**  
*CEO, Christie Clinic*  
Friday, February 21 | 3:30 – 4:30 p.m.

R. Alan Gleghorn is a leader in the healthcare management industry with 30 years of progressive experience including direct patient care, national physician practice management, and senior administration at large healthcare-related companies. He is an expert in implementing lean healthcare and process improvement cultures and has led healthcare organizations through financial turnarounds, large building projects, technology system conversions, physician compensation and governance changes. For 13 years, Gleghorn has led Christie Clinic, one of the largest physician-owned, multispecialty group medical practices in Illinois. He oversees all clinic operations, leading a team of 800 in an organization known for full participation, long-term vision and leadership by example. Gleghorn has previously served as a nurse’s aide, a U.S. Army medic, associate administrator of the Wichita Falls Clinic, administrator of Arlington Medical Associates, and director of operations at the physician practice management company, ProMedCo. Gleghorn has a bachelor’s degree in business administration with a major in economics from Midwestern State University and an MBA from the University of Illinois at Urbana-Champaign.

**DARRYL GREENE**  
*Executive Director of Continuous Improvement (former)*  
*Cleveland Clinic*  
Saturday, February 22 | Noon – 1:15 p.m.

Darryl Greene is the former executive director of continuous improvement (CI) for the Cleveland Clinic. Greene was responsible for helping the Cleveland Clinic Health System improve its healthcare delivery system and increase value for its patients and caregivers by advancing the four continuous improvement strategies: reducing cost per encounter, creating a culture of improvement, supporting innovative care delivery, and developing a world-class CI department. Greene has more than 28 years of experience in process improvement and performance management. He began his career at General Electric, where he held various leadership positions in manufacturing and engineering for 11 years. Other companies where Darryl has held a leadership role in process improvement include Maytag, Key Bank and, most recently, JP Morgan Chase. Greene holds a B.S. in chemical engineering from New Mexico State University and an M.S. in materials science engineering from Case Western Reserve University.
Karen Martin has been designing, managing and improving healthcare operations for more than 20 years. As president of The Karen Martin Group Inc., she is a recognized thought leader in applying lean thinking and the psychology of change to office, service and knowledge work environments. She has worked with nearly every type of healthcare organization on a wide range of performance improvement projects that span the clinical, administrative, financial, legal and regulatory spheres. Martin is the author of the Shingo prize-winning book, The Outstanding Organization, and co-author of Value Stream Mapping, Metrics-Based Process Mapping and The Kaizen Event Planner. She also teaches at the University of California, San Diego, is a guest blogger on The Lean Enterprise's The Lean Post, and serves as an industry adviser to the University of San Diego's Industrial and Systems Engineering program.
## SCHEDULE AT-A-GLANCE

### FRIDAY, FEB. 21

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>7 a.m. – 5 p.m.</td>
<td>Registration Desk Open</td>
<td>Orange Ballroom Foyer</td>
</tr>
<tr>
<td>8 a.m. – Noon</td>
<td>Pre-Conference Workshops</td>
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<tr>
<td>1 – 1:20 p.m.</td>
<td>Welcome</td>
<td>Florida Ballroom</td>
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<tr>
<td>1:30 – 3:20 p.m.</td>
<td>Concurrent Sessions</td>
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<tr>
<td>3:30 – 4:30 p.m.</td>
<td>Keynote Speaker - R. Alan Gleghorn, CEO, Christie Clinic</td>
<td>Florida Ballroom</td>
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<tr>
<td>4:30 – 5 p.m.</td>
<td>SHS Business Meeting</td>
<td>Florida Ballroom</td>
</tr>
<tr>
<td>4:30 – 5 p.m.</td>
<td>Student Networking Reception</td>
<td>Florida Ballroom 5</td>
</tr>
<tr>
<td>5 – 6 p.m.</td>
<td>Welcome Reception</td>
<td>Exhibit Hall</td>
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<td>Orange Ballroom D</td>
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### SATURDAY, FEB. 22

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<tr>
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<tr>
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<tr>
<td>7 – 8 a.m.</td>
<td>Continental Breakfast</td>
<td>Exhibit Hall</td>
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<tr>
<td>8 – 10:50 a.m.</td>
<td>Concurrent Sessions</td>
<td>Orange Ballroom D</td>
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<tr>
<td>11 a.m. – Noon</td>
<td>Dedicated Exhibit Time Poster Session</td>
<td>Exhibit Hall</td>
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<td>Orange Ballroom D</td>
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<tr>
<td>Noon – 1:15 p.m.</td>
<td>Keynote Presentation/Lunch - Darryl Greene, Former Executive Director of Continuous Improvement, Cleveland Clinic</td>
<td>Florida Ballroom</td>
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<td>1:30 – 4:20 p.m.</td>
<td>Concurrent Sessions</td>
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<tr>
<td>4:30 – 6 p.m.</td>
<td>Networking Reception Book Signing</td>
<td>Exhibit Hall</td>
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<td>Orange Ballroom D</td>
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### SUNDAY, FEB. 23

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<tr>
<td>7 a.m. – 1 p.m.</td>
<td>Registration Desk Open</td>
<td>Orange Ballroom Foyer</td>
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<tr>
<td>7:15 – 8 a.m.</td>
<td>Continental Breakfast</td>
<td>Exhibit Hall</td>
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<td>8 – 8:50 a.m.</td>
<td>Concurrent Sessions</td>
<td>Orange Ballroom D</td>
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<tr>
<td>9 – 10 a.m.</td>
<td>Keynote Presentation - Karen Martin,</td>
<td>Florida Ballroom</td>
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<tr>
<td></td>
<td>President, The Karen Martin Group Inc.</td>
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<tr>
<td>10 – 11 a.m.</td>
<td>Dedicated Exhibit Time</td>
<td>Exhibit Hall</td>
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<td>Book Signing</td>
<td>Orange Ballroom D</td>
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<tr>
<td>11:10 a.m. – 1 p.m.</td>
<td>Concurrent Sessions</td>
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### MONDAY, FEB. 24

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<tr>
<th>Time - TBA</th>
<th>Event</th>
<th>Location</th>
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<tr>
<td></td>
<td>Joint sessions with HIMSS</td>
<td>Orange County</td>
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<td></td>
<td>Additional fee applies</td>
<td>Convention Center</td>
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<td>West Building</td>
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### EXHIBIT HALL SCHEDULE

#### FRIDAY, FEB. 21

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<th>Time</th>
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<tbody>
<tr>
<td>Noon – 4 p.m.</td>
<td>Exhibit installation and set-up</td>
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<tr>
<td>5 – 6 p.m.</td>
<td>Welcome Reception (Dedicated exhibit time)</td>
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#### SATURDAY, FEB. 22

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7 a.m. – 6 p.m.</td>
<td>Exhibit Show Floor Open</td>
</tr>
<tr>
<td>11 a.m. – Noon</td>
<td>Dedicated Exhibit Time/Poster Session</td>
</tr>
<tr>
<td>4:30 – 6 p.m.</td>
<td>Networking Reception – Poster Session in Exhibit Hall (dedicated exhibit time)</td>
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#### SUNDAY, FEB. 23

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<th>Time</th>
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<tbody>
<tr>
<td>7:15 a.m. – Noon</td>
<td>Exhibit Show Floor Open/Poster Session</td>
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### IMPORTANT – PLEASE READ

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 booth prior to the official closing of the exhibit hall.
SPECIAL EVENTS

FRIDAY, FEBRUARY 21

STUDENT NETWORKING RECEPTION
4:30 – 5 p.m.
Meet other student attendees and get a jump-start on your conference networking. This event is sponsored by the Department of Healthcare Systems Engineering at Northeastern University.

WELCOME RECEPTION
5 – 6 p.m.
Meet and network with other conference attendees as we kick off the conference!

SATURDAY, FEBRUARY 22

DEDICATED EXHIBIT TIME – POSTER SESSION – EXHIBIT HALL
11 a.m. – Noon
A visit to the exhibit hall is your chance to find new vendors or suppliers, see product demonstrations, interact with existing vendors and network with your peers. You can view the latest products and services as well as visit with the authors of cutting-edge posters.

BOOK SIGNING
11:15 a.m. – Noon
5 – 6 p.m.
Karen Martin, Jean Ann Larson, Mark Graban, Joe Swartz and Pierce Story will be in the Exhibit Hall offering their latest books for sale and will sign your personal copy.

SOCIETY FOR HEALTH SYSTEMS SCHOLARSHIP PRESENTATION
Noon
Congratulations to Katie Scholl of North Dakota State University for winning the Society for Health Systems annual scholarship of $1,000. SHS awards the scholarship to an undergraduate student in industrial engineering or operations research with an interest in healthcare. The 2014 scholarship is sponsored by Parallon Workforce Solutions.

NETWORKING RECEPTION IN THE EXHIBIT HALL
4:30 – 6 p.m.
Join your colleagues for networking and continue to interact with exhibit hall vendors as well as poster session presenters. Take in the latest products and services and discuss poster presentations that are on display.

SUNDAY, FEBRUARY 23

DEDICATED EXHIBIT TIME – BOOK SIGNING - EXHIBIT HALL
10 – 11 a.m.
SoCIET y FoR HEAlTH SySTEMS STuDENT PAPER CoMPETITIoN

The Society for Health Systems is pleased to announce that Rachel J. Miller of Northeastern University won the 2014 SHS Student Paper Competition. The paper is titled “Optimizing Resident-Based Teamlet Schedules to Improve Continuity in Primary Care.” She will present her project Saturday, Feb. 22, from 3:30 - 4:20 p.m. in Orange G.

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

The 2014 Graduate Student Paper Competition is sponsored by the Mayo Clinic Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery.

STUDENT CASE STUDY COMPETITION

The Society for Health Systems is presenting its Student Case Study Competition at the conference. Case study coordinators assigned teams of four to five graduate and undergraduate students from various schools. The top four teams will present their solutions at the conference, and winners will be determined based on their presentations. The winners will be recognized prior to the Sunday Keynote Address.
MAXIMIZING HEALTHCARE PROCESS REDESIGN ENGAGEMENTS – IMPROVING PROCESSES, GETTING RESULTS AND ENGAGING OTHERS
Presenter: Jean Ann Larson, Jean Ann Larson and Associates
Orange B

This workshop provides a team-based practical approach to redesigning and creating new processes. The simple methods and tools may precede or parallel other process and continuous improvement methods and tools such as PDSA, lean and Six Sigma. However, this approach is not intended to replace them but is designed to enhance them and position them giving them a jump start within the organization. Major topic areas include setting the stage for organizational change, an overview of the tools, methods for work redesign teams, and the role of technology.

VALUE STREAM MAPPING: HOW TO VISUALIZE WORK AND ALIGN LEADERSHIP FOR ORGANIZATIONAL TRANSFORMATION
Presenter: Karen Martin, The Karen Martin Group Inc.
Orange A

Value stream mapping (VSM) is an effective management practice for improving performance across clinical and administrative work systems alike. But VSM is much more than just a mapping exercise. Properly executed, VSM results in a more engaged and knowledgeable leadership team; surfaces cultural, organizational and work design issues; and aligns resources, goals and priorities. It results in a strategic improvement plan that, when well-executed, accelerates organizational transformation. But VSM remains a misunderstood, misapplied and under-utilized management practice. Many organizations confuse value stream maps with process maps and fail to tie improvement to the organization’s most critical business goals. Healthcare organizations can reap tremendous benefits by the proper use of VSM. Through discussion and a simulated mapping activity, workshop participants will learn the ins-and-outs of driving organizational transformation using VSM. Learn how to plan and execute a VSM activity; create current and future state maps; and create an actionable, consensus-driven transformation plan.
MEASUREMENT SYSTEMS ANALYSIS (MSA) IN HEALTHCARE
Presenters: Keith Poole, Khrusallis.org; Joseph Swartz, Franciscan St. Francis Health; and Nimish Patel, HCA Healthcare
Orange D

Join us for a fun, eye-opening, and interactive workshop explaining the much-needed application of measurement systems analysis (MSA) in healthcare. All measuring devices – even humans such as nurses and other staff – can be (and need to be) continually assessed and occasionally calibrated to ensure we have reliable data upon which to make decisions. Throughout your department and across your facility there are hundreds or even thousands of measurements taken every single day – but can you trust the data? Are measurement systems in healthcare giving us the true picture of how our processes are performing? From pain scales to tympanic temperature measurement, are our measuring devices even capable of distinguishing what we expect them to? Simple graphical analysis of your existing data in Excel can quickly give us the answer. Both theory and practical application of traditional (computational) gage repeatability and reliability and control chart (graphical) analysis methods will be taught and demonstrated. Come learn how to assess and calibrate measuring devices – even when that device is a person!

DISCRETE-EVENT SIMULATION FOR PROCESS REDESIGN/RE-ENGINEERING IN HEALTHCARE
Presenters: Thomas Roh and Tarun Mohan Lal, Mayo Clinic
Orange C

Traditionally, healthcare organizations have used several lean/Six Sigma tools and methods to reduce costs and eliminate waste from the system. However, increasing complexity in systems and processes requires the use of operations research methods to attain greater efficiency. Discrete-event simulation (DES) is one such commonly used computer-based operations research modeling technique that is used to evaluate, improve and optimize stochastic processes such as in healthcare. It can be used as a decision support system to make critical strategic and operational decisions by assessing trade-offs between resource utilization, service and operating costs to improve patient satisfaction and health of patients. This workshop will cover the basics and provide best practice recommendations on multiple stages of simulation modeling process, statistical analysis, parameter estimation, model implementation, analysis and reporting. The course will include example applications of simulation in common healthcare problems (scheduling, facility planning, staffing, capacity planning) and hands-on experience in conceptualizing and building a simulation model using the software (MED-MODEL). The workshop will require use of laptops for training exercises. Sharing of laptops between participants is permitted.
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<tr>
<td>7 a.m. – 5 p.m.</td>
<td>Registration Desk open – Orange Ballroom Foyer</td>
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<tr>
<td>8 a.m. – 8:50 a.m.</td>
<td><strong>SESSION ROOM</strong>&lt;br&gt;<strong>ORANGE A</strong>&lt;br&gt;Possible Pre-conference workshop&lt;br&gt;Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation&lt;br&gt;Karen Martin, The Karen Martin Group Inc.&lt;br&gt;<strong>ORANGE B</strong>&lt;br&gt;Possible Pre-conference workshop&lt;br&gt;Maximizing Healthcare Process Redesign Engagements – Improving Processes, Getting Results and Engaging Others&lt;br&gt;Jean Ann Larson, Jean Ann Larson and Associates</td>
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<tr>
<td>1 – 1:20 p.m.</td>
<td>Welcome - Orange Ballroom D</td>
</tr>
<tr>
<td>1:30 – 2:20 p.m.</td>
<td><strong>SESSION ROOM</strong>&lt;br&gt;<strong>OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT</strong>&lt;br&gt;Industrial Engineering Tools in Public Health&lt;br&gt;Michael Washington, Centers for Disease Control&lt;br&gt;<strong>POTPOURRI</strong>&lt;br&gt;Establishing Relationships, Improving Patient Safety and Patient and Staff Satisfaction&lt;br&gt;Judith Ann Pauley and Joseph F. Pauley, Process Communications Inc.</td>
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<tr>
<td>2:30 – 3:20 p.m.</td>
<td>Applications of Analytics at the Mayo Clinic&lt;br&gt;Jeannne Huddleston, Mayo Clinic&lt;br&gt;Establishing Relationships, Improving Patient Safety and Patient and Staff Satisfaction&lt;br&gt;Judith Ann Pauley and Joseph F. Pauley, Process Communications Inc.</td>
</tr>
<tr>
<td>3:30 – 4:30 p.m.</td>
<td>Keynote Speaker - Orange Ballroom D - R. Alan</td>
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<td>4:30 – 5 p.m.</td>
<td>SHS Business Meeting - Florida Ballroom</td>
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<tr>
<td>4:30 – 5 p.m.</td>
<td>Student Networking Reception Sponsored by</td>
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<tr>
<td>5 – 6 p.m.</td>
<td>Welcome Reception - Exhibit Hall – Florida Ballroom</td>
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### ORANGE C

**Pre-Conference Workshop**  
*Discrete-Event Simulation for Process Redesign/Re-engineering in Healthcare*  
Thomas Roh and Tarun Mohan Lal, Mayo Clinic

**APPLIED RESEARCH**

- **Predicting Chronic Dialysis Patient Admissions to a Network of Hospitals**  
  Shoshana Hahn-Goldberg, Tai Huynh, and Dante Morra, Centre for Innovation in Complex Care

- **Impact of Propofol on Endoscopy Unit Efficiency: A Discrete-Event Simulation Model**  
  Javad Taheri, North Carolina State University, Ziad Gellad, Duke University Medical Center

### ORANGE E

**Pre-Conference Workshop**  
*Measurement Systems Analysis (MSA) in Healthcare*  
Keith Poole, Khrusallis.org; Nimish Patel, HCA Healthcare; Joseph Swartz, Franciscan St. Francis Health

**HEALTHCARE REFORM**

- **The CQC Compass: A Results-Oriented Statewide CMS Stars Improvement Collaborative**  
  Lyd Paull-Flores, California Quality Collaborative

- **Using Industrial and Systems Engineering to Drive the Triple Aim**  
  James Benneyan, Northeastern University, Susan Goldstein Healthcare Systems Engineering Institute

### ORANGE F

**INFORMATION TECHNOLOGY**

- **Using RFID to Enhance Patient Flow and Care Team Coordination**  
  Lauren Fiedler and Sue Ertl, University of Wisconsin Health

- **Process Design Implications of Using Tablet Computers for Patient Intake**  
  Bryan Norman and Rachel Hess, University of Pittsburgh

### ORANGE G

**CHANGE MANAGEMENT**

- **Using Systems Engineering to Improve the Care of Chronic Obstructive Pulmonary Disease**  
  Susan Seidensticker, University of Texas Medical Branch

- **Evolution, Driving Results, and Life after Lean in Healthcare**  
  DeAnna Davis Consulting and PEIT

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Gleghorn – CEO, Christie Clinic

Northeastern University Healthcare Systems Engineering Institute - Florida Ballroom 5
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<tr>
<th>Time</th>
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<td>Exhibit Hall Open</td>
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<td>7 – 8 a.m.</td>
<td>Continental Breakfast – Exhibit Hall</td>
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<tr>
<td>7 a.m. – 5 p.m.</td>
<td>Registration Desk Open – Orange Ballroom Foyer</td>
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<tr>
<td><strong>SESSION ROOM</strong></td>
<td><strong>ORANGE A</strong> <strong>ORANGE B</strong></td>
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<tr>
<td><strong>TRACK</strong></td>
<td><strong>KEYNOTE FOLLOW-UP</strong> <strong>LEAN SIX SIGMA</strong></td>
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<tr>
<td>8 – 8:50 a.m.</td>
<td>Keynote Follow-Up R. Alan Gleghorn, Christie Clinic</td>
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<td>Hardwiring Nursing Bedside Report across Phases of Care</td>
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<td>John Green and Sharon Hickman, Bon Secours Richmond St. Mary’s Hospital</td>
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<td><strong>TRACK</strong></td>
<td><strong>OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT</strong> <strong>LEAN SIX SIGMA</strong></td>
</tr>
<tr>
<td>9 – 9:50 a.m.</td>
<td>Improving the Process Before It Exists: IEs &amp; Architects Working Together Jonathan Bykowski, Array Architects</td>
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<td>Redefine Expert: Engaging Front-line Staff in Lean Continuous Improvement Isaac Mitchell, East Tennessee Children’s Hospital</td>
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<td>10 – 10:50 a.m.</td>
<td><strong>Practical Applications of Operations Research to Optimize Complex Scheduling and Capacity Problems</strong> Rachel Miller and James Benneyan, Northeastern University, Susan Freeman, Healthcare Systems Engineering Institute, Serpil Mutlu</td>
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<td><strong>Global Health Systems - An African Case Study</strong></td>
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<td>Joshua Gray, University of Southern California</td>
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<td><strong>Accuracy and Precision, Altered Levels of Measurement in Healthcare</strong> Janet Sanders, East Carolina University, Todd Karr, Vidant Medical Center</td>
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<td>11 a.m. – Noon</td>
<td>Dedicated Exhibit Time - Poster Session – Book Signing –</td>
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<td>Noon – 1:15 p.m.</td>
<td>Keynote Presentation/Lunch – Florida Ballroom –</td>
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<td>ORANGE E</td>
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<td><strong>APPLIED RESEARCH</strong></td>
<td><strong>HEALTHCARE REFORM</strong></td>
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<tr>
<td>Assessing Surgical Team Awareness and Resiliency through Recurrence of Communications Amanda Baty and Timothy Matis, Texas Tech University</td>
<td>Value-Based Purchasing: Achieving STEEEP Care at Baylor Health Care System Sheri Winsper, The STEEEP® Global Institute, Baylor Scott and White Health</td>
</tr>
<tr>
<td><strong>APPLIED RESEARCH</strong></td>
<td><strong>HEALTHCARE REFORM</strong></td>
</tr>
<tr>
<td>Closed Queueing Network Analyzes Resource Allocation for Emergent Patient Flow Afrifah Bobbie, University of Central Florida</td>
<td>Beyond the Hospital: Ambulatory Care’s Role in the Readmission Challenge Maj-Britt Llewellyn, California Quality Collaborative</td>
</tr>
<tr>
<td><strong>PROCESS VARIATION IN DEEP BRAIN STIMULATION</strong></td>
<td><strong>DELIVERING ON THE PATIENT PROMISE – JOURNEY TO REDUCE HOSPITAL LOS</strong></td>
</tr>
<tr>
<td>Reducing Patient Wait Time with Simulation Modeling Mary Coniglio and Senthil Balasubramanian, Penn Medicine</td>
<td>Breaking Down Department Barriers to Improve Utilization Stephen Clayman, Optimal Use</td>
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Exhibit Hall

Darryl Greene, Executive Director of Continuous Improvement (former), Cleveland Clinic
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<tr>
<th>SESSION ROOM</th>
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<td>TRACK</td>
<td>LEADERSHIP &amp; MANAGEMENT</td>
<td>LEAN SIX SIGMA</td>
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| 1:30 – 2:20 p.m. | Error Proof Health Care – How to Accelerate Your Improvement Efforts  
Kevin McManus, Great Systems | Applying Lean Healthcare in Developing Countries: A Success Case in Private Hospitals in Mexico  
Agustin Perez, ITESM |
| TRACK | OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT | LEAN SIX SIGMA |
| 2:30 – 3:20 p.m. | Transforming the Giant Hairball  
Mike Stoeklein, ThedaCare Center for Healthcare Value | Coaching for Lean and Kaizen  
Joseph Swartz, Franciscan St. Francis Health  
Mark Graban, KaiNexus |
| TRACK | OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT | LEAN SIX SIGMA |
| 3:30 – 4:20 p.m. | Mastering Your EQ – Emotional Intelligence – The Differentiator of Leadership Success  
Jean Ann Larson, Jean Ann Larson and Associates | Use of Lean in Healthcare Facility Planning and Design  
Amanda Mewborn and Marvina Williams, Perkins + Will |
<p>| 4:30 – 6 p.m. | Reception – Exhibits – Book Signing – Exhibit Hall |</p>
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<td><strong>PATIENT FLOW</strong></td>
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<td>Bundled Care at University of Wisconsin Health</td>
<td>Proven Innovative Strategies to Increase Patient Access to Care</td>
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<td>My Wife Has Metastatic Breast Cancer. I'm a Statistician: How Can I Help?</td>
<td>The Application of Human Factors Engineering to Healthcare</td>
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<td>Jordan Peck, Coby Durham, Tom Gormley and Robertus Van Aalst, New England Veterans Engineering Resource Center</td>
<td>Rachel J. Miller, Northeastern University</td>
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<td>Case Study: Reducing Manual Pipetting at a Clinical Diagnostics Laboratory</td>
<td>Lean Approach to Healthcare Scheduling</td>
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<td>John Templin, Templin Management Associates Inc.</td>
<td>Ivana Wireman, Ohio Bureau of Workers' Compensation</td>
<td>Keith Leitner, University of Tennessee</td>
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### Session Room

**Session Room Overview**

- **Oranges A and B**
- **Orange C**
- **Orange D**
- **Orange E**
- **Orange F**
- **Orange G**

### Tracks

- **Track Leadership & Management**
  - Lean Six Sigma
  - Big Data/Analytics and Clinical Decision Support
  - Healthcare Reform

- **Track Operation Research for Process Improvement**
  - Lean Six Sigma
  - Big Data/Analytics and Clinical Decision Support

- **Track Operations Research for Process Improvement**
  - Lean Six Sigma
  - Big Data/Analytics and Clinical Decision Support
  - Cost Reduction

### Talks

#### 1:30 – 2:20 p.m.

- **Error Proof Health Care** – How to Accelerate Your Improvement Efforts
  - Kevin McManus, Great Systems

- **Applying Lean Healthcare in Developing Countries: A Success Case in Private Hospitals in Mexico**
  - Agustin Perez, ITESM

- **Improving Healthcare Quality and Efficiency through Big Data Analytics**
  - Thomas Pearson, Franciscan St. Francis Health

- **Bundled Care at University of Wisconsin Health**
  - Elizabeth Strutz, University of Wisconsin Health

- **Proven Innovative Strategies to Increase Patient Access to Care**
  - Sumeet Kumar, North Bay Regional Health Centre

- **Lack of Sustainability: Curing the Most Dangerous Chronic Disease in Healthcare**
  - Marci Jackson, Premier Inc.

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  - Jordan Peck, Coby Durham, Tom Gormley and Robertus Van Aalst, New England Veterans Engineering Resource Center

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  - Rachel J. Miller, Northeastern University

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- **Lean Approach to Healthcare Scheduling**
  - Keith Leitner, University of Tennessee

- **Student Case Study Competition**

#### 4:30 – 6 p.m.

- **Reception – Exhibits – Book Signing – Exhibit Hall**
<table>
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<tbody>
<tr>
<td>7:15 a.m. – Noon</td>
<td>Exhibit Hall Open</td>
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<tr>
<td>7:15 – 8 a.m.</td>
<td>Continental Breakfast – Exhibit Hall</td>
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<tr>
<td>7:15 a.m. – 1 p.m.</td>
<td>Registration Desk Open – Orange Ballroom Foyer</td>
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<tr>
<td>SESSION ROOM</td>
<td><strong>ORANGE A</strong></td>
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<tr>
<td>TRACK</td>
<td><strong>LEADERSHIP &amp; MANAGEMENT</strong></td>
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<tr>
<td>8 – 8:50 a.m.</td>
<td>Shifting Over 50 Clinics to Patient Center Medical Home Model</td>
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<td>Michael Parris and Jean Donie, Banner Health</td>
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<td></td>
<td>How to Conduct an Effective Lean (Hands-on) Simulation</td>
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<td>Matt Morrissette, More Effective Consulting</td>
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<tr>
<td>9 – 10 a.m.</td>
<td>Keynote Presentation - Florida Ballroom - Karen Martin,</td>
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<tr>
<td>10 – 11 a.m.</td>
<td>Dedicated Exhibit Time – Exhibits – Book Signing –</td>
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<tr>
<td>TRACK</td>
<td><strong>LEADERSHIP &amp; MANAGEMENT</strong></td>
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<tr>
<td>11:10 a.m. – Noon</td>
<td>Good Accounting Augments Process Engineering</td>
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<td>Brian D. Gregory, ORTimes LLC, Deborah W. Gregory, Bentley University</td>
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<td></td>
<td>Pharmacy Go Lean: An Initiative in Lean Culture</td>
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<td>Parviz Kheirkhah, Miguel Lozano, Dalia Farhat and Laura Burke, MD Anderson Cancer Center</td>
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<tr>
<td>TRACK</td>
<td><strong>LEAN SIX SIGMA</strong></td>
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<tr>
<td>12:10 – 1 p.m.</td>
<td>Daily Huddles Achieve Strategic Results</td>
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<td>Sherida Harvey, OhioHealth</td>
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<td>Two Data Points Are Not a Trend: Using SPC to Manage Better</td>
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<td>Mark Graban, KaiNexus</td>
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| Reducing Expenses in Nonvariable 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 |

President, The Karen Martin Group Inc.

Orange Ballroom D

<table>
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| Functional Tree Structures “FTS”  
The Path to Sustainable Improvements  
James Bologna, Truven Health Analytics, Reza Ziaee, Banner Health System  
*Part 1 of 2* | Evaluating Existing Safe Patient Handling Programs – Key Learnings and Pointers  
Elise Condie, 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 |

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| Functional Tree Structures “FTS”  
The Path to Sustainable Improvements  
James Bologna, Truven Health Analytics, Reza Ziaee, Banner Health System  
*Part 2 of 2* | 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 |
DON’T MISS THE BOOK SIGNING!
Knowledge is power so don’t miss the chance to get the latest books on managing healthcare systems from Society for Health Systems members.

Saturday, Feb. 22 | 11:15 a.m. and 5 p.m.
Karen Martin, Jean Ann Larson, Mark Graban, Joe Swartz and Pierce Story will be in the Exhibit Hall offering their latest books for sale and will sign your personal copy.

Sunday, Feb. 23 | 10 a.m.
Immediately following her keynote presentation, Karen Martin will be in the Exhibit Hall offering her latest books for sale and will sign your personal copy.

Jean Ann Larson of Jean Ann Larson and Associates

Mark Graban of KaiNexus and Joseph E. Swartz of Franciscan St. Francis Health
The Executive Guide to Healthcare Kaizen: Leadership for a Continuously Learning and Improving Organization

Karen Martin of The Karen Martin Group
Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation (with co-author Mike Osterling)

The Outstanding Organization: Generate Business Results by Eliminating Chaos and Building the Foundation for Everyday Excellence

The Outstanding Organization

Pierce Story of Capacity Strategies Inc.
Developing a Poly-Chronic Care Network: An Engineered, Community-Wide Approach to Disease Management

Developing a Poly-Chronic Care Network

Karen Martin Group

Dynamic Capacity Management for Hospitals: Advanced Methods and Tools for Optimization

Dynamic Capacity Management for Hospitals
Take advantage of the opportunity to improve the quality, productivity, and efficiency of your healthcare organization with the Society for Health Systems.

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 levels efficiently.

Corporate Partnership with SHS can include:
• *Industrial Engineer* magazine subscription
• Discounted training – at SHS Training Center, online, or at your location
• Discounted conference registration – save on HSPI Conference 2015’s registration!
• Recruitment tools – find the best talent
• Member-only webinar attendance – access cutting-edge research and case study presentations
• Sponsorship, advertising or exhibit opportunities
• And much more!

Learn more online at www.iienet.org/shs/partnership.
OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT TRACK | ORANGE A

THE ROLE OF AN IE IN PUBLIC HEALTH AT THE CDC
Michael Washington, Centers for Disease Control
Basic level
Industrial engineering and operations research techniques have been used to improve the acute care side of healthcare systems for decades, but their use is limited in the public health sector despite the need for them. This presentation will discuss how these tools have been used at the U.S. Centers for Disease Control and Prevention and other public health entities to inform policy decisions, assist in improving care in developing countries, and respond to public health emergencies. Examples include computer simulation to optimize patient flow during an emergency vaccination program and Markov models to show the long-term cost effectiveness of lifestyle intervention for preventing type 2 diabetes.

POTPOURRI TRACK | ORANGE B

MANAGEMENT ENGINEERING: A GUIDE TO BEST PRACTICES FOR INDUSTRIAL ENGINEERING IN HEALTHCARE
Jean Ann Larson, Jean Ann Larson and Associates
Intermediate level
The session is a panel discussion by chapter contributors to the latest edition of Management Engineering: A Guide to Best Practices for Industrial Engineering in Health Care. They are all longtime practitioners. Not only have they witnessed the evolution of this field up close and in person, many of them were trained by those who impacted its course and they themselves have also been influential.

APPLIED RESEARCH TRACK | ORANGE C

PREDICTING CHRONIC DIALYSIS PATIENT ADMISSIONS TO A NETWORK OF HOSPITALS
Shoshana Hahn-Goldberg, Hannah Wong and Tai Huynh, Centre for Innovation in Complex Care
All levels
Chronic dialysis patients use a lot of inpatient resources outside of their dialysis care, which is thought to be unpredictable. The application of different simulation technologies to predict inpatient admissions for a particular patient population will be discussed.

HEALTHCARE REFORM TRACK | ORANGE E

THE CQC COMPASS: A RESULTS-ORIENTED STATEWIDE CMS STARS IMPROVEMENT COLLABORATIVE
Lyd Paull-Flores, California Quality Collaborative
Intermediate level
The California Quality Collaborative Compass Program is a well-rounded quality improvement program that identifies weaknesses via gap assessments and leverages strengths to manage CMS Stars, ACO, and Pay For Performance quality measures while focusing on population health, team-based care, and provider organization systemwide changes.

INFORMATION TECHNOLOGY TRACK | ORANGE F

USING RFID TO ENHANCE PATIENT FLOW AND CARE TEAM COORDINATION
Lauren Fiedler and Sue Ertl, University of Wisconsin Health
Basic level
Discover how the University of Wisconsin Health Digestive Health Center has designed and implemented a system using radio frequency identification (RFID) technology that connects people and enhances service to patients and each other. This presentation will address the technical, operational and human considerations of developing and implementing the new technology.

CHANGE MANAGEMENT TRACK | ORANGE G

USING SYSTEMS ENGINEERING TO IMPROVE THE CARE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)
Susan Seidensticker, University of Texas Medical Branch (UTMB)
Intermediate level
The management of chronic disease impacts every part of the healthcare continuum. UTMB has implemented some systems engineering tools and concepts into the care delivery process for COPD patients that may be adaptable to other sites and diseases.
FRIDAY, FEBRUARY 21 - 2:30 - 3:20 P.M.

OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT TRACK | ORANGE A
APPLICATIONS OF ANALYTICS AT THE MAYO CLINIC
Jeanne Huddleston, Mayo Clinic
All levels
An overview of three operations research methods used to implement changes at the Mayo Clinic.

POTPOURRI TRACK | ORANGE B
ESTABLISHING RELATIONSHIPS, IMPROVING PATIENT SAFETY AND PATIENT AND STAFF SATISFACTION
Judith Ann Pauley and Joseph F. Pauley, Process Communications Inc.
Basic level
Understanding the motivational needs of patients and their communication preferences is the key to establishing relationships and providing improved service and patient care. Participants will learn successful scientifically proven communication and motivation strategies to enable them to establish relationships so that patients and staff will be happier and more satisfied.

APPLIED RESEARCH TRACK | ORANGE C
IMPACT OF PROPOFOL ON ENDOSCOPY UNIT EFFICIENCY: A DISCRETE-EVENT SIMULATION MODEL
Javad Taheri, North Carolina State University, Ziad Gellad, Duke University Medical Center
Basic level
Propofol has become a popular choice for sedation in endoscopy because of its rapid onset of action, quick recovery and reported superior efficacy. We employed discrete-event simulation modeling to evaluate the impact on efficiency of conversion to propofol sedation in an ambulatory surgical center.

HEALTHCARE REFORM TRACK | ORANGE E
USING INDUSTRIAL AND SYSTEMS ENGINEERING TO DRIVE THE TRIPLE AIM
James Benneyan, Northeastern University, Susan Goldstein, Healthcare Systems Engineering Institute
Intermediate level
We describe four varied applications of industrial and systems engineering to significantly improve the CMS “triple aim” of better care, better health, and lower costs, as well as the important roles industrial engineers can play. Case studies include key inpatient care, primary care, home health care, and chronic care applications.

INFORMATION TECHNOLOGY TRACK | ORANGE F
PROCESS DESIGN IMPLICATIONS OF USING TABLET COMPUTERS FOR PATIENT INTAKE
Bryan Norman and Rachel Hess, University of Pittsburgh
All levels
Hospitals employ electronic health record systems in different ways, but even in “paperless” systems, patients still complete paper-based histories, reviews of systems, and specialized questionnaires. We discuss how patient flow and staff workflows change and highlight key implementation issues and principal advantages found using tablet computers for patient intake.

CHANGE MANAGEMENT TRACK | ORANGE G
EVOLUTION, DRIVING RESULTS, AND LIFE AFTER LEAN IN HEALTHCARE
DeAnna Davis, DeAnna Davis Consulting and PEIT
All levels
The focus of 2014 and beyond will be cost out and efficiency. Most hospitals are using lean and project management to drive these focus areas. It is critical for leaders to understand the lean evolution for hospitals, driving results, and driving organizational commitment after lean. As you and your healthcare demands evolve, so must your tools and your leadership style to keep your teams engaged.
Patient safety and satisfaction are associated with effective transitions of care. Barriers needed to be removed so that nurses could consistently hand over care at the bedside. We also created a standardized bedside report process that reflected the voice of the customer and evidence-based practice using lean methodologies.

This research assessed surgical team awareness and resiliency through conceptual recurrence of communication patterns. Through a simulation study, communication patterns of surgical procedures were collected and then analyzed using conceptual recurrence. Principles established in high reliability organizations were used to evaluate the resiliency and awareness of the surgical teams.

This presentation will describe the Hospital Value-Based Purchasing (VBP) program and the Baylor Health Care System (BHCS) experience with VBP. BHCS’s commitment to building quality improvement infrastructure has prepared the organization for VBP’s emphasis on quality and patient outcomes.

This presentation shows how the Nebraska Medical Center designed a process to identify, prioritize, and resolve stabilization needs while simultaneously identifying optimization opportunities for the ambulatory clinics. In other words, how do you allow time for your core team to resolve clinic issues while still actively supporting clinic needs? Blitz Phase I and Phase II.

TBA
SATURDAY, FEBRUARY 22 - 9 - 9:20 A.M.

OPERATIONS RESEARCH FOR PROCESS IMPROVEMENT TRACK | ORANGE A

IMPROVING THE PROCESS BEFORE IT EXISTS: IES & ARCHITECTS WORKING TOGETHER
Jonathan Bykowski, Array Architects
Intermediate level
With a new facilities project about to begin, or already underway, we will explore how industrial engineers and architects can work together effectively. While from very different backgrounds, both IEs and architects are focused on the same mission: to improve the quality of healthcare.

LEAN SIX SIGMA TRACK | ORANGE B

REDEFINE EXPERT: ENGAGING FRONT-LINE STAFF IN LEAN CONTINUOUS IMPROVEMENT
Isaac Mitchell, East Tennessee Children’s Hospital
Intermediate level
Hospitals are filled with highly educated and skilled employees that are extremely passionate about their work. Why then are only a select few managers, consultants or change agents expected to solve problems? Engage front-line staff, the true experts, in A3 problem solving and lean management to provide ideal patient care.

APPLIED RESEARCH TRACK | ORANGE C

CLOSED QueUING NETWORK ANALYZES RESOURCE ALLOCATION FOR EMERGENT PATIENT FLOW
Afrifah Bobbie, University of Central Florida
Intermediate level
Improving the flow of emergency department (ED) patients requires a different point of view. A broader glance is necessary to understand the interaction between the ED and other hospital departments. This inclusion is vital when decisions are made to allocate resources.

HEALTHCARE REFORM TRACK | ORANGE E

BEYOND THE HOSPITAL: AMBULATORY CARE’S ROLE IN THE READMISSION CHALLENGE
Maj-Britt Llewellyn, California Quality Collaborative
Basic level
While most hospitals have implemented improvements to reduce readmissions, work is still needed in the post-discharge ambulatory care setting. Learn how multiple medical groups leverage resources and tools developed through a collaborative learning process to target high-risk patients in the first 30 days post-discharge and reduce readmission rates.

PATIENT FLOW TRACK | ORANGE F

SYSTEMS ANALYSIS AND FLOW CONTROLS TO INCREASE THE EFFICIENCY OF AN OPERATING SUITE
Mark Biscone, Michael E. DeBakey VA Medical Center, Susan Seidensticker, University of Texas Medical Branch (UTMB)
All levels
This presentation will break down the perioperative process into easy-to-understand pieces, allowing for discussion on performance improvement, operational efficiency, and systems redesign of this highly valuable area of a hospital.

CHANGE MANAGEMENT TRACK (9– 9:20 A.M.) | ORANGE G

CREATING THE STERILE PROCESSING MODEL CELL FOR THE SYSTEM
Sabrina Gilbert, OhioHealth
Intermediate level
Learn how OhioHealth created a sterile processing model cell for the system to benchmark from by changing the organization structure, staffing to demand, eliminating waste, standardizing work flows, and improving daily and shift-to-shift communication.

CHANGE MANAGEMENT TRACK (9:30 – 9:50 A.M.) | ORANGE G

GETTING STARTED FOR EARLY WINS: ELLIS’ JOURNEY
Kristin May and Wendy Rosher, Ellis Medicine
All levels
Much discussion on successful PI programs comes from healthcare systems that are many years into their journey. In this segment, Ellis Medicine, one year into their journey, will share how they are building their lean program from the ground up – both successes and lessons learned. Even a new program through seven focused initiatives can bring more than a million dollars in savings!
PRACTICAL APPLICATIONS OF OPERATIONS RESEARCH TO OPTIMIZE COMPLEX SCHEDULING AND CAPACITY PROBLEMS
Rachel Miller and James Benneyan, Northeastern University, Susan Freeman, Healthcare Systems Engineering Institute, Serpil Mutlu
Intermediate level
Complex scheduling problems are ubiquitous in healthcare, yet advanced operations research solutions typically fail to be implemented. We illustrate successful practical applications of optimization methods to a range of common healthcare problems, focusing on practical approaches and impact.

GLOBAL HEALTH SYSTEMS - AN AFRICAN CASE STUDY
Joshua Gray, University of Southern California
Advanced level
This presentation is a global health systems case study of lean Six Sigma methodology and tool applications to improve patient flow and drug supply in Uganda, Africa.

ACCURACY AND PRECISION, ALTERED LEVELS OF MEASUREMENT IN HEALTHCARE
Janet Sanders, East Carolina University, Tedd Karr, Vidant Medical Center
Intermediate level
The concepts of accuracy and precision apply in healthcare, but their application may necessitate a different approach with operational data in the healthcare environment. This paper analyzes how accuracy and precision may be tarnished by data nuances that were discovered during the completion of several LSS green belt projects.

PROCESS VARIATION IN DEEP BRAIN STIMULATION
Jonathan Inselman, Nilay Shah, Ahmed Rahman, April Horne, Colleen Storino, Robert Wharen, Herbert Heien and AJ Bouquet, Mayo Clinic
Basic level
Deep Brain Stimulation (DBS) has experienced a growth in demand as it has begun to be used for a wider scope of conditions. The variation in DBS processes from patient to patient must be better understood to identify potential for process improvement. This presentation will outline methodology in identifying DBS episodes of care through billing data.

REDUCING PATIENT WAIT TIME WITH SIMULATION MODELING
Mary Coniglio and Senthil Balasubramanian, Penn Medicine
Intermediate level
A simulation model was built to accurately reflect the patient flow in the cancer center. The model incorporated real patient scheduling data and resource constraints. Patient time in the department was reduced significantly by increasing the number of patients seen independently by nurse practitioners and revising the lab prioritization. Priorities were set based on quantified improvements.

DELIVERING ON THE PATIENT PROMISE – JOURNEY TO REDUCE HOSPITAL LOS
Lauren Cooper, Wake Forest Baptist Health
Basic level
“We will keep you safe, care for you, involve you and your family, and respect you and your time.” This is the patient promise at Wake Forest Baptist Medical Center (WFBMC). In order to deliver on this promise we need to reduce our overall hospital length of stay. This presentation will highlight key LOS reduction projects during fiscal year 14 and their impact on keeping our patient promise.
Patient Flow Track (10:00 - 10:20 A.M.) | Orange F

**Visualizing, Analyzing, and Optimizing OR and PACU Staffing Schedules**

Todd LeBaron, Intermountain Healthcare
Intermediate level

This presentation will focus on the methodology used to efficiently predict and match staff to patient workload requirements. Several automated tools will be presented, including a predictive tool used to schedule staff and a detail simulation tool used to visualize staffing levels and patient volumes by hour of the day.

Patient Flow Track (10:30 - 10:50 A.M.) | Orange F

**Breaking Down Department Barriers to Improve Utilization**

Stephen Clayman, OptimalUse
Intermediate level

This presentation will review opportunities to maximize hospital resources by identifying clinical spaces that can be used by multiple departments based on time of day, patient volumes and types. Simulation modeling is used to demonstrate this potential. Case studies will provide real-world examples.

Change Management Track (10:00 - 10:20 A.M.) | Orange G

**Strategies to Accelerate Learning, Promote Acceptance and Prevent Skill Decay**

Matthew Johnston and David Jones, Design Interactive Inc.
Basic level

Lessons learned from a consumer goods manufacturing change management case study shall be presented and applied to the medical industry with a focus on communication strategies and the design and implementation of training systems to accelerate learning and prevent skill decay.

Change Management Track (10:30 - 10:50 A.M.) | Orange G

**Implementing Andon in Healthcare Delivery**

Kambiz Farahmand, North Dakota State University
All levels

An Andon system was developed for capturing and documenting defects along with the ability to present emergency and urgent situations to members of the management for making decisions. The Andon system will allow for notification and alarming needed to tackle and resolve the problem or incident using problem swarming.
LEADERSHIP & MANAGEMENT TRACK | ORANGE A
ERROR PROOF HEALTHCARE – HOW TO ACCELERATE YOUR IMPROVEMENT EFFORTS
Kevin McManus, Great Systems
Basic level
Excellent levels of quality cannot be achieved by simply asking people to be careful. How do high performance healthcare systems achieve very low error rates on a consistent basis, while others struggle to even capture the errors that occur daily? This presentation will describe several best practices you can use to better ‘error proof’ the different processes in your healthcare system.

LEAN SIX SIGMA TRACK | ORANGE B
APPLYING LEAN HEALTHCARE IN DEVELOPING COUNTRIES, A SUCCESS CASE IN PRIVATE HOSPITALS IN MEXICO
Agustin Perez-Araos, ITESM Campus GDA
All levels
This presentation covers changing the organizational culture from traditional management to lean healthcare and continuous improvement. The project ranged from conducting strategic planning, key performance indicators definition, and implementing lean tools in four critical processes: admission, emergency room, medication and inputs procurement.

BIG DATA/ANALYTICS AND CLINICAL DECISION SUPPORT TRACK | ORANGE C
IMPROVING HEALTHCARE QUALITY AND EFFICIENCY THROUGH BIG DATA ANALYTICS
Thomas Pearson, Franciscan St. Francis Health
Intermediate level
When unlimited data from electronic medical records meet the new tools for predictive analytics, visual analytics, process monitoring, and real-time action alerts, the potential for healthcare improvement accelerates. But these new methods can be complex, costly and confusing. This presentation describes how Franciscan St. Francis is applying big data analytics for more improvement at lower cost.

HEALTHCARE REFORM TRACK | ORANGE E
BUNDLED CARE AT UNIVERSITY OF WISCONSIN HEALTH
Elizabeth Strutz, University of Wisconsin Medical Foundation
All levels
As part of University of Wisconsin Health’s transition to becoming an Accountable Care Organization, the Bundled Care Program was established in 2012 to promote coordinated care, improve quality outcomes, reduce waste and improve patient experiences. Discover how industrial engineering concepts were used to improve processes in a kidney transplant bundle.

PATIENT FLOW TRACK | ORANGE F
PROVEN INNOVATIVE STRATEGIES TO INCREASE PATIENT ACCESS TO CARE
Sumeet Kumar, North Bay Regional Health Centre
All levels
North Bay Regional Health Centre is leading northeast Ontario, Canada, in an aggressive approach to ensure patients have access to the right care. Learn what innovative, sustainable strategies and partnerships were employed to decrease length of stay from the emergency department to an inpatient bed by 57 percent.

CHANGE MANAGEMENT TRACK | ORANGE G
LACK OF SUSTAINABILITY: CURING THE MOST DANGEROUS CHRONIC DISEASE IN HEALTHCARE
Marci Jackson, Premier Inc.
Intermediate level
Why do healthcare processes allow defects and waste unacceptable in any other industry? Is healthcare so different that processes are not sustainable? They absolutely can be sustained if proper measures are applied toward four discrete characteristics. Join me to assess how leading hospitals have leveraged these proven characteristics to sustain excellence.
TRANSFORMING THE GIANT HAIRBALL
Mike Stoecklein, ThedaCare Center for Healthcare Value
Intermediate level
All organizations are “hairballs”: cumbersome, bureaucratic, fraught with waste and inefficiency, impeding creativity and innovation. It doesn’t have to stay that way. The knowledge about how to orbit the hairball is available to anyone who wishes to learn, but orbiting the hairball will not be sufficient. Transformation of management is required, and we have access to that knowledge as well.

COACHING FOR LEAN AND KAIZEN
Joseph Swartz, Franciscan St. Francis Health, Mark Graban, KaiNexus
All levels
Learn the basics on how to coach staff through individual and small group-led lean and kaizen improvements. Coaching practices and examples will be presented from a variety of healthcare organizations.

MY WIFE HAS METASTATIC BREAST CANCER. I’M A STATISTICIAN; HOW CAN I HELP?
T. Allen Pannell Jr., University of Tennessee Center for Executive Education
Basic level
Business analytics and big data are becoming the next wave in management improvement strategies like Six Sigma, lean and TQM. The age of big data is creating a unique opportunity for an accelerated and enhanced embrace of data in all industries, with healthcare being at the forefront.

THE APPLICATION OF HUMAN FACTORS ENGINEERING TO HEALTHCARE
Brian Fillipo, Bon Secours St. Mary’s
Basic level
One of the most powerful tools to help providers improve the reliability of healthcare is the application of human factors engineering (HFE). The basic concepts of HFE and how they can be applied to healthcare will be reviewed. Real life examples will be given.

ENGINEERING TOOLS FOR IMPROVED UTILIZATION MANAGEMENT AT THE VHA
Jordan Peck, Coby Durham and Tom Gormley, New England Veterans Engineering Resource Center (VERC)
Intermediate level
A utilization management system has recently been implemented at the Veterans Health Administration. The issues that have led to difficulty meeting utilization goals will be described and a spreadsheet simulation tool will be introduced, which helped VHA hospitals make resource decisions to improve utilization metrics.

OPTIMIZING RESIDENT-BASED TEAMLET SCHEDULES TO IMPROVE CONTINUITY IN PRIMARY CARE
Rachel J. Miller, Northeastern University
One of modern healthcare’s important innovations, the Patient-Centered Medical Home (PCMH) model, suggests a format of team-based care in order to improve continuity. Continuity of care, continuous care from a consistent provider, drives patient satisfaction and improved health outcomes. In clinics staffed with residents (physicians-in-training), continuity and team-based care are difficult to achieve. At Cambridge Health Alliance’s Family Medicine Clinic in Malden, Mass. (MFMC), a teamlet model was tested as an approach to improving continuity.
LEADERSHIP & MANAGEMENT TRACK | ORANGE A

MASTERING YOUR EQ – EMOTIONAL INTELLIGENCE – THE DIFFERENTIATOR OF LEADERSHIP SUCCESS
Jean Ann Larson, Jean Ann Larson and Associates
Intermediate level
Per Daniel Goleman, 90 percent of the difference between star performers and average performers in high levels of leadership can be explained by EQ. Understanding the multifaceted aspects of EQ and learning how to develop our own EQ will help us develop wisdom in order to lead better continuous improvement and change in our organizations.

LEAN SIX SIGMA TRACK | ORANGE B

USE OF LEAN IN HEALTHCARE FACILITY PLANNING AND DESIGN
Amanda Mewborn and Marvina Williams, Perkins+Will
Basic level
With healthcare reform looming, healthcare organizations are seeking advancements in efficiency, quality, and experience. Lean is key in the design of healthcare facilities. This session will present an overview of use of lean as an architectural design tool, followed by four case studies detailing the impact of lean principles on design of healthcare facilities, including the results achieved.

COST REDUCTION TRACK | ORANGE C

USING TREND REPORTS AND RELATED FORMS TO CONTAIN STAFFING COSTS
John Templin, Templin Management Associates Inc.
Intermediate level
Use position control reports, staffing patterns and staffing grids to establish staffing standards. Use this information in biweekly or monthly trend reports to contain costs and have top management understanding and support. Show how to use the historic data for annual budget projections.

HUMAN FACTORS TRACK | ORANGE E

CASE STUDY: REDUCING MANUAL PIPETTING AT A CLINICAL DIAGNOSTICS LABORATORY
Ivana Wireman, Ohio Bureau of Workers’ Compensation
All levels
Attendees will be able to identify the problems associated with manual pipetting tasks involved in analysis of patient blood samples. This case study will document the engineering controls implemented at one large organization that focused on improving employee comfort while optimizing processes. The company won two awards for these solutions at the 2013 Ohio Safety and Health Safety Congress.

PATIENT FLOW TRACK | ORANGE F

LEAN APPROACH TO HEALTHCARE SCHEDULING
Keith Leitner, University of Tennessee
Intermediate level
Healthcare started moving to scheduled practices in the mid-1900s, and many scheduling philosophies have emerged, but none have been accepted as best practice. This is due to the omnipresent challenge in healthcare - variation. Service and patient variation means that provider utilization is frequently at the expense of patient waiting. This session will highlight the lean solution to this issue.

STUDENT COMPETITION | ORANGE G

CASE STUDY COMPETITION
LEADERSHIP & MANAGEMENT TRACK | ORANGE A

SHIFTING OVER 50 CLINICS TO PATIENT CENTER MEDICAL HOME MODEL
Michael Parris and Jean Donie, Banner Health
Intermediate level
Bringing the Patient Center Medical Home across our entire primary care network through a system-led initiative has been a journey. Changing the very structure of our care delivery model required a great deal of buy-in, change management, communication, and leadership strength.

LEAN SIX SIGMA TRACK | ORANGE B

HOW TO CONDUCT AN EFFECTIVE LEAN (HANDS-ON) SIMULATION WORKSHOP
Matt Morrissette, More Effective Consulting LLC
Basic level
Discover what your employees need in a lean simulation hands-on training class. See how to really engage your employees, create a cycle time takt time bar chart or use role playing to associate their own work environment. This class teaches more than 20 methods to engage employees during a lean workshop. Throw PowerPoint out and use sensory and logic-based methods to engage them.

COST REDUCTION TRACK | ORANGE C

REDUCING EXPENSES IN NON-VARIABLE COST CENTERS
Jeff Ratliff and Todd Schneider, OhioHealth
Intermediate level
OhioHealth, an eight-hospital system, evaluated all areas including traditionally fixed cost departments including HR, Organizational Development, Finance, Marketing, and Facilities. Evaluation of in-source vs. outsource, contract consolidation, standardization, and rationalization of services enabled the organization to find significant opportunities for savings.

CHANGE MANAGEMENT TRACK | ORANGE E

USING LEAN AND SIX SIGMA TOOLS TO REDUCE 30-DAY READMISSION RATES
Derek Murray and Roque Perez-Velez, Shands Healthcare
Basic level
The discharge process is defined as the transition to the next level of care. It incorporates actions on the day of admission, the days between the admission and discharge, the day of discharge, and after discharge. The presentation describes the process of how the presenters used Six Sigma and lean tools to facilitate a cross-functional group in developing a standardized discharge process.

SUPPLY CHAIN TRACK | ORANGE F

PROCESS IMPROVEMENTS IN HOSPITAL SUPPLY CHAIN LOGISTICS
Seth Hostetler and Aaron Homiak, Geisinger Health System
Basic level
This presentation will provide several examples of projects where process improvement tools were employed to improve support service departments’ work flows and increase service levels. These projects focus on many processes including warehouse operations, linen distribution, mail processing, and the use of a real-time location system for improved asset management.

QUALITY TRACK (8 - 8:20 A.M.) | ORANGE G

REDUCING CLINICAL VARIATION AND TESTING IN THE HEAD & NECK CENTER
Laura Burke, MD Anderson Cancer Center
All levels
The goal of this project was to design a regimen to best coordinate follow-up care for patients treated by multiple provider teams in the Head and Neck Center at The University of Texas MD Anderson Cancer Center. This system would reduce the number of appointments and tests for patients.

QUALITY TRACK (8:30 - 8:50 A.M.) | ORANGE G

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
All levels
In recent years the healthcare sector’s adoption of lean/six sigma tools has received significant attention. This presentation reviews, over a five-year period, how a graduate level university course has significantly changed to provide increasing value to healthcare providers while providing for hands-on learning in the “real world.” Lessons learned, tools used, and future plans are discussed.
LEADERSHIP & MANAGEMENT TRACK | ORANGE A

GOOD ACCOUNTING AUGMENTS PROCESS ENGINEERING
Brian D. Gregory, ORTime LLC, Deborah W. Gregory, Bentley University
All levels
Accounting system design in healthcare facilities should provide data that help systems engineers increase productivity and decrease cost in order to better compete on price.

LEAN SIX SIGMA TRACK | ORANGE B

PHARMACY GO LEAN: AN INITIATIVE IN LEAN CULTURE
Parviz Kheirkhah, Miguel Lozano, Dalia Farhat, and Laura Burke, MD Anderson Cancer Center
All levels
The Office of Performance Improvement was requested by the Division of Pharmacy to assess current inventory practices and offer opportunities to improve inventory management systems. In the study phase, we found out training the teams and pharmacy staff has a vital role in our project success. Therefore “Pharmacy Go Lean” was identified as one sub-project in the division of Pharmacy.

COST REDUCTION TRACK | ORANGE C

FUNCTIONAL TREE STRUCTURES “FTS” THE PATH TO SUSTAINABLE IMPROVEMENTS
James Bologna, Truven Health Analytics, and Reza Ziaee, Banner Health System
Part 1 of 2
All levels
Based on different studies, approximately 70 percent of all operations and quality improvement projects do sustain their gain beyond six to nine months. FTS provides a stable structure based on a set of uniform, reliable and standardized functions and processes.

HUMAN FACTORS TRACK | ORANGE E

EVALUATING EXISTING SAFE PATIENT HANDLING PROGRAMS - KEY LEARNINGS AND POINTERS
Elise Condie, EORM Inc.
Intermediate level
A number of states have established requirements for a Safe Patient Handling (SPH) program in acute-care facilities. SPH programs can affect both patient and caregiver safety. This presentation describes considerations to make when analyzing the effectiveness of an SPH program, drawing on international experiences.

SUPPLY CHAIN TRACK | ORANGE F

CENTRALIZED RESOURCE MANAGEMENT SYSTEM (CRSM): A CASE STUDY FROM TURKEY
Mustafa Yildiz and M. Mahmud Khan, University of South Carolina
Basic level
The Centralized Resource Management System (CRSM) which has been implemented by Ministry of Health (MoH) since 2009 helped the MoH monitor hospital inventories and enabled the transfer of pharmaceuticals and medical supplies among hospitals. This case study analyzes the process of implementing the CRMS and its effects on hospital-based outcomes.

QUALITY TRACK | ORANGE G

BUNDLED PAYMENT MODELS & PROCESS IMPROVEMENT OPPORTUNITIES
Brenton Faber, Worcester Polytechnic Institute
Intermediate level
Over the past year, our team has been building models to assess the impact of a bundled payments system on four hospital service lines: Orthopedics, congestive heart failure, pneumonia, and diabetes. The project expands beyond financial modeling to highlight process issues that emerge when services transition from fee-for-service to bundled payments.
LEADERSHIP & MANAGEMENT TRACK | ORANGE A
DAILY HUDDLES ACHIEVE STRATEGIC RESULTS
Sherida Harvey, OhioHealth
Intermediate level
Discover how OhioHealth focused their efforts on improving lagging performance metrics by incorporating appropriate leading indicators into daily management activities at the procedural and inpatient areas. Leveraging tools such as standardization of templates and huddle procedures in all practice areas, this presentation will demonstrate lean tools utilized and results achieved.

LEADERSHIP & MANAGEMENT TRACK | ORANGE B
TWO DATA POINTS ARE NOT A TREND: USING SPC TO MANAGE BETTER
Mark Graban, KaiNexus
Basic level
Healthcare leaders often make bad decisions due to a lack of statistical understanding. This session will remind attendees that simple comparisons of two data points or comparisons to goals and targets can be misleading. Control charts allow us to better validate project success and make better ongoing management decisions.

COST REDUCTION TRACK | ORANGE C
FUNCTIONAL TREE STRUCTURES “FTS” THE PATH TO SUSTAINABLE IMPROVEMENTS
James Bologna, Truven Health Analytics, and Reza Ziaee, Banner Health System
Part 2 of 2
All levels
Based on different studies, approximately 70 percent of all operations and quality improvement projects do sustain their gain beyond six to nine months. FTS provides a stable structure based on set of uniform, reliable and standardized functions and processes.

POTPOURRI TRACK | ORANGE E
GOOGLE GLASS AND HEALTHCARE INFORMATION AND WORKFLOW
Charles Webster, EHR Workflow Inc.
Basic level
Google Glass is a small, sensor-equipped, head-mounted display connected to the Internet. How can Glass improve healthcare information management and EHR workflow? Dr. Webster, a Glass Explorer, will have Glass on hand to demonstrate, explain, and predict. Depending on audience size, attendees can try it out!

SUPPLY CHAIN TRACK | ORANGE F
DEVELOPING A PROCESS FOR EXPIRED MATERIALS MANAGEMENT AND PREVENTION
Elia Cole and Zachary Gersten, Boston University School of Public Health
Basic level
This project used Lean concepts to develop an efficient system for medical supply management within the Operating Room Floor of the West Roxbury Veterans Affairs Hospital.

QUALITY TRACK | ORANGE G
SAFE PATIENT TRANSPORT AND HANDOFFS TO NON-INVASIVE CARDIOLOGY LABORATORY
Susan Seidensticker, University of Texas Medical Branch (UTMB)
Intermediate level
Clinically unstable patients are at risk every time they are transported. When tests are ordered, there are often options to bring the test to the patient. UTMB’s Echo Lab has maintained a 50 percent reduction in transportation of clinically unstable patients to the procedural area and will share its success story.
POSTER SESSIONS

Posters will be on display in the Exhibit Hall. They will be posted in order of the abstract number. Authors will be at their posters between 11 a.m. and noon on Saturday, Feb. 22, to answer

ABSTRACT #4: OPERATIONAL STRATEGY DEPLOYMENT AND SUSTAINMENT TO IMPROVE PATIENT FLOW, QUALITY, AND PATIENT EXPERIENCE
Sang Yoon, Providence Health & Services, United States

ABSTRACT #15: IMPROVING PATIENT’S FIRST IMPRESSION: REDUCE PATIENT REGISTRATION TIME
Lara Wheelhouse (United States)

ABSTRACT #21: DEVELOPING A PROCESS FOR EXPIRED MATERIALS MANAGEMENT AND PREVENTION
Elia Cole and Zachary Gersten, Boston University School of Public Health

ABSTRACT #29: STANDARDIZED WORK: ONLY YOU CAN PREVENT WORKPLACE FIRES
Marti Jordan, East Tennessee Children’s Hospital

ABSTRACT #30: INNOVATIVE CHALLENGE TO PROMOTE 5S EDUCATION, IMPLEMENTATION, ADAPTATION AND SUSTAINABILITY
Eddie Perez-Ruberte, Mayo Clinic, and Lynn Hill

ABSTRACT #31: BRIDGE TO TRANSPLANT DEVICE ORDER PROCESS RE-ENGINEERING
Derek Murray, Shands Health Care

ABSTRACT #34: THE APPLICATION OF KANO MODELING IN STAFF BENEFITS OPEN ENROLLMENT PROCESS
Norman Pimentel, Boulder Community Hospital

ABSTRACT #36: BUNDLED PAYMENT MODELS & PROCESS IMPROVEMENT OPPORTUNITIES
Brenton Faber, Worcester Polytechnic Institute

ABSTRACT #38: HEALTH SYSTEMS ENGINEERING AT UW HEALTH: PARTNERING TO REDESIGN AMBULATORY CARE
Elizabeth Strutz, Lauren Fiedler, Sue Ertl and Sally Kraft, University of Wisconsin Health

ABSTRACT #44: REDUCING WASTED UNUSED SUPPLIES IN MEDICAL UNITS
Nadia Lahrichi, Elliot Silverman, and Rita Di Girolama, Sir Mortimer B. Davis Jewish General Hospital (Canada), and Lawrence Rosenberg, McGill University

ABSTRACT #45: APPLICATIONS FOR REAL-TIME LOCATION SYSTEM TECHNOLOGY IN THE OPERATING ROOM
Susan Seidensticker, University of Texas Medical Branch (UTMB)

ABSTRACT #46: EMBEDDING SAFETY AND EFFICIENCY INTO THE DESIGN OF A NEW INPATIENT FACILITY
Susan Seidensticker, University of Texas Medical Branch (UTMB)

ABSTRACT #48: REDUCING LENGTH OF STAY AND IMPROVING BED ALLOCATION WITH DYNAMIC SIMULATION
Hosni Adra, CreateaSoft
ABSTRACT #49: CREATING A QUALITY CULTURE – DIARIES OF PERFORMANCE IMPROVEMENT CONSULTANTS
Sophie Clyne, Providence Health Care (United States), and Meghan MacLeod, Camille Rozon, and Francisco Velazquez, Providence Health Care (Canada)

ABSTRACT #52: INTEGRATING PROCESS SIMULATION INTO STANDARD LEAN SIX SIGMA PRACTICE
Brittany Hagedorn, Simul8, Todd Roberts, Memorial Health System

ABSTRACT #62: EXAMPLES OF PHYSICIANS DAILY INTEGRATION OF SYSTEMS ENGINEERING AND FINANCE
Brian D. Gregory, ORTimes LLC, and Deborah W. Gregory, Bentley University

ABSTRACT #63: OPTIMIZING PERSONNEL FUNGIBILITY TO INCREASE THROUGHPUT
Brian D. Gregory, ORTimes LLC, and Deborah W. Gregory, Bentley University

ABSTRACT #66: EFFICIENT OR WITH DYNAMIC SIMULATION AND LIVE DATA
Hosni Adra

ABSTRACT #67: EFFECTIVE EMERGENCY DEPARTMENT SIMULATION
Hosni Adra

ABSTRACT #68: DETECTING PHYSIOLOGICAL DETERIORATION AND ALERTING HOSPITAL PHYSICIANS: CAN IT WORK?
Santiago Romero-Brufau and Jeanne Huddleston, Mayo Clinic; Bruce Morlan, Matthew Johnson, and Joel Hickman, May Clinic Rochester; James Naessens

ABSTRACT #69: USING DATA ANALYSIS TO DETERMINE THE IMPACT OF RESOURCE ALLOCATIONS
John Kros and Evelyn Brown, East Carolina University Department of Marketing & Supply Chain Management

ABSTRACT #88: THE HIGH COST OF QUALITY IN AN AUTOMATED ENVIRONMENT
Matthew Clark, Mayo Clinic

ABSTRACT #94: 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

ABSTRACT #100: INCREASING ACCURACY OF POSTINGS IN THE OPERATING ROOM
Rachel Douglas, MD Anderson Cancer Center, and Ashley Robinson

ABSTRACT #101: PROFESSIONAL DEVELOPMENT A3 - DO YOU HAVE YOURS?
Darrin Judkins, Boulder Community Hospital

ABSTRACT #102: OPERATIONAL MODELING AND SIMULATION: ANALYZE AND OPTIMIZE HEALTHCARE SYSTEM PERFORMANCE
David Morgareidge, RTKL Associates Inc.

ABSTRACT #114: TRACKING PATIENT FLOW USING RFID
John Jackson and Weton Bryant, UF Health Shands

ABSTRACT #118: TRANSLATION/IMPLEMENTATION SCIENCE: CAN RESEARCH AND PRACTICE COME TO A MIDDLE GROUND?
Tarun Mohan Lal, Mayo Clinic
ABSTRACT #126: VALUE STREAMS AT THE INDIANAPOLIS VA HOSPITAL
Chris Tucker, Richard L. Roudebush Veterans Affairs Hospital, and Lindsay Hopkins, Veterans Health Administration

ABSTRACT #141: DEVELOPMENT AND IMPLEMENTATION OF AN INTEGRATED CARE TRANSITION PILOT PROGRAM
Samira Qadir and Eric Beck, University of Chicago Medicine, and Laura Kneale

ABSTRACT #143: VIRTUAL 5S: REDUCING RISK THROUGH BETTER TOOL USE
Michele Stuart, Efficiency Engineers, and Kristin May, Ellis Medicine

ABSTRACT #147: PRIORITIZATION OF PERFORMANCE IMPROVEMENT EFFORTS FOR MEDICAL IMAGE VIEWING SYSTEM USING KANO MODEL
Mohd Ragheb El-Sharo, Jacob Elo, Md Rana, and Dorothy Larsen, Mayo Clinic

ABSTRACT #148: RIGHT PATIENT, RIGHT PLACE, RIGHT TIME – PATIENT-CENTERED FLOW
Dayna Roberts, University Health Network (Canada), and Brenda Kenefick

ABSTRACT #151: ASSESSING AND MAINTAINING QUALITY OF CARE FOR VETERANS WITH MENTAL HEALTH DISORDERS
Christine Tang, Renata Konrad, and Andrew Trapp, Worcester Polytechnic Institute

ABSTRACT #154: THE SEVEN TENETS OF HEALTHCARE PROCESS IMPROVEMENT
Lucien ‘Lou’ Keller, Flexsim Software Products Inc.

ABSTRACT #161: FAILURE MODE AND EFFECTS ANALYSIS (FMEA): PROACTIVE RISK ANALYSIS FOR BEDSIDE PATIENT RESCUE
Yue Dong, Jennifer Elmer, Julie Schmidt, Lynn Loynes, Sean Caples, Jeff Jensen, and Jeanne Huddleston, Mayo Clinic

ABSTRACT #162: THE CMS HEALTHCARE INDUSTRIAL ENGINEERING CENTER SUMMER INTERNSHIP PROGRAM
James Benneyan, Northeastern University; Corey Balint and Thomas Cullinan, Healthcare Systems Engineering Institute; Laura Hyde

ABSTRACT #165: MODELING THE CONNECTEDNESS AND SPREAD POTENTIAL OF HEALTHCARE QUALITY IMPROVEMENT NETWORKS
James Benneyan, Northeastern University; Corey Balint, Dayna Martinez, Nicholas Andrianas, and Cory Stasko, Healthcare Systems Engineering Institute

ABSTRACT #169: AN INDUSTRY-UNIVERSITY COLLABORATIVE RESEARCH CENTER APPROACH TO HEALTHCARE TRANSFORMATION
James Benneyan, Northeastern University; Dayna Martinez and Susan Goldstein, Healthcare Systems Engineering Institute

ABSTRACT #172: IT’S ALL ABOUT WHAT YOU LEAVE BEHIND – VALUE AND SUSTAINMENT
Keith Poole, Khrusallis.org; Nimish Patel, HCA; Joseph Swartz, Franciscan St. Francis Health

ABSTRACT #174: TOOLS FOR IMPROVING ED OBSERVATION UNITS AND URGENT CARE CENTER OPERATIONS
James Benneyan, Northeastern University; Kendall Sanderson and Cory Stasko, Healthcare Systems Engineering Institute; Laura Hyde
ABSTRACT #177: BENETRAVEL CONVERSION FROM CASH
Rick Lawson, Department of Veteran Affairs

ABSTRACT #182: ANALYSIS OF REAL-TIME HOSPITAL NEEDS AND RFID BENEFITS
Hulya Yazici, FGCU

ABSTRACT #184: INTEGRATING INTERVENTIONS IN CPOES TO REDUCE LABORATORY TEST REQUEST ERRORS
Gouri Prakash, CitiusTech Inc. (India)

ABSTRACT #185: USE OF SIMULATION TO OPTIMIZE PEDIATRIC SCHEDULING TEMPLATES
Molly Williams, University of Wisconsin Medical Foundation

ABSTRACT #186: BEHAVIORAL AND COGNITIVE PERFORMANCE INFORMATION BASELINES FOR IMPROVED TBI REHABILITATION
Siobhan Heiden and Barrett Caldwell, Purdue University

ABSTRACT #188: SIMULATION MODELING OF SYSTEM PERFORMANCE FOR UNIVERSITY OF COLORADO’S EMERGENCY DEPARTMENT
Michelle Boyd and Allyson Robbins, Analytical Decision Services LLC

ABSTRACT #189: IMPROVING PATIENT SAFETY AND CUTTING COSTS IN THE UK: A STICKY BUSINESS
Kelvin Yan, Imperial College London

ABSTRACT #190: TECHNOLOGY-AIDED TRANSFORMATION OF MOBILE EQUIPMENT MANAGEMENT PROCESSES
Alexandra McCaffrey, Virtua

ABSTRACT #191: AUTOMATED TOOLS TO SCHEDULE RESIDENTS: IMPROVING TRAINING AND PATIENT CARE
Amy Cohn, Young-Chae Hong, Ishan Mukherjee, Elizabeth Perelstein, Zachary Vershure, University of Michigan; Jennifer Zank

ABSTRACT #192: IMPROVING PATIENT FLOW IN AN OUTPATIENT INFUSION CENTER
Amy Cohn, Brian Denton, Spyros Potiris, Jeremy Castaing, Autumn Heiny, and Christopher Friese, University of Michigan; Louise Salamin, UMHS

ABSTRACT #193: A SIMULATION-BASED TOOL TO IMPROVE MATCHING OF RESIDENTS TO SURGICAL TRAINING OPPORTUNITIES
Amy Cohn, Mark Daskin, Rishindra Reddy, Frank Seagull, Ryan Chen, Asher Perlmutter, William Pozehl, Andrea Obi, University of Michigan
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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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EmLogis, Inc. | Booth #206
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Melissa Vega: mvega@emlogis.com
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CreateASoft, Inc. | Booth #104
Next Generation Dynamic Simulation, Simcad Pro, 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 integrates with live and historical data to provide the most effective simulation system on the market today. Check out SimTrack for live EMR connectivity, schedule adherence, and real time dashboards with forecasting.

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FlexSim Healthcare | Booth #200
FlexSim HC is the only discrete-event simulation software designed specifically for healthcare and patient flow modeling. FlexSim HC easily models all healthcare operations from emergency department, clinics, OR/PACU, floor units, pharmacy and labs. FlexSim HC uses patent-pending technology that allows the user to model complex patient flows without the need for programming.

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iDashboards | Booth #207
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Lehigh University | Booth #208
Lehigh is a premier residential research university, ranked in the top tier of national research universities each year. We are a coeducational, nondenominational, private university that offers a distinct academic environment to undergraduate and graduate students from across the globe. Visit www.lehigh.edu/hse for more information.

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McKesson | Booth #108
McKesson’s holistic capacity management strategy includes predictive analytics for accurately forecasting patient demand far enough in advance so you can proactively align staff and resources, along with real-time visual controls for tracking patient status and operational processes in order to improve patient flow, staff productivity and care quality.

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