WELCOME LETTER

On behalf of the organizing committee we are delighted to welcome you to the Lean Healthcare Research Symposium 2019.

This 3rd Annual Symposium is designed to foster understanding of lean in healthcare through presentation and discussion of recent research on the implementation of the lean philosophy and management practices in healthcare organizations and the effects of lean management on healthcare processes and patient outcomes. The Symposium features a keynote address by David Bates, MD; presentations by Stephen Shortell, PhD, MPH, MBA and Thomas Rundall, PhD (Center for Lean Engagement and Research) on recent studies and research projects; three presentations of research on lean in healthcare conducted by leading health services researchers; and breakout discussions with the Symposium presenters.

We are indebted to Catalysis, Lean Enterprise Institute, Moss Adams, and ValueCapture for their sponsorship of CLEAR and specifically for their support of this Symposium. The leaders of these organizations understand the value of actionable research on lean in healthcare and the importance of disseminating that research to clinical and managerial audiences. We would like to express our special gratitude to Nicole Christensen, Network Coordinator at Catalysis, for her support and guidance in the development of the Symposium.

Finally, we would like to express our gratitude to our Symposium attendees. We look forward to hearing your reactions to the research that is presented and your thoughts on the implications of that research for future lean initiatives. We hope you enjoy the conference and find true value in your participation.

With warm regards,

Thomas Rundall, Ph.D
Janet Blodgett, M.Sc.
Stephen Shortell, Ph.D., M.P.H., M.B.A

Conference Conveners
Center for Lean Engagement and Research
### CONFERENCE PROGRAM

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00am</td>
<td>Registration Begins</td>
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<tr>
<td>8:30am</td>
<td><strong>Welcome and Overview of the Day</strong>&lt;br&gt;<strong>Thomas Rundall, PhD</strong>&lt;br&gt;Henry J. Kaiser Professor of Organized Health Systems, Emeritus&lt;br&gt;Co-Director, Center for Lean Engagement and Research, in Healthcare (CLEAR)</td>
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<tr>
<td>8:45am</td>
<td><strong>Keynote Presentation</strong>&lt;br&gt;<strong>Using Tools and Practices Like Lean to Improve Patient Safety</strong>&lt;br&gt;<strong>David Bates, MD</strong>, Medical Director of Clinical Quality Analysis, Information Systems, Partners HealthCare; Chief, Division of General Internal Medicine, Brigham and Women’s Hospital; Professor, Harvard Medical School &amp; T.H. Chan School of Public Health</td>
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<td>9:30am</td>
<td>Refreshment Break (adjacent to Mt. Vernon Square Room)</td>
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<tr>
<td>9:45am</td>
<td><strong>The Intersection of Lean Mindset and Methods with Physician Fulfillment and Wellbeing</strong>&lt;br&gt;<strong>Daniel Murphy Jr., MD</strong>&lt;br&gt;Professor of Pediatrics (Cardiology), Lucille Packard Children’s Hospital, Stanford University Medical Center</td>
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<tr>
<td>10:30am</td>
<td><strong>Lean and Physicians: From Antecedents to Behavioral Support of Change</strong>&lt;br&gt;<strong>Pierre-Luc Fournier, PhD</strong>&lt;br&gt;Assistant Professor, Department of Information Systems and Quantitative Methods Business School, Université de Sherbrooke</td>
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<tr>
<td>11:15am</td>
<td><strong>Design and Validation of a Lean Leader Self-Assessment Tool</strong>&lt;br&gt;<strong>Laura Winner, DrPH</strong>&lt;br&gt;Senior Director - Lean Six Sigma Deployment, Armstrong Institute for Patient Safety and Quality, Johns Hopkins School of Medicine&lt;br&gt;<strong>Erica Reinhardt, MS, RD CLSSBB</strong>&lt;br&gt;Assistant Director - Lean Six Sigma Deployment, Armstrong Institute for Patient Safety and Quality, Johns Hopkins School of Medicine</td>
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<tr>
<td>12:00pm</td>
<td>Lunch (Ballroom)</td>
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<tr>
<td>1:00pm</td>
<td>Breakout Small Group Discussions with Presenters&lt;br&gt;- Patient Safety&lt;br&gt;- Physician Fulfillment and Wellbeing&lt;br&gt;- Behavioral Support of Change&lt;br&gt;- Lean Leader Self-Assessment Tool</td>
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<tr>
<td>1:45pm</td>
<td>Summary: Key Points from Each Small Group Discussion</td>
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Patients are still harmed far too often by the care they receive, even though many approaches have been identified that reduce harm rates. Dr. Bates will focus on the current state of patient safety, including some of the main problems that exist today, and then will discuss how tools and practices like Lean can be used to improve it.

Burnout is a specific, job-related phenomenon. Earlier investigations into the correlates of burnout focused on factors related to personal resilience and initial efforts to prevent or reduce burnout were primarily aimed at increasing individual personal resilience. Stanford has expanded their focus to promote and achieve improved professional fulfillment. Their Model accentuates the importance of a Culture of Wellness and Efficiency of Practice in promoting physician well being. Dr. Murphy will discuss examples of practice improvements that employ the principles of Lean thinking and how those improvements can promote physician well-being. Dr. Murphy will also discuss evidence that suggests that “Lean” improvements may actually increase burnout if implemented improperly by failing to promote a Culture of Wellness.
## Conference Program

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| 2:00pm     | Assessing Lean Implementation: The Lean Healthcare Implementation Self-Assessment Instrument (LHISI)  
Stephen Shortell, MBA, MPH, PhD  
Co-Director, Center for Lean Engagement & Research in Healthcare; Blue Cross of California Distinguished Professor of Health Policy and Management, Emeritus; University of California, Berkeley |
| 2:45pm     | Refreshment Break (adjacent to Mt. Vernon Square Room)               |
| 3:00pm     | Lean and Breakthrough Improvements in Healthcare  
Christie Ahn, MPH,  
School of Public Health, University of California, Berkeley  
Thomas Rundall, PhD,  
Henry J. Kaiser Professor of Organized Health Systems, Emeritus, University of California, Berkeley |
| 3:45pm     | Final Comments                                                       |
| 4:00pm     | Adjournment                                                          |

## About Us

The Center for Lean Engagement and Research in Healthcare (CLEAR) was launched in 2016 at the UC Berkeley School of Public Health with core support provided by Catalysis, Lean Enterprise Institute, Moss Adams, and ValueCapture.

**Our Vision**

The vision of CLEAR is to transform healthcare delivery by providing the knowledge to help organizations eliminate waste and create greater value resulting in the continuous improvement of patients’ outcomes and experience of care, population health, and reduced growth in the cost of care.

**Our Mission**

CLEAR’s mission is to conduct timely, relevant, and actionable research on lean whole system transformation initiatives in healthcare.

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**Our Team**

**Stephen M. Shortell, Ph.D., M.P.H., M.B.A., Co-Director,** is the Blue Cross of California Distinguished Professor Emeritus of Health Policy and Management at the School of Public Health, and Professor of the Graduate School at the University of California—Berkeley where he also directs the Center for Healthcare Organizational and Innovation Research (CHOIR). From 2002 to 2013 he served as Dean of the School of Public Health at Berkeley. A leading health care scholar, Dr. Shortell and his colleagues have received numerous awards for their research examining the performance of integrated delivery systems; the organizational factors associated with quality and outcomes of care; and the factors associated with the adoption of evidence-based processes for treating patients with chronic illness. He is currently conducting research on patient engagement and the performance of Accountable Care Organizations (ACOs). He is an elected member of the National Academy of Medicine and a recent recipient of the AHA/HRET TRUST Visionary Leadership Award.

**Thomas Rundall, Ph.D., Co-Director,** is the Henry J. Kaiser Professor Emeritus in the Division of Health Policy and Management at the University of California, Berkeley School of Public Health. From 2008 to 2010 he served as Executive Associate Dean of the School of Public Health at UC. Berkeley. Professor Rundall has published extensively across a broad array of topics in health care policy and management, including primary care, quality improvement, integration of health care services, hospital-physician relationships, health information technology, and evidence-based management. In 2005 Rundall was awarded the Filerman Prize by the Association of University Programs in Health Administration for his contributions to the field of health services management education, and in 2010 he was awarded the Berkeley Citation for distinguished achievement and notable service to the University of California at Berkeley. Professor Rundall has served on the boards of directors for John Muir Health, an integrated health care system, and On Lok, a program of all-inclusive care for the elderly.

**Janet C. Blodgett, M.Sc., Research Analyst/ Project Manager,** holds a Bachelor of Arts degree in Sociology from Boston University and a Master of Science degree in Social Policy (Research) from the London School of Economics and Political Science. She has over 10 years of research experience in data collection and management, data analysis, and project management (PMP certified), with a focus on systematic reviews and meta-analyses of interventions to diagnose and treat a range of mental health conditions and infectious diseases.
Elina Reponen, MD, PhD, Visiting Scholar is a specialist in Anesthesiology and Intensive Care with a PhD in Medical Science from the University of Helsinki, Finland. Elina has over 15 years of clinical experience, and she has been involved in implementing Lean management in her position as the Deputy Chief Physician of one of the OR departments at Helsinki University Hospital. Elina is joining CLEAR from 2019-2020 as a Visiting Scholar with a focus on contributing to high-quality research on the implementation of Lean in healthcare.

Christie Ahn, MPH holds a Master of Public Health in Health Policy and Management from the University of California, Berkeley and a Bachelor of Arts degree in Political Science from the University of Notre Dame. Before graduate school, she worked for over three years in medical group operations and performance improvement at Beacon Health System in South Bend, Indiana.

Noah Fourogi is currently a fourth year student at the University of California, Berkeley. He is studying Economics and intending on minoring in Public Health. He is most interested in learning about the intersection of healthcare systems and economics.

Recent publications from CLEAR include:
Use of Lean and Related Transformational Performance Improvement Systems in Hospitals in the United States: Results From a National Survey
S.M. Shortell, J.C. Blodgett, T.G. Rundall, and P. Kralovec
The Joint Commission Journal on Quality and Patient Safety 2018; 44:574-582. DOI: https://doi.org/10.1016/j.jcjq.2018.03.003.

Lean Management and U.S. Public Hospital Performance: Results From a National Survey
J. Po, T.G. Rundall, S.M. Shortell, J.C. Blodgett
Journal of Healthcare Management, forthcoming

Lean Action Research Learning Collaborative
Consists of 7 hospitals/health systems working together to conduct research on Lean in their organizations.

Annotated Bibliography
A comprehensive collection of empirical research studies and systematic reviews of Lean in healthcare. Regularly updated with recently published research. As of April 2019, there were 238 articles.

Thank you for attending!
We would love to hear your questions, comments, and feedback:

Stephen Shortell
shortell@berkeley.edu

Thomas Rundall
trundall@berkeley.edu

Janet Blodgett
janet.blodgett@berkeley.edu

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