The 6\textsuperscript{th} Annual Workshop on Health IT and Economics  
October 9-10\textsuperscript{th}, 2015  
Washington Court Hotel, 525 New Jersey Ave NW • Washington, DC 20001

### Friday Oct 9, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:00 am - 08:30 am</td>
<td>Breakfast and Opening Remarks</td>
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<tr>
<td>08:30 am - 09:00 am</td>
<td>Policy Keynote</td>
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<tr>
<td>09:00 am - 09:40 am</td>
<td>Quality Transparency Panel</td>
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<td>09:40 am - 10:00 am</td>
<td>Break</td>
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<tr>
<td>10:00 am - 10:40 am</td>
<td>Industry Keynote</td>
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<tr>
<td>10:40 am - 11:00 am</td>
<td>Break</td>
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<tr>
<td>11:00 am - 12:15 pm</td>
<td>Session 1 – Health IT’s Impact on Quality of Care</td>
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<tr>
<td>12:15 pm - 01:30 pm</td>
<td>Lunch</td>
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<tr>
<td>12:45 pm - 01:30 pm</td>
<td>Academic Keynote</td>
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<tr>
<td>01:30 pm - 02:45 pm</td>
<td>Session 2 – EMR and Reimbursement</td>
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<td>02:45 pm - 03:00 pm</td>
<td>Break</td>
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<tr>
<td>03:00 pm - 04:15 pm</td>
<td>Session 3 – Health IT Adoption</td>
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<td>04:15 pm - 04:30 pm</td>
<td>Break</td>
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<td>04:30 pm - 05:30 pm</td>
<td>Advanced Analytics in Care Delivery Panel</td>
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<tr>
<td>06:00 pm - 08:00 pm</td>
<td>Reception</td>
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### Saturday Oct 10, 2015

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<tr>
<td>08:30 am - 09:00 am</td>
<td>Breakfast</td>
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<tr>
<td>09:00 am - 10:00 am</td>
<td>Mobile Health Panel</td>
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<tr>
<td>10:00 am - 10:15 am</td>
<td>Break</td>
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<tr>
<td>10:15 am - 11:30 pm</td>
<td>Session 4 – Information and Health Services Efficiency</td>
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<tr>
<td>11:30 pm - 12:20 pm</td>
<td>Short Presentations</td>
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<td>12:20 pm - 01:00 pm</td>
<td>Awards Luncheon</td>
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<td>01:00 pm - 02:15 pm</td>
<td>Session 5 – Technology for the Social Good in Healthcare</td>
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<tr>
<td>02:15 pm - 03:05 pm</td>
<td>Social Media in Healthcare Panel</td>
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<tr>
<td>3:05 pm</td>
<td>Adjourn</td>
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The Workshop on Health IT & Economics is supported in part by a grant from the United States Agency for Healthcare Research and Quality (AHRQ)
# Program - Friday, October 9

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**Kate Goodrich**, Director, Quality Measurement and Value-Based Incentives Group, United States Centers for Medicare and Medicaid Services (CMS)

**Moderator**: Gordon Gao, University of Maryland

**Panelists**:
- Kate Goodrich, Director, Quality Measurement and Value-Based Incentives Group, United States Centers for Medicare and Medicaid Services (CMS)
- Robert Krughoff, President, Consumers CHECKBOOK/CSS
- Lynn Quincy, Associate Director, Consumers Union
- Christie Teigland, Senior Director of Statistical Research, Inovalon

**Glenn Tobin**, CEO of Crimson, The Advisory Board Company

**Session Chair**: Frank Limbrock, Northwestern

**Health IT and Ambulatory Care Quality**
- Carole Roan Gresenz, Scott Laugher, Amalia R. Miller, Catherine E. Tucker
- University of Virginia, MIT Sloan
- Discussant: Lorens Helmchen, George Washington University

**Heterogeneous Treatment Effect of Electronic Medical Records on Hospital Efficiency**
- Ruirui Sun
- City University of New York
- Discussant: Hilal Atasoy, Temple University

**Is Technology Eating Nurses? Staffing Decisions in Nursing Homes**
- Susan F. Lu, Huaxia Rui, Abraham Seidmann
- University of Rochester
- Discussant: Frank Limbrock, Northwestern University
**12:15 – 1:30**  
Lunch and Academic Keynote

**Jonathan Kolstad**, Assistant Professor, Haas Economic Analysis and Policy Group, University of California Berkeley, Chief Data Scientist, Picwell

**1:30 - 2:45**  
Session 2 – EMR and Reimbursement

Session Chair: **Nirup Menon**, George Mason University

**Indranil Bardhan**, Danish Saifee  
Univ of Texas at Dallas  
Discussant: **Sharon Tan**, National University of Singapore

Does the Adoption of EMR Systems Inflate Medicare Reimbursements?  
**Kartik K Ganju**, Hilal Atasoy, Paul A Pavlou  
Temple University  
Discussant: **Wendy Duan**, George Washington University

Does IT Enable Revenue Management in Hospitals?  
**Kangkang Qi**, Ranjani Krishnan, Matt Wimble, Jonas Heese  
Michigan State Univ, Univ of Michigan, Harvard Business School  
Discussant: **Nirup Menon**, George Mason University

**2:45 – 3:00**  
Coffee Break

**3:00 – 4:15**  
Session 3 – Health IT Adoption

Session Chair: **Niam Yaraghi**, the Brookings Institution

Do Hospitals Value Interoperability? Evidence from Health IT Vendor Choice  
**Sunita Desai**  
Harvard Medical School  
Discussant: **Colin Baker**, ASPE, U.S. Department of Health & Human Services

Testing Theories of Innovation Diffusion: Analysis of Physicians’ Adoption of Electronic Health Record  
**Marty Cohen**  
George Mason University, Kennell and Associates  
Discussant: **Dong-Gil Ko**, University of Connecticut

Vendor choice in Physician EMR Adoption: The Role of Network Effects  
Mariano Irace, **Frank Limbrook**  
Northwestern University  
Discussant: **Niam Yaraghi**, the Brookings Institution

**4:15 – 4:30**  
Break
Moderator: **Dongsong Zhang**, University of Maryland

Examining Integrated Performance in Healthcare Using Data-driven Clinical Pathways
**Yiye Zhang**, Rema Padman
Carnegie Mellon University

Predicting Inpatient Admissions from Triage Data: A Machine Learning Approach
Ralph Gross, **Idris Adjerid**, R Coulter
University of Notre Dame, Mendoza College of Business, Carnegie Mellon University

Telemedicine in Humanitarian Assistance and Disaster Relief
**Joyce Byrne**, Brendan Smith, Emaan Osman
The MITRE Corporation

Reasoning and Decision Making in Health Care Management of Diabetes Mellitus using as Framework Model Based Systems Engineering
**Iakovos M. Katsipis**, John S. Baras
University of Maryland

Leveraging Data Analytics to Improve Home Care Processes and Utilization Outcomes
**Gunes Koru**, Pooja Parameshwarappa, Dari AlHuwait
University of Maryland Baltimore County

Visual Social Media Analytics for Patient Centric Care
**Xiao Liu**, Bin Zhang, Anjana Susarla, Rema Padman, Hsinchun Chen
University of Arizona, Carnegie Mellon University, Michigan State University
Sonoma Restaurant and Wine Bar
223 Pennsylvania Avenue, SE Washington DC
Program – Saturday, October 10

8:30 – 9:00  Breakfast

9:00 – 10:00  Mobile Health Panel

Moderator: Raymonde Charles Y. Uy, National Library of Medicine

A Retrospective Review of the State and Trends of PDA, Smartphone and Tablet Use in US Hospitals
Raymonde Charles Y. Uy, Fabricio S. P. Kury, Paul A. Fontelo
National Library of Medicine

Considerations for the Creation and Review of Digital Health Cohorts
Thomas Martin
HIMSS North America

Policy: The Missing Piece of Patient Engagement
Keara McKenna Diamond, Kristina Sheridan
The MITRE Corporation

There’s an App for that: Addressing the Handoff Problem in Healthcare using Mobile
Idris Adjerid, Ralph Gross, R Craig Coulter
University of Notre Dame, Mendoza College of Business, Disruptive Robotics, LLC, Carnegie Mellon

Lack of Comprehensive Cost Evaluations in Mobile Technology Integration Studies is a Barrier to Value
Creation in Cancer Care Delivery
John D. Calhoun, Sriram Iyengar, Thomas Feeley
University of Texas Health Science Center

10:00 – 10:15  Break

10:15 – 11:30  Session 4 – Information and Health Services Efficiency

Session Chair: Heiko Gewald, Neu-Ulm University of Applied Sciences and UCLA

An Empirical Analysis of the Financial Benefits of Health Information Exchange in Emergency Departments
Niam Yaraghi
The Brookings Institution
Discussant: Thomas Martin, HIMSS

The Impact of Health Information Exchanges on Emergency Department Length of Stay
Turgay Ayer, Mehmet Ayvaci, Zeynal Karaca, Jan Vlachy, and Herbert S. Wong
Georgia Tech, University of Texas at Dallas, AHRQ
Discussant: Jiban Khuntia, University of Colorado

Impact of Organizational Usage Experience on Service Operation Efficiency: A Study of Online Care Delivery
Changmi Jung, Rema Padman, Linda Argote, Ateev Mehrotra
Johns Hopkins, Carnegie Mellon Univ, Harvard University
Discussant: Heiko Gewald, Neu-Ulm University of Applied Sciences and UCLA
11:30 – 12:20  Short Presentations

Session Chair: KZ Zhang, University of Maryland, College Park

Workload Reduction Through Usability Improvement of Hospital Information, Systems – The Case of Order Set Optimization
Daniel Gartner, Yiye Zhang and Rema Padman
Carnegie Mellon University

Fostering Patient Informed Consent to Sharing Personal Health Information: A Field Experiment
Mohamed Abdelhamid, Raj Sharman, Ram Bezawada
University of Buffalo

Impediments to the adoption and scalability of mHealth interventions in Burundi
Patrick Ndayizigamiye
University of KwaZulu-Natal

The Effect of Previous Work Experience on eHealth Adoption of the Elderly
Robert Rockmann, Heiko Gewald
Hochschule Neu-Ulm University of Applied Sciences

The Impact of Online Ratings and Reviews on New Patient Referrals
Anton Ivanov, Ram Bezawada, Raj Sharman
University of Buffalo

Exploring Financial Incentives to Improve Medication Adherence
Alan Yang, Upkar Varshney
Georgia State University

12:20 – 1:00  Awards Luncheon

1:00 – 2:15  Session 5 – Technology for the Social Good in Healthcare

Session Chair: Haijing Hao, University of Massachusetts

Using Mobile Messaging to Leverage Social Connections for the Social Good: Evidence from a Large-scale Randomized Field Experiment
Tianshu Sun, Gordon Gao, Ginger Zhe Jin
University of Maryland, College Park
Discussant: Emilia Simeonova, Johns Hopkins University

Show Me the Way To Go Home: An Empirical Investigation of Ride Sharing and Alcohol Related Motor Vehicle Homicide
Brad Greenwood, Sunil Wattal
Temple University
Discussant: Michel Boudreaux, University of Maryland

A Hidden Markov Model of Mental Health Dynamics of Breast, Cancer Patients using Data from m-Health Applications
Sanghee Lim, Juntae Kim, Byungtae Lee, Jongwon Lee
Johns Hopkins University, KAIST Business School, Asian Medical Center
Discussant: Haijing Hao, University of Massachusetts
Moderator: **Jeffrey McCullough**, University of Minnesota

Identifying Novel Adverse Drug Events from Health Social Media Using Distant Supervision
**Xiao Liu**, Hsinchun Chen
University of Arizona

Privacy Concerns and Information Revelation in Online Patient Communities
Adel Yazdanmehr, Fereshteh Ghahramani, **Jie (Jennifer) Zhang**
University of Texas at Arlington

imHealthy: A Comprehensive Health Assessment and Intervention System for People in Medically Underserved Communities
**Leming Zhou**, Valerie Watzlaf, Paul Abernathy
University of Pittsburgh, FOCUS Pittsburg

Asthma Surveillance Using Social Media Data
**Wenli Zhang**, Sudha Ram, Mark Burkart, Max Williams and Yolande Pengetenze
University of Arizona

Managing Paradoxical Tensions to Improve Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews
**Feng Mai**, Zhe Shan, Dong-Gil Ko
Stevens Institute of Technology, University of Cincinnati

Do online communities help patients to achieve health goals? The role of sub-group cultures and progression spiral effects
Nadee Goonawardene, **Sharon Swee-Lin Tan**
National University of Singapore

3:05 pm **Summary and Adjourn**