



ACCREDITED CONTINUING EDUCATION

# Advancing Analytics for Children's Hospitals

November 11-12, 2021

Children's Hospital Colorado  
Anschutz Medical Campus

Hosted Virtually

Provided by: Analytics Resource Center



Children's Hospital Colorado



Affiliated with  
University of Colorado  
Anschutz Medical Campus

Children's Hospital Colorado complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. • ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-720-777-1234. • CHÚ Ý: Nếu bạn nói Tiếng Việt, có các dịch vụ hỗ trợ ngôn ngữ miễn phí dành cho bạn. Gọi số 1-720-777-1234.

# Advancing Analytics for Children's Hospitals Conference

## Overview and Objectives

This conference will explore ways to address the unique analytics challenges pediatric hospitals face and will focus on advanced and innovative analytics solutions for pediatric hospitals. Clinicians, researchers, and experts who are building analytics programs will present best practices with data science, data governance, self-service competencies, and more.

There are four learning tracks focused on Leadership, Operational, Data Science and Research.

Following the presentations, attendees should be able to:

- Describe ways to apply innovative analytical approaches to support predictive or prescriptive analytics.
- Describe analytic skills that focus on computational thinking, critical assessment, and application of analytic methods and approaches.
- Collaborate with other disciplines and faculty across organizations.
- Understand how to use data in everyday practice and illustrate the importance of various forms of data (structured, unstructured).
- Express and translate the importance of embracing multiple methodological approaches in the emerging fields of data science and bioinformatics to other researchers, staff, students, and clinicians.

## Continuing Education Credit

Medical

Children's Hospital Colorado is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Children's Hospital Colorado designates this Other activity (Internet Live Course) for a maximum of 5 *AMA PRA Category 1 Credits*™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

A certificate of attendance will be available upon completion of the online evaluation for all attendees.

## Presenters & Faculty

### **Brianna Barry, MHA, CLSSGB**

Senior Project Manager  
Boston Children's Hospital

### **Sara Deakyne Davies, MPH**

Director | Research Informatics & Data Science | Analytics Resource Center  
Children's Hospital Colorado

### **Ashley Doherty**

IT Manager  
Boston Children's Hospital

### **Matt Dye, MPH, MS**

Analytics Lead  
Children's Hospital Philadelphia

### **Brad Ewald, MBA**

Manager | Data Warehouse/BI Program Analytics | Analytics Resource Center  
Children's Hospital Colorado

### **Katie Gallagher, MA**

Sr. Continuous Improvement Analyst  
Boston Children's Hospital

### **Jonathan Geis**

Patient Experience Analyst  
Dayton Children's Hospital

### **Tyler Gorham, PhD, MPH**

Data Scientist  
Nationwide Children's Hospital

### **Dionne Graham, PhD**

Director | Evaluation and Analytics, Program for Patient Safety & Quality  
Boston Children's Hospital

### **Mounika Guntu**

Data Scientist II  
Nationwide Children's Hospital

### **Phillip Hahn, MPH**

Biostatistician II  
Boston Children's Hospital

### **Shannon Haymond, PhD**

Vice Chair for Computational Pathology  
Lurie Children's Hospital

### **Syed-Amad Hussain, B.S.E.**

Associate Data Scientist  
Nationwide Children's Hospital

### **Roderick Jones, MPH**

Director of Clinical Analytics  
Lurie Children's Hospital

### **Genna Kreher, MPH, CPHQ**

Data Literacy Program Manager  
Children's Hospital Philadelphia

**Carly Milliren, MPH**  
 Biostatistician IV  
 Boston Children's Hospital

**Suresh Sampangiraman**  
 Senior Director  
 Children's Hospital Philadelphia

**Tyler Moon, B.Sc. ISE, LSSGB**  
 Sr. System Reporting Specialist  
 Lurie Children's Hospital

**Mark Sanders**  
 Analytics and Technology Manager  
 Boston Children's Hospital

**Annie O'Connor**  
 Continuous Improvement Consultant  
 Boston Children's Hospital

**Patrick Sullivan**  
 Data Analyst  
 Children's Hospital Philadelphia

**Issac Parakati, MS**  
 Senior Statistician  
 Lurie Children's Hospital

**Gordon Teubner, AAS**  
 IT Architect Sr | Analytics Resource Center  
 Children's Hospital Colorado

**Jin Peng, MD, MS, PhD**  
 Data Scientist II  
 Nationwide Children's Hospital

**Anthony Wong**  
 Data Scientist  
 Lurie Children's Hospital

**Mihail Samnaliev, PhD**  
 Health Economist, Assistant Professor | Department of  
 General Pediatrics  
 Boston Children's Hospital

## Agenda

Thursday, November 11, 2021						
Eastern	Central	Mountain	Pacific	Presenter	Event	Tracks
11:00	10:00	9:00	8:00	Children's Hospital Colorado Gordon Teubner, AAS - IT Architect Sr   Analytics Resource Center	Census Forecasting	Leadership Operational Data Science
				Boston Children's Hospital Mihail Samnaliev, PhD - Health Economist, Assistant Professor   Department of General Pediatrics	Using and Improving Hospital Data to Conduct Economic Evaluations	Research
11:30	10:30	9:30	8:30	Dayton Children's Hospital Jonathan Geis - Patient Experience Analyst	Enhancing Patient Experience Qualitative Data	Leadership Operational Data Science
				Nationwide Children's Hospital Mounika Guntu - Data Scientist II	Identifying the factors influencing patients' telehealth visit satisfaction: Survey validation through a structural equation modeling approach	Research
<b>Break (60-minutes)</b>						
13:00	12:00	11:00	10:00	Dayton Children's Hospital Jonathan Geis - Patient Experience Analyst	Using Visualization Tools to Present Patient Experience Data	Leadership Operational
				Lurie Children's Hospital Anthony Wong - Data Scientist	Identifying Peanut Recommendation in Clinical Notes using Natural Language Processing	Data Science Research
13:30	12:30	11:30	10:30	Boston Children's Hospital Mark Sanders - Analytics and Technology Manager Katie Gallagher, MA - Sr. Continuous Improvement Analyst Annie O'Connor - Continuous Improvement Consultant Ashley Doherty - IT Manager	Powering Analytics through Network Building and Knowledge Sharing	Leadership Operational
				Nationwide Children's Hospital Jin Peng, MD, MS, PhD - Data Scientist II	Application of Machine Learning to Predict Patient No- Shows in an Academic Pediatric Neurology Clinic	Data Science Research

**Thursday, November 11, 2021**

Eastern	Central	Mountain	Pacific	Presenter	Event	Tracks
<b>Poster Session (60-minutes) (No CME Credit)</b>						
14:00	13:00	12:00	11:00	Children's Hospital Philadelphia Patrick Sullivan - Data Analyst	Improving User Experience in Data Rich Operational Dashboards	Leadership
				Lurie Children's Hospital Issac Parakati, MS Public Health - Senior Statistician	Advancing Analytics in a Clinical Department: The Role of Business Intelligence Dashboards	Leadership
				Lurie Children's Hospital Roderick Jones, MPH - Director of Clinical Analytics	Repurposing an epidemiologic statistic to rank areas of potential impact for hospital quality and safety interventions	Operational
				Boston Children's Hospital Carly Milliren, MPH - Biostatistician IV	Time to readmission among newborns: time for a reappraisal? A comparison of methods examining crude and adjusted time to readmission in the first year for infants with neonatal opioid withdrawal syndrome (NOWS) vs. infants without NOWS	Research
				Children's Hospital Colorado Sara Deakyne Davies, MPH - Director   Research Informatics & Data Science   Analytics Resource Center	Response to COVID Public Health Orders for Clinical Research	Research
				Boston Children's Hospital Phillip Hahn, MPH - Biostatistician II	Creating mother-infant dyads using data from the Pediatric Health Information System: an example examining associations between maternal and infant factors on birth utilization for infants diagnosed with neonatal opioid withdrawal syndrome	Research
<b>Break (30-minutes)</b>						
15:30	14:30	13:30	12:30	Boston Children's Hospital Brianna Barry, MHA, CLSSGB - Senior Project Manager	Design and Implementation of an Institutional Continuous Readiness Dashboard	Leadership
				Children's Hospital Philadelphia Matt Dye, MPH, MS - Analytics Lead	Advancing USNWR Analytical Maturity at CHOP	Operational
				Nationwide Children's Hospital Syed-Amad Hussain, B.S.E - Associate Data Scientist	Natural Language Processing Aided Cohort Identification from Free-Text Clinical Notes	Data Science Research
16:00	15:00	14:00	13:00	<b>Complete online evaluations and adjourn</b>		

**Friday, November 12, 2021**

Eastern	Central	Mountain	Pacific	Presenter	Event	Tracks
11:00	10:00	9:00	8:00	Boston Children's Hospital Dionne Graham, PhD - Director   Evaluation and Analytics, Program for Patient Safety & Quality	Development of institutional standard methods and tools for assessing equity of care at a pediatric healthcare institution	Leadership
				Lurie Children's Hospital Tyler Moon, B.Sc. ISE, LSSGB - Sr. System Reporting Specialist	Mitigating Surgical Flow Failures with Discrete Event Simulation Modeling during COVID-19	Data Science
11:30-12:15	10:30-11:15	9:30-10:15	8:30-9:15	Children's Hospital Philadelphia Genna Kreher, MPH, CPHQ - Data Literacy Program Manager	DnA University & Analytics Concierge Team	Leadership Operational Data Science Research
<b>Break (45-minutes)</b>						
13:00	12:00	11:00	10:00	Children's Hospital Philadelphia Suresh Sampangiraman - Senior Director	Crowdsourcing Healthcare Enterprise Data Model	Leadership
				Children's Hospital Colorado Brad Ewald, MBA - Manager   Data Warehouse/BI Program Analytics   Analytics Resource Center	Leveraging Data Virtualization	Operational
				Nationwide Children's Hospital Tyler Gorham, PhD, MPH - Data Scientist	Developing the Deterioration Risk Index: A Simulation-Based Approach to Bridging the Machine Learning Algorithm Implementation Gap	Data Science
13:30	12:30	11:30	10:30	Lurie Children's Hospital Shannon Haymond, PhD - Vice Chair for Computational Pathology	Optimized Assignment of Phlebotomists to Balance Workload for Inpatient Blood Collection Requests	Leadership Operational
14:00	13:00	12:00	11:00	<b>Complete online evaluations and adjourn</b>		

## Registration

Registration is [Online](#)  
<https://ce.childrencolorado.org>

Register online by November 9.

There is no fee to participate, however, registration is required to complete the evaluation for professional continuing education credit.

### **Cancellation Policy**

The Planning Committee reserves the right to alter the agenda or cancel the conference in the event of an unforeseen circumstance, or if the minimum registration is not attained by November 9.