

**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** 





# **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*  $^{\text{TM}}$ . 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

#### 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

#### Genna Kreher, MPH, CPHQ

Data Literacy Program Manager Children's Hospital Philadelphia

#### Carly Milliren, MPH

Biostatistician IV Boston Children's Hospital

#### Tyler Moon, B.Sc. ISE, LSSGB

Sr. System Reporting Specialist Lurie Children's Hospital Issac Parakati, MS

Senior Statistician Lurie Children's Hospital

Jin Peng, MD, MS, PhD

Data Scientist II

Nationwide Children's Hospital

Justin Pestrue, MA

Director | Quality Analytics University of Michigan Health

Mihail Samnaliev, PhD

Health Economist, Assistant Professor | Department of General Pediatrics Boston Children's Hospital Suresh Sampangiraman

Senior Director

Children's Hospital Philadelphia

**Patrick Sullivan** 

Data Analyst

Children's Hospital Philadelphia

**Gordon Teubner, AAS** 

IT Architect Sr | Analytics Resource Center

Children's Hospital Colorado

**Anthony Wong** 

Data Scientist

Lurie Children's Hospital

## **Agenda**

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

	Thursday, November 11, 2021						
Eastern	Central	Mountain	Pacific	Presenter	Event	Tracks	
14:00	13:00	12:00	11:00	Children's Hospital Philadelphia Patrick Sullivan - Data Analyst Lurie Children's Hospital Issac Parakati, MS Public Health - Senior Statistician Lurie Children's Hospital Issac Parakati, MS Public Health - Senior Statistician  Lurie Children's Hospital Issac Parakati, MS Public Health - Senior Statistician  Boston Children's Hospital Carly Milliren, MPH - Biostatistician IV Children's Hospital Colorado Sara Deakyne Davies, MPH - Director   Research Informatics & Data Science   Analytics Resource Center  Boston Children's Hospital Phillip Hahn, MPH - Biostatistician II	Poster Session (No CME Credit)  Improving User Experience in Data Rich Operational Dashboards  Advancing Analytics in a Clinical Department: The Role of Business Intelligence Dashboards  Repurposing an epidemiologic statistic to rank areas of potential impact for hospital quality and safety interventions  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  Response to COVID Public Health Orders for Clinical Research  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	Leadership  Leadership  Operational  Research  Research	
				Break (30-minu	tes)		
15:30	14:30	13:30	12:30	Boston Children's Hospital Brianna Barry, MHA, CLSSGB - Senior Project Manager Children's Hospital Philadelphia Matt Dye, MPH, MS - Analytics Lead	Design and Implementation of an Institutional Continuous Readiness Dashboard  Advancing USNWR Analytical Maturity at CHOP	Leadership 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	Co	mplete online evaluations and adjourn		

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		
				University of Michigan Health Justin Pestrue, MA - Director   Quality Analytics	The Analytics of Addressing Sepsis	Operational		
				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		
	Break (45-minutes)							
13:00	12:00	11:00	10:00	Children's Hospital Philadelphia Suresh Sampangiraman - Senior Director Children's Hospital Colorado Brad Ewald, MBA - Manager   Data Warehouse/BI Program Analytics   Analytics Resource Center Nationwide Children's Hospital	Crowdsourcing Healthcare Enterprise Data Model  Leveraging Data Virtualization  Developing the Deterioration Risk Index: A Simulation-	Leadership  Operational		
13:30	12:30	11:30	10:30	Tyler Gorham, PhD, MPH - Data Scientist Lurie Children's Hospital Shannon Haymond, PhD - Vice Chair for Computational Pathology	Based Approach to Bridging the Machine Learning Algorithm Implementation Gap  Optimized Assignment of Phlebotomists to Balance Workload for Inpatient Blood Collection Requests	Data Science  Leadership Operational		
14:00	13:00	12:00	11:00	Complete online evaluations and adjourn				

## Registration

Registration is <u>Online</u> https://ce.childrenscolorado.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.