

**Academic Pediatric Association
Research Scholars Program
Cohort 1 2013-2016**



Sarah Armstrong, MD

Sarah earned her medical degree at the University of Virginia School of Medicine. She completed her pediatric residency training at the Children's Hospital of Philadelphia. Following this, she practiced primary care pediatrics at a community-based urban health center in Baltimore, MD for three years, where she became interested in the epidemic of childhood obesity. She joined faculty at Duke Children's in 2006, where she founded Healthy Lifestyles, a multidisciplinary family-based treatment clinic. Sarah co-directs a childhood obesity fellowship for clinician/researchers. She teaches motivational interviewing in the Duke medical school curriculum, is a course director for a childhood obesity medical student and resident elective, and supervises the community portion of the Duke pediatrics residents training. She serves on the board of directors for North Carolina's Eat Smart, Move More initiative. She is the recipient of the NC AAP's 2011 outstanding advocate for children award. In addition to the clinical care of obese children, Sarah is interested in improving pediatricians' community engagement to affect environments of care. As such, she is the team lead for the Durham Healthy Weight QI Collaborative, a cross-sector community-clinic partnership funded by the Robert Wood Johnson Foundation and the Agency for Healthcare and Research Quality, administered by NICHQ. Her research interests include the development of more effective office-based and community-based obesity treatment.

Project

Description:

Augmenting childhood obesity treatment through provider-to-parent text messaging: HLP4U (Healthy Lifestyles Program for You)

Outpatient childhood obesity treatment has limited efficacy. This randomized controlled clinical trial aims to discover whether we can improve the health habits of parents of obese 5-12 year old children enrolled in the Duke Healthy Lifestyles Program by delivering educational and supportive text messages to the parent's mobile device.



Eric Biondi, MD

I graduated medical school at Temple University in 2008 and completed my pediatrics residency at the University of Rochester in 2011 where I subsequently accepted a faculty position as a pediatric hospitalist. In addition to my clinical responsibilities, I have won awards for teaching and have taken a very active role in clinical research. I have led several national projects and am involved in the Pediatric Research in Inpatient Settings (PRIS) and Value in Inpatient Pediatrics (VIP) networks. My research focuses on children hospitalized with common illnesses, and my areas of interest include minimizing unnecessary diagnostic testing, medical education as it relates to patient outcomes and common management techniques such as the "rule out sepsis evaluation".

Project **Description:**
Incidence, Epidemiology, Resistance Patterns and Contamination Costs of Suspected Serious Bacterial Infection in Previously Healthy Febrile Infants

My project is titled "Incidence, Epidemiology, Resistance Patterns and Contamination Costs of Suspected Serious Bacterial Infection in Previously Healthy Febrile Infants". Using direct abstraction from the electronic medical records at multiple institutions, we are attempting 1) to determine the incidence, epidemiology, and antibiotic resistance patterns of true positive and false positive bacteriologic culture results obtained in previously healthy, febrile infants < 90 days old with suspected SBI; 2) to

assess the impact that bacterial contamination has on length of stay (LOS) and antibiotic dosing; and 3) to develop a novel variable mapping procedure that will be partially portable to EMRs at other institutions.



Paul Carbone, MD

Dr. Carbone is a general pediatrician with an interest and experience in the area of autism spectrum disorder (ASD) and related developmental disabilities. He currently holds the position of Associate Professor of Pediatrics and arrived at the University of Utah in 2006. His general pediatric practice is within the University of Utah Neurobehavior HOME Program, a lifespan clinic that provides comprehensive medical and mental health services for individuals with developmental disabilities. He is a current member of the Council on Children with Disabilities Autism Subcommittee of the American Academy of Pediatrics. Dr. Carbone has lectured extensively both locally and nationally around the topic of ASD and he is the co-editor of the book *Autism Spectrum Disorders: What Every Parent Needs to Know*, published by the American Academy of Pediatrics. His research interest is in the area of primary medical care for children with ASD and other developmental disabilities.

| Project | Description: |
|---|-----------------|
| <i>Ambulatory Care Sensitive Hospitalizations Among Children with Autism Spectrum</i> | <i>Disorder</i> |

Hospitalization for "ambulatory care sensitive conditions" (ACSCs) refers to medical conditions for which high quality outpatient care can potentially prevent the need for hospitalization and is a measure of access to appropriate primary health care. Families of children with autism spectrum disorder (ASD) report higher rates of unmet health care needs, lower levels of satisfaction with outpatient services, and are less likely to have a medical home, a model of care that that has been shown to reduce hospitalization. The purpose of this study is to describe the prevalence of

ACSCs and associated characteristics of hospitalized children with ASD and compare them with the prevalence of the same diagnoses in two cohorts of hospitalized children: those with other developmental disabilities (DD) and those without ASD or DD (No ASD/DD) using data from the Kids' Inpatient Database (KID).



Jeffrey Colvin, MD

Dr. Colvin obtained his undergraduate degree in public health with honors from the Johns Hopkins University before graduating from Columbia University School of Law, where he was a three time Stone Scholar. He earned his medical degree from the Medical College of Georgia, and then completed his pediatric residency at the combined program of Boston Medical Center (Boston University) and Children's Hospital Boston (Harvard), where he received the Tesoriero-Oglesby Award for Community Pediatrics. He is currently an Associate Professor of Pediatrics at the University of Missouri-Kansas City School of Medicine and pediatric hospitalist at Children's Mercy Hospitals and Clinics (CMH) in Kansas City, Missouri. Since 2007, he has served as the medical director of the CMH Legal Aid Referral Program which he helped to establish and which has gained national attention for its scope of service and innovative approach to legal issues related to health disparities. Dr. Colvin chairs the Kansas chapter of the Injury, Violence, and Poison Prevention Committee of the AAP and is active in the community, serving on the board of directors of numerous non-profit organizations. He has published and lectured regionally and nationally on the relationship of law, poverty, and child health.

Project Description:
Characterization of the Inpatient Admission of Low Income Children

Socioeconomic status (SES) is inversely related to mortality and health status in both children and adults: the higher an individual's SES, the less

likely illness and death. Medical centers have developed programs to reduce childhood health disparities based upon SES. These interventions are typically in large, urban academic medical centers. However, the location of inpatient admissions for low income children is unknown. As a result, it is unknown if the location of interventions to address disparities in low income children match where those children are hospitalized. In addition, it is unknown if downturns in local macroeconomic conditions acutely impact the health of low income children, leading to associated increases in hospital admissions. This project will use the HCUP KID database to examine any potential associations between patient socioeconomic status and hospital characteristics (e.g., teaching status, children's hospital) for pediatric inpatient admissions and how those associations have changed over time and in relation to local macroeconomic conditions.



J. Michael Connors, MD

I am the Associate Director of Pediatric Pain and Palliative Care at Connecticut Children's Medical Center. I took this role last year after 10 years of experience in founding and developing a highly successful pediatric procedural sedation service in Knoxville, TN. My current role involves the oversight and development of the pediatric sedation service as well as participating in acute pain consultations. My past experiences have included leadership role in local, state and national organizations related to improving the care of children in the emergency department and around procedures. Through an AHRQ grant, I led a consensus conference of national experts on defining quality in pediatric sedation and the "white paper" from this meeting will be published by the end of 2014. From this work, I was awarded the 2013 Society for Pediatric Sedation Joseph P. Cravero for leadership within the field of pediatric sedation.

Project

Description:

Approach to Sedation for Brainstem Auditory Evoked Response Testing

of Children: variation and impact on hospital charges

The objective of my study is to describe the variation in the approach to sedation and to examine the impact of this variation on cost. For our test, we will examine brainstem auditory evoked responses. Through my work in pediatric procedural sedation I am aware of the great variation in the approach to various procedures and tests. This variation is a clinical challenge and also I believe has a significant impact on the costs associated with procedures. Therefore, my goal is to utilize data from the Children's Hospital Association, PHIS data, to identify this variation across these hospitals and identify the impact on cost. My goal with this study is to continue to seek best practice, reduce variation and promote safe and cost effective care around procedures.



Lauren Destino, MD

I am a Pediatric Hospitalist at Lucile Packard Children's Hospital (LPCH), Stanford University. I am the assistant medical director for our hospitalist group. I have been a co-Investigator on the IPASS (IPE-PRIS Accelerating Safe Sign-Outs) study funded by the NIH to assess the effect of a resident handoff bundle on medical errors and adverse events. I am also involved in a number of quality and process improvement related activities at LPCH and developed the curriculum for a required quality improvement rotation for third year residents which I currently direct.

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| Project | Description: |
| <i>Resident work load and direct patient care time: What are factors associated with increased time?</i> | |

Despite the importance of the patient and family interaction, there is evidence that time spent by residents in direct patient care is declining. I am interested in the factors that may be associated with increased time in this important area. I will be examining the time motion data of daily

pediatric resident work life gathered from nine pediatric institutions across the United States as part of the I-PASS (IIPE-PRIS Accelerating Safe Sign-outs) study. I will be exploring differences in hospital, team, physician and patient level factors and how those differences may be associated with increased or decreased time in direct patient care.



Keely Dwyer-Matzky, MD

Keely Dwyer-Matzky, MD is an Assistant Professor in Medicine and Pediatrics at the University of Rochester. She is an Internal Medicine and Pediatric hospitalist at Highland Hospital and The Golisano Children's Hospital at Strong. Her interests include transitioning adolescent patients to adult oriented medicine, patient safety, resident education and safe transitions from the hospital. At the 2012 SHM National Conference she helped lead a workshop on demystifying the care of adults with chronic diseases of childhood. She has helped co-chair the Transition of Care Committee for the Children's Hospital, that included clinical faculty, staff and parent advocates. The committee focused on improving the education of adolescents about transitioning to adult oriented health care. In addition, she sits as a physician representative on the Highland Hospital Patient Safety Committee. Dr. Dwyer-Matzky also has an interest in research and is an Academic Pediatric Association Research Scholar. She was the Rochester site co-investigator and study coordinator for a multi-institutional study to implement a formal nighttime teaching curriculum within a pediatric residency program.

| Project | Description: |
|---|--------------|
| <i>Adolescent to Adult Oriented Health Care Transition Survey</i> | |

Over the last 40 years, survival rates of children born with chronic illness or severely disabling health conditions have increased dramatically due to innovations in medical care and technology; current life expectancy surpasses 20 years in more than 90% of such patients. This has yielded

a growing cohort of adolescents with chronic diseases of childhood who require adequate transition from pediatric-oriented to adult-oriented medical services. Outcomes research in this area supports use of patient education programs to improve medical follow-up and to decrease acute and chronic complications of chronic disease in this patient population. The purpose of this study is to assess the hospitalized adolescents' baseline knowledge on the transition of care to adult providers and to determine if an educational video viewed during an inpatient stay affects their perception of knowledge, attitudes and participation in transition planning using sequential surveys at baseline, after intervention during hospitalization and 1 month after hospital discharge.



Mary Greiner, MD, MS

Mary Greiner, MD, MS, is a child abuse pediatrician who is doing clinical research in foster care health. She is studying disparities of foster care health as well as the impact of interventions, such as specialized care and focused screenings.

Project

Description:

Infectious Disease Screening for Children in Foster Care

What is the impact of implementation of current American Academy of Pediatrics recommendations for screening for infectious disease in children entering foster care?

-What is the prevalence of syphilis, hepatitis B, hepatitis C, tuberculosis, and HIV in children entering foster care?

-What are the risk factors for children entering foster care who will have syphilis, hepatitis B, hepatitis C, tuberculosis, and HIV?



Gabrielle Zimbric Hester, MD

Gabrielle Hester received her MD from the University of Wisconsin-Madison, completed pediatrics residency at the University of Utah and is in the midst of a pediatric hospital medicine fellowship at the University of Utah. She has a variety of academic interests including health services research and quality improvement.

Project Description:
Outcomes of Dual Antibiotic Use for Pediatric Skin and Soft Tissue Infections Across a Large Integrated Healthcare System

Her APA Research Scholars Program project is analyzing variation in management of a common pediatric condition across a large health system in Utah. The goal is to use results of this project to inform a care process model to be implemented across the system with subsequent study of resultant patient and hospital outcomes.



Brian Knox, MD

Dr. Knox completed his undergraduate training at University of Kentucky and received a BS in Biology and a BA in Chemistry in 2002. Following that he attended the University of Kentucky College of Medicine and received his MD degree in 2006. He graduated with distinction and was inducted into AOA (Alpha Omega Alpha Medical Honor Society) during medical school. He then moved to Tampa in 2006, did his residency training in Internal Medicine & Pediatrics, and completed residency in June 2010. He has been an Assistant Professor at the USF Morsani College of Medicine since that time. His patient care interests include

primary care in both general pediatrics, and general internal medicine. Other patient care interests include treatment of overweight and obesity as well as eating disorders for persons of all ages.

Project

Description:

Improving Health Outcomes with Psychological Evaluations (IHOPE)

Overweight and obesity are growing problems affecting both the adult and pediatric populations in the United States. Cognitive behavioral therapy (CBT) has shown promise in positively impacting weight and weight-related behaviors in the current literature. There is limited data on the use of this strategy in the primary care setting. This project aims to determine the impact of implementing CBT in the primary care setting to improve weight-related behaviors, and in turn weight status, in the adolescent population.



JoAnna Leyenaar, MD, MPH

JoAnna Leyenaar, MD, MPH, is Assistant Professor of Pediatrics at Tufts University School of Medicine and a pediatric hospitalist in the Division of Pediatric Hospital Medicine at Floating Hospital for Children, Tufts Medical Center. Her research interests include comparative effectiveness of treatments for common pediatric conditions, transitional care for the inpatient to outpatient setting, outcomes following hospital admission for children with complex chronic medical conditions, and global child health and development. She is recipient of a Tufts Clinical and Translational Science Institute KM1 Award in Comparative Effectiveness Research

Project

Description:

"Nothing About Me Without Me": a systematic examination of patients' and families' perspectives regarding their transition home following hospital discharge.

Transitions home from hospital are established "at risk" periods. Children with chronic medical conditions are at particular risk, having high rates of medication errors and medication-related injuries as well as hospital readmissions. Recognizing the importance of hospital to home transitions, national physicians' organizations developed a Transitions of Care Consensus Policy Statement to address quality gaps. A defining principal of the Policy Statement is patient-centeredness, and the Policy Statement recommends that patients and families be involved in planning their discharge from the hospital and that a section of the discharge record be dedicated to communicating their preferences, priorities, goals and values. However, very few studies among adults, and none among pediatric patients, have explored the scope of patients' and families' perspectives. To our knowledge, there are no established methods to facilitate inclusion of families' perspectives in the discharge record. The overall goal of our research is to establish specific priority issues that should be discussed with parents of children with chronic medical conditions to ascertain their priorities, preferences, goals and values, establishing a research base necessary to incorporate these factors into the discharge record.



Rebecca Rosenberg, MD, MPH

Dr. Rosenberg is Assistant Professor of Pediatrics at NYU School of Medicine and is part of the pediatric hospitalist group at NYU Langone Medical Center. As a hospitalist, Dr Rosenberg focuses on safety and quality improvement, pain management, and clinical translation of evidence-based medicine. Current research includes parent involvement in postoperative pain management and impact of post-operative spinal fusion guidelines. She is interested in improving patient care quality and safety and is also an assistant epidemiologist in the NYULMC Infection Prevention and Control Department. Her past research has focused on autism epidemiology and international neonatal health, in countries like India and Bangladesh. She completed her residency at Yale-New Haven

Children's Hospital and earned an MPH at the Johns Hopkins Bloomberg School of Public Health.

Project Description:
Antecedents and Impact of Parent Anxiety in Pediatric Postoperative Pain

As an APA Research Scholar, Dr Rosenberg is investigating parent anxiety in the context of postoperative pain management of their young children (< 2years). Specifically, she is conducting a prospective study about the psychological factors that contribute to parent anxiety as well as the correlation of parent anxiety with child pain. The sample population are young children undergoing cleft-lip/palate repair at NYULMC. Dr Rosenberg plans on using this data to develop a targeted, effective intervention to decrease parent anxiety and lessen child discomfort around surgical procedures. Dr Rosenberg's excellent local mentor is Dr Alan Mendelsohn (NYU SOM) and insightful national mentor is Dr Chris Feudtner (Children's Hospital of Philadelphia).



Christopher Russell, MD

Christopher J. Russell, MD was born and raised in Los Angeles, CA. He completed his undergraduate degree in Psychology and Biology at Harvard University, where he studied the interaction of sexual orientation and eating disorders in men. He remained at Harvard Medical School for his graduate medical work; during this time, he conducted research in HIV and sexually transmitted infections in sexual minorities and served as one of the co-chair of the premedical advisory committee at the Harvard undergraduate campus. He returned to California and completed his pediatric internship and residency at the University of California, San Francisco campus. Upon completion of his residency, Dr. Russell joined the Division of Hospital Medicine at Children's Hospital, Los Angeles as an attending physician in 2010 and became an assistant professor of clinical pediatrics at the Keck School of Medicine, University of Southern

California in 2011. His research interests involve improving evidence-based care of hospitalized medically complex children, medical decision making in medically complex children and the reduction of pain and suffering in hospitalized children.

Project

Description:

Physician Decision Making In Children with Medical Complexity: Exploring Factors That Influence Recommendations for Tracheostomy Placement and Home Mechanical Ventilation in Pediatric Patients with Chronic Respiratory Failure

Children with medical complexity account for an increasingly greater proportion of hospital admissions, hospital charges and healthcare resource utilization. One important sub-population of children with medical complexity includes those with chronic respiratory failure requiring tracheostomy placement and invasive home mechanical ventilation (HMV). Children's Hospital Los Angeles (CHLA) has one of the largest HMV programs in the nation (n=228 patients), presenting an opportunity to study this unique population. Despite support and infrastructure, outcomes for children with HMV followed at CHLA (e.g. liberation from HMV, mortality) are variable. While previous published research exploring attitudes towards tracheostomy and HMV mainly focus on the caregiver perspective, fewer studies examine physician perspectives. Physician guidance about tracheostomy placement and initiation of HMV may be highly influential. Using mixed methods, we are investigating physician attitudes about tracheostomy and HMV for patients with chronic respiratory failure. The first portion of the study is to conduct semi-structured individual interviews with various physicians that care for these patients. We plan use data obtained during these interviews to design a study using quantitative methods to identify the association of specific factors that influence the likelihood physicians recommend tracheostomy placement and initiation of HMV using specific clinical scenarios.