PECARN
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PECARN
In a nutshell

FEATURE ARTICLE:

How Do You Push the Evidence Out?

Authors: Lynn Babcock, James Gray, Brad Sobolewski, Tricia Cobb, David Schnadower (HOMERUN Node)

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How Do You Push the Evidence Out?

Authors: Lynn Babcock, James Gray, Brad Sobolewski, Tricia Cobb, David Schnadower (HOMERUN Node)

The speed at which high-quality evidence from research changes clinical practice is far less explosive than the foul-smelling, diaper soaking blowouts following acute gastroenteritis. Upwards of 1.7 million children are diagnosed with acute gastroenteritis annually in the US and it is the second leading cause of death worldwide in children younger than 5 years old. Multiple small studies and metanalyses have shown that probiotics, live bacteria ingested in the form of a pill, were suspected to have beneficial effects in the host, including a reduction in the duration of diarrhea. This prompted widespread recommendation for their use and spurred a booming 64-billion-dollar industry. However, after a careful review of the literature it was clear that most of these studies were small, flawed and/or supported by the probiotic industry.

Therefore, a team of investigators at ten PECARN sites, led by HOMERUN investigator David Schnadower, developed a randomized trial that included 971 children, aged 3 months to 4 years with acute gastroenteritis, Children received either placebo or Lactobacillus rhamnosus GG (Culturelle®, a popular probiotic) for five days. The study showed no differences between the probiotic group and the placebo group in the severity of gastroenteritis episodes, the duration and severity of diarrhea or vomiting, day-care absenteeism, or household

transmission. The results were published November 2018 in the *New England Journal of Medicine*.

The audience of high impact journals typically includes researchers, clinicians, active health care policy makers, and medical journalists. It can take as long as 17 years before the evidence is translated into effective changes in health policy or clinical practice and it may take even longer to abandon unnecessary interventions. It is clear that the use of probiotics is unwarranted and costly for children with acute gastroenteritis.

What if there were technologies that could rapidly connect people in an egalitarian fashion?

Multifaceted strategies are needed to close this gap and get the evidence to the bedside clinicians and the affected patient and family. Evidence generated by Schnadower, et al was quickly incorporated into a new clinical practice guideline authored by the American Gastroenterology Association (https://www.gastrojournal.org/article/S0016-5085(20)34729-6/fulltext). Additionally, the recommendations in favor of probiotics in the prior Cochrane Database review on the topic were reversed. (https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003048.pub4/full).

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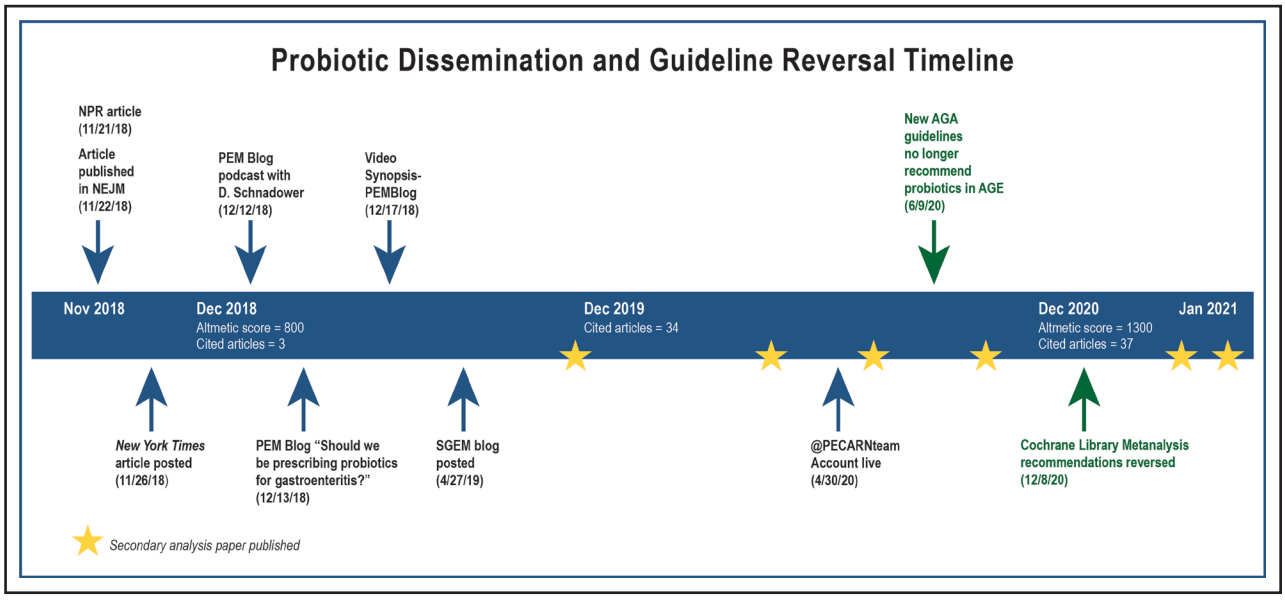


However, guidelines are static and require necessary, but laborious reviews. Widespread and more-timely adoption requires increased awareness and engagement from all stakeholders to speed implementation efforts. Traditionally, newsletters from healthcare organizations (AAP, AAFP etc,.), professional conferences, and institutional educational activities (grand rounds) have been vehicles to spread the evidence on a community and personal level. These are still too slow and do not reach a broad enough cohort of providers. What if there were technologies that could rapidly connect people in an egalitarian fashion?

Shortly after the initial manuscript was published, the HOMERUN node embarked on a multi-pronged dissemination effort. Using the reach and expertise of our nodal dissemination representative, Brad Sobolewski MD, MEd, and dissemination fellow, James Gray, MD, we utilized existing dissemination platforms starting with a blog post, a podcast episode, and a video. Dr. Schnadower provided editorial feedback and participated directly in the production of the podcast and the video. Several days after publication on PEMBlog.com, "Should we be prescribing probiotics for gastroenteritis?" had amassed >500 page views (http://pemcincinnati.com/blog/noprobiotics/). The podcast episode has amassed >2,800 listens to date, and the video has been viewed nearly 1,000 times. These efforts were shared via Twitter and facebook and reach was measured via Altmetric data, social media metrics, and individual media consumption statistics.

Dissemination is an active process, requiring renewed efforts over time to continue to spread new knowledge and account for changes in the literature. In late 2020, after the implementation of the new @PECARNteam Twitter handle, we created a short thread of bottom-line recommendations from the trial, resulting in a reach of 61,000 users across 5 countries.

Following the initial dissemination effort, a subsequent blog post and podcast episode from the widely read "The Skeptic's Guide to Emergency Medicine" (The SGEM) concluded with authors Ken Milne, MD and Anthony Crocco, MD noting that "prescribing *L. rhamnosus* to children with acute gastroenteritis cannot be recommended at this time." The Free Open Access Medical Education movement thrives on efforts that echo work of others and reach an ever expanding audience. (https://thesgem.com/2019/04/sgem254-probiotics-for-pediatric-gastroenteritis-i-cant-go-for-that-no-can-do/)

A combination of our efforts and the initial publication in the *New England Journal of Medicine* resulted in widespread dissemination of the research findings. Traditional news sources, including The *New York Times* (https://www.nytimes.com/2018/11/26/well/eat/probiotics-do-not-ease-stomach-flu.html) and NPR (https://www.npr.org/sections/health-shots/2018/11/21/669373363/probiotics-found-to-be-ineffective-for-easing-symptoms-of-kids-stomach-bugs), also covered the results. Altmetric, a metrics and analytics aggregator, described >600 tweets from 54 countries, 20 Facebook posts and 150 news stories citing the article, putting it in the top 5% of all research outputs scored by Altmetric. (https://www.altmetric.com/details/51518310)

The old days of relying on traditional publishers have passed.

As the way people consume content changes, we must adapt our methods of dissemination to match. The old days of relying on traditional publishers have passed. We should be planning dissemination using non-traditional methods from the very beginning, and we should investigate how to measure the impact these methods have. We can achieve even greater reach by engaging an audience of clinicians using blogs, social media, and podcasts: but we must start thinking about dissemination as a key portion of the research planning process.

PECARN is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) , the Emergency Medical Services for Children (EMSC) program through the following grants: DCC-University of Utah (U03MC00008), GLEMSCRN-Nationwide Children's Hospital (U03MC28844), HOMERUN-Cincinnati Children's Hospital Medical Center (U03MC22684), PEMNEWS-Columbia University Medical Center (U03MC00007), PRIME-University of California at Davis Medical Center (U03MC00001), CHaMP node- State University of New York at Buffalo (U03MC33154), WPEMR- Seattle Children's Hospital (U03MC33156), and SPARC-Rhode Island Hospital/Hasbro Children's Hospital (U03MC33155). HRSA/ EMSC Contact: Patricia Fanflik (PFanflik@hrsa.gov)

FEDERAL CORNER

Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB)

On January 19, 2021, MCHB's Division of Child, Adolescent and Family Health welcomed Sofia Arias, MS, CHES as our new Management Analyst.

Sofia graduated from the University of Florida with a Master of Science in Health Education and Behavior. She is a Certified Health Education Specialist and has worked as a program assistant at the North Florida AIDS Education and Training Center. Most recently, Sofia served in the Peace Corps as a Community Health Facilitator in Peru.

Sofia enjoys traveling, reading, going to the beach, baking (a hobby discovered during her recent time in quarantine), participating in triathlons, and spending time with family, friends, and her dog nephew, Chester A. Arthur.

HRSA's MCHB announces the release of new Notice of Funding Opportunity Announcements (NOFO):

HRSA-21-052 NOFO solicits applications for the R41 Autism Secondary Data Analysis Research (SDAR). This program supports applied Maternal and Child Health (MCH) research that exclusively utilizes the secondary analysis of existing national databases and/or administrative records to determine evidence-based practices for interventions to improve the physical and behavioral health of children and adolescents with Autism Spectrum Disorder (ASD) and other Developmental Disabilities (DD). Programs should address ASD/DD across the lifespan, with a focus on addressing the needs of underserved populations for whom there is limited evidence of the effectiveness of interventions, and limited access to screening, diagnosis, and treatment for ASD/DD. Link to Download NOFO: https://www.grants.gov/web/grants/view-opportunity.html?oppId=330896

HRSA-21-053 NOFO solicits applications for the R41 Autism Field-Initiated Innovative Research Studies Program (Autism-FIRST). The purpose of this program is to support empirical research that advances the evidence base on interventions designed to improve the health of children, adolescents, and young adults with Autism Spectrum Disorders (ASD) and other developmental disabilities (DD) across the lifespan. Because racial and ethnic disparities exist in the early screening and diagnosis of ASD/DD, the Autism-FIRST Program has a special focus on addressing the needs of underserved populations. Link to Download NOFO: https://www.grants.gov/web/grants/view-opportunity.html?oppId=330982

National EMSC Data Assistance Resource Center (NEDARC)

EMS for Children Survey of Prehospital EMS Agencies that respond to 911 across 58 states/territories launch.
The EMS for Children Survey launched the week of January 4, 2021. Invitations were sent to more than 15,000 EMS agencies across the country that respond to public 911 calls and render patient care. The goal of this survey is to collect data related to the availability of an individual who coordinates pediatric emergency care for an agency and the frequency of skill checking on pediatric equipment. The data collection period runs through March 19, 2021.

National Pediatric Readiness Project (NPRP) Assessment

The pilot for the National Pediatric Readiness Project (NPRP) assessment was launched from September through November and successfully achieved a 94% response rate from hospital emergency departments. Sincere appreciation goes out to the EMSC programs in Colorado and Louisiana for their participation and tireless efforts. We look forward to launching the NPRP assessment to emergency departments in all other states and territories on May 2021.

EMSC Innovations and Improvement Center (EIIC)

The EIIC launched a Pediatric Education and Advocacy Toolkit Series
Pediatric Education and Advocacy Kits (PEAK) have been created to improve dissemination of best practices to pediatric emergency care providers to enable them to deliver the high quality emergency care to children. The goal of PEAK is to support the mission of the EIIC and its knowledge management domain to maximize the application of current evidence into clinical practice by front line healthcare.

Status Epilepticus, the first toolkit launched in December, includes publications, an interactive module, and simulations. Available at: https://emscimprovement.center/education-and-resources/peak/peak-status-epilepticus/

Mental Health will be the focus of the next toolkit.

National Highway Traffic and Safety Administration, Office of EMS

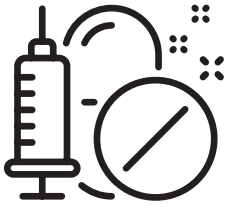
Information on NHTSA updates available at www.ems.gov

EMS Education Standards Revision Project
After a brief hiatus due to the pandemic, the project re-launched on an August stakeholder call. The stakeholders agreed with the proposed format which combines the Education Standards and Instructional Guidelines into one document and adds a resources section (appendices) to help guide EMS publishers and educators to increase preparedness for pediatric emergencies. The period of performance for this contract was extended to March 2021. More information can be found on www.EMS.gov under the Current Projects tab.

PECARN STUDY UPDATES

FLUID

The FLUID study enrolled ~1,800 children with diabetes: ~1400 with DKA and 400 without DKA. The main analysis was published in the NEJM and demonstrated no significant differences between fast and slower fluid rates on neurological outcomes. This liberates clinicians to use their clinical judgment when hydrating children with DKA. There have been several secondary analyses ongoing and manuscripts written. Most recently, we have had important publications in Diabetes Care (neurocognitive outcomes of patients with and without DKA), and JAMA Network Open (AKI in children with DKA and associations with neurocognitive outcomes). Several manuscripts are currently under review at medical journals including: 1) Predictors of successful patient enrollment into the FLUID trial; 2) Effects of fluid therapy on acidosis and electrolyte abnormalities; and 3) Changes in sodium concentration and neurocognitive changes. Several other manuscripts are being drafted. An abstract pertaining to predicting level of dehydration was submitted to the 2021 PAS meeting. Finally, the FLUID Public Use Dataset (PUD) is currently under review.



HEADACHE

The Headache Assessment in Children for Emergent Abnormalities (HEADACHE) study aims to enroll 28,000 children across 18 sites to create a decision-making algorithm that will allow physicians to determine the precise risk of emergent intracranial abnormalities in children with headaches, and accurately identify those who require emergent neuroimaging and those who do not. This information may safely reduce unnecessary emergency department neuroimaging in children with headaches, and decrease exposure to risks associated with neuroimaging, such as lethal malignancies due to ionizing radiation. Study team training is underway, with an anticipated enrollment start in early February 2021.

C-SPINE

The Development and Testing of a Pediatric CSI Risk Assessment Tool (C-Spine study) has completed enrollment for Round I (derivation phase) of the study! The Round I sites enrolled 12,243 patients and met their goal of 253 cervical spine injuries with 111 of those being EMS arrivals. The Round II sites are currently enrolling for the validation phase of the study and are moving along with 1,764 patients enrolled, 12 CSIs identified, and 5 of those being EMS arrivals. Additionally, we have begun coding the transcripts from the first 70 user-centered design interviews. Lastly, the diversity supplement, which was awarded to support Dr. Jordee Wells, has begun data collection to investigate disparities amongst cervical spine injured patients!

SCIENCE

The investigators on the SCIENCE planning grant continue to optimistically prepare for the subsequent interventional trial. We developed a highly feasible and impactful intervention to improve guideline adherent care for children with sickle cell disease who present to the ED with pain. We submitted the grant for the interventional trial and await review. The study PIs thank the site investigators for their hard work. We also thank the PECARN executive and steering committees and the subcommittees for help in improving the application. The baseline data from SCIENCE is published with further dissemination of findings forthcoming.

PROBIOTICS

The Probiotics trial showed that LGG a commonly used probiotic was not better than placebo in improving outcomes in children 3-48 months of age with acute gastroenteritis. This landmark study, published in the NEJM, reverses previously held beliefs regarding the effectiveness of probiotics products, an industry worth 32 billion dollars per year globally. The probiotics investigators and the DCC continue analyzing this large database, including data from a parallel trial conducted by PERC in Canada, the Progut study, and publishing multiple sub-studies.

STI

Sexually transmitted infections (STIs) are highly prevalent among adolescents. Despite established principles for STI control, clinical practices related to screening, diagnosis, treatment and prevention of STIs among adolescents are suboptimal. This study aims to determine the most clinically efficient and cost-effective ED STI screening method among adolescents who would otherwise not receive preventive healthcare. This study has the potential to improve diagnosis of asymptomatic STIs and decrease the time interval to treatment, consequently decreasing reinfection rates as well as decreasing healthcare costs. The STI study team recently published the results of the workflow analyses in the *Journal of Medical Systems*. Further, a literature estimate-based cost effectiveness analysis comparing different STI screening strategies was published in *JAMA Pediatrics*. Finally the study investigators submitted an administrative supplement to the parent award in October which is pending review.

REGISTRY

The PECARN Registry is an emergency care visit registry with automated transmission from the electronic health record data for pediatric patients at participating sites. The Registry currently contains data from all ED visits from nine sites with data spanning calendar years 2012 through 2020. Each site transmits data to the DCC monthly. Comprehensive data quality assurance rules have been automated to assess data quality and validation of the transmitted data. The Registry is about to undergo an upgrade to the data collection system as well as onboard 3 new sites once that migration has occurred.

The Registry is currently being used to directly populate pediatric emergency medicine quality-of-care performance measure report cards and has derived benchmarks for each of the measures. The Registry has data on over 4.4 M visits and 1.6 M unique patients. Data is also used for health services research, comparative effectiveness research, hypothesis generation and grant planning for the network. The Registry is utilized in four other funded PECARN grants.

ESETT

ESETT (Established Status Epilepticus Treatment Trial) was a cooperative trial with the Neurologic Emergencies Treatment Trial network (NETT). NETT approached PECARN to ensure that the trial was informative for children as well as for adults. In patients 2 years and older, we compared levetiracetam, fos-phenytoin, and valproate for the treatment of status epilepticus that failed treatment with benzodiazepines. The study was unique in that randomization was adaptive and results were analyzed as the Bayesian posterior probability of success for each drug.

The primary results of ESETT indicated that all 3 drugs were effective in about half of patients in stopping status. Overall, rates were about 47%, but in children the drugs were about 52% effective. In an analysis by age group, children receiving fos-phenytoin were more likely to be intubated than children receiving the other two drugs. In secondary studies, we also found that physicians tend to under-dose benzodiazepines compared to published guidelines, and we found large differences by site in rates of intubation. Other secondary analyses are in progress. Meanwhile, we are working toward our next study, which is a comparison of levetiracetam to levetiracetam plus ketamine for the same population of patients.

STArT

Pain is the clinical hallmark symptom of Sickle Cell Disease (SCD), and is the leading cause of hospitalizations, emergency room visits, missed school, and is associated with an increased death rate. Arginine is a promising new therapy that could change the way we treat acute pain in SCD in children. The STArT study will investigate the benefits and safety of arginine for the treatment of patients with SCD and pain. The protocol is currently under central IRB review and the DSMB had a successful kickoff meeting in January with anticipated approval coming in the next month.

ARGININE

The below publication results were published in Blood, based on the Arginine pK study supported by the NHLBI R34. This is data that helped support the STArT trial grant.
Morris CR, Brown LA, Reynolds M, Dampier C, Lane P, Watt A, Kumari P, Harris F, Figueroa J, and Shiva S. Impact of Arginine Therapy on Mitochondrial Function in Children with Sickle Cell Disease and Vaso-occlusive Pain. Blood. 2020 Sept 17; 136 (12): 1402-1406.
https://ashpublications.org/blood/article/136/12/1402/454971/Impact-of-arginine-therapy-on-mitochondrial

ED-SAMS

ED-SAMS enrolled their first subject September 9, 2019. We have completed recruitment of subjects 6-12 years old who present to the ED with an acute asthma attack over a 90 day recruitment period and followed for 120 days. The study randomized 9 subjects and recruitment ended the first week of March with subjects being followed through the end of the school year. We are currently writing the primary outcome manuscript.

HIKO-STEC

Hyperhydration to Improve Kidney Outcomes in Children with Shiga Toxin-Producing E. coli Infection (HIKO STEC): A Multi-national Cluster Randomized Crossover Trial is a 26 site phase III, embedded, cluster-randomized, crossover trial to compare hyperhydration (e.g. early aggressive intravenous treatment) with conservative fluid management as treatment for STEC-infected children. This study has the potential to mitigate the renal and extrarenal complications of the hemolytic uremic syndrome (HUS) and improve health outcomes in STEC-infected children. The NIAID has approved and extended over-the-cap R01 application, which will be submitted in January 2021.

PED SCREEN

PED Screen addresses the critical need to improve pediatric sepsis outcomes by developing methods to accurately identify at-risk children presenting for emergency care. The project captures electronic health record (EHR) data to create a multi-center registry with the ultimate goal of improving the detection and treatment of pediatric sepsis in the emergency department (ED) setting. To accomplish this, we are automating the determination of organ dysfunction in children with sepsis directly from structured and narrative data in an expanded multicenter EHR patient registry. That data are being used to derive and validate prediction models of pediatric sepsis that predict subsequent organ dysfunction within 48 hours using ED EHR data from the first 4 hours of care. Innovative deliverables from this project include the existence of a broad and rich EHR registry, an automated process of outcome determination, and prediction models of risk of sepsis.

BIOSIGNATURES

The Biosignature I/II studies are evaluating the ability of the "RNA Biosignature" to distinguish febrile infants ≤ 60 days-old with viral versus invasive bacterial infections (bacterial meningitis and bacteremia). This technology has the potential for rapid and accurate diagnosis of febrile infants. Biosignatures II is assessing the stability of the RNA signature via sequential sampling. We enrolled 2,612 infants, with 306 sequential samples! We have published ~ 10 manuscripts on Biosigs I and II, and are working on several others. The next manuscripts to be submitted are: 1) the risk of bacterial meningitis in febrile infants with positive urinalyses, and 2) validation of the PECARN febrile infant prediction rule. We are working on the analyses of the epidemiology of pneumonia in this group, the impact of a compete nasopharyngeal PCR multiplex viral panel on the prediction rule, and a machine learning analysis on the complete cohort of ~ 8000 infants, among others. Since the last newsletter, we have submitted two abstracts for the 2021 PAS and SAEM. And of course, the final mRNA analyses of both studies (including sequential samples) is in the works! All of these studies will help facilitate a more expeditious, accurate and safer evaluation of the febrile infant.

ED-STARS

The ED Screen for Teens at Risk for Suicide (ED-STARS) has recently published a manuscript on Risk and Protective Factors for Suicide among Sexual Minority Youth in the *Journal of Affect Disorder* - https://pubmed.ncbi.nlm.nih.gov/33074147/ and the Computerized Adaptive Screen for Suicidal Youth (CASSY): Prospective Development and Validation paper will be out in the beginning of February in *JAMA Psychiatry*. We are also working on 10 other manuscripts for submission throughout 2021.

BEEPER

BEdside Exclusion of Pulmonary Embolism in children without Radiation (BEEPER) Study enrolled their first subject on November 30, 2020 and to date has enrolled 28 subjects with 7 sites currently activated. Our target is 4030 subjects enrolled at over 18 sites over four years. This study is a large multi-center prospective, observational cohort study of children ages 4 to 17 years old who have sufficiently high probability of pulmonary embolism (PE).

IMPROVE

This is a multi-center, longitudinal comparative effectiveness study combining Registry data with prospective outcomes data collected via text messages. IMPROVE aims to provide evidence to inform optimal pain treatment for a long bone fracture. Enrollment has been open at 6 sites since Summer 2019, with a brief pause in the Spring of 2020 as a result of the COVID-19 pandemic. Currently, 1,422 subjects have been enrolled. We recently added a 7th site, Nationwide Children's Hospital. We continue to focus on improving enrollment rates across all sites in order to reach our enrollment goal of 14,000.

PRAPP

Procalcitonin to Reduce Antibiotic Prescribing in Pediatric Pneumonia (PRAPP) is an R34 clinical trials planning grant funded by NHLBI with the goal of preparing for a large-scale, randomized clinical trial of amoxicillin vs. placebo in young children with mild, outpatient community-acquired pneumonia (CAP) who have a low procalcitonin concentration. This definitive trial will improve outcomes in children by decreasing unnecessary exposure to antibiotics, and their associated short- and long-term effects. We are slated to begin (a) Delphi surveys of ~20 experts to build consensus on study population and outcomes, (b) qualitative interviews of parents and clinicians to gain their perspectives on antibiotic use in mild CAP and study procedures, and (c) a pilot cohort study of use of telehealth technologies to evaluate respiratory outcomes in children, while planning for a 3-site pilot RCT slated to start October 2021.

SPEED

This study aims to develop an electronic health record clinical decision support system (EHR-CDS) for antibiotic prescribing of pneumonia and UTI, which will serve as the centerpiece of an ED-based antimicrobial stewardship program. Currently, the prototype EHR-CDS has been developed and is undergoing user-testing, with plans for real-time testing and implementation this Spring. A subsequent multicenter effectiveness implementation trial for the EHR-CDS is currently being developed. Completion of this project will produce increased guideline adherent prescribing, reducing development of antimicrobial resistance and infections for resistant organisms.

TIC-TOC

The Traumatic Injury Clinical Trial Evaluating Tranexamic Acid (TXA) in Children (TIC-TOC) is a pilot and feasibility trial of TXA for severely injured children conducted at four PECARN sites. TXA has the potential to safely reduce blood transfusions, morbidity, and mortality in injured children. We completed the pilot trial, enrolling 31 patients. We submitted the grant proposal for the subsequent phase 3 multicenter trial to NIH in June 2020. Several manuscripts have been published during the funding period including: the study protocol (*Trials*), public deliberation methods (*Acad Emerg Med*), functional outcome assessment (*Ann Emerg Med*), outcome consensus (*Am J Emerg Med*), and transfusion consensus (*J Trauma Acute Care Surg)*. Manuscripts on the statistical analysis plan using a Bayesian design, the pilot study results, evaluation of the PedsQL physical domain alone, coagulation biomarkers, frozen vs. real time thromboelastography, pharmacokinetics/pharmacodynamics of TXA, and the use of EFIC are in various stages of completion.

AZ-SWED

AZithromycin Therapy in Preschoolers with Severe Wheezing Episode Diagnosed at the Emergency Department (AZ-SWED) is a parallel group, double blind, efficacy clinical trial comparing oral Azithromycin to placebo. Participants will be stratified by presence of Moraxella catarrhalis, Streptococcus pneumoniae or Haemophilus Influenzae in their nasopharynx. AZ-SWED will enroll up to 2,000 18 to < 60-month-old patients presenting to the ED with acute wheezing episodes across six PECARN sites. Enrollment is scheduled to open in the Spring of 2021. This study aims to find better ways to treat acute preschool wheezing illnesses, which are a major cause of morbidity and hospital admissions in this age group.

DISPARITIES

Racial and ethnic disparities in health care provision have received considerable attention in recent years. In 2002, the Institute of Medicine released a report assessing the extent of variability and disparities in the types and quality of health services provided in the United States. Given this role in our healthcare delivery system, there is a unique opportunity to understand whether care is being delivered equitably, independent of other access issues. For this study, PECARN Registry data have been used to explore racial/ethnic disparities in the emergency care of children with long bone fractures and appendicitis. We recently published a paper in *Pediatrics* describing disparities in the pain management of children with long bone fractures. We also published a manuscript in *Academic Emergency Medicine* that described disparities in delayed diagnoses of appendicitis. Additional manuscripts from this grant award are currently in preparation.

PRoMPT BOLUS

PRoMPT BOLUS is a large pragmatic clinical trial comparing normal saline to balanced fluids for resuscitation in pediatric sepsis. The primary outcome is MAKE30: a composite outcome that includes persistent kidney injury, dialysis, and death. PRoMPT will be the largest pediatric acute care trial in history, and aims to enroll 8800 children at 46 sites across 3 international networks. This effort is led by PECARN and includes our sister networks PERC in Canada and PREDICT in Australia/New Zealand. Enrollment has begun at CHOP, the lead US site, with 47 patients enrolled to date. Most PECARN sites are currently completing pre-trial EFIC activities, and plan to start enrolling this spring.

NODAL NEWS & NEW FACES

PRIME NODE

CONGRATULATIONS to **Jade Mulvey** at PCH on her medical school acceptance! Jade will be attending the University of Utah, receiving her acceptance in the first round.

STAFF UPDATES

Paul Tominez
UC Davis
November 2020
Research Coordinator

Jessica Jung
Primary Children's
October 2020
Regulatory Coordinator

SPARC NODE

Reshika Mendis was promoted to PEM research Team Lead in Fall 2020.

Dr. Claudia Morris received recognition as part of the 2020 Emory School of Medicine Researcher Appreciation Day.

Dr. Morris was nominated as Executive Committee Vice Chair, AAP Section on Integrative Medicine in November 2020.

HOMERUN NODE

Congratulations to Dr. Lauren Riney on the birth of her daughter,

Charlotte Rose

1/1/21 at 2:59am • 7lb, 8oz and 20.5in

Mom and baby are both doing great!

DCC

STAFF UPDATES

Julie Fey
December 2020
Clinical Data Manager

Brian Liles
September 2020
Clinical Data Manager

Camile Carter
November 2020
Statistician I

Elizabeth Morrey accepted the Administrative Manager position in the DCC back in November, 2020 and will be leaving our PECARN team. She has worked on PECARN for the last 6 years and will be greatly missed. Congratulations on your new job! We are so lucky to be able to keep you in a different role in the DCC.

Congratulations to Cara Elsholz on the birth of her son,

Quinn Matthew Elsholz

9/21/20

CHaMP NODE

Dipesh Patel, MPH
University of Buffalo
October 2020
Nodal Administrator, CHaMP