



# Pediatric Research Day

**A Showcase for Residents and Fellows**

Wednesday, May 25, 2022

8 am to 1 pm

Medical and Research Translation  
(MART) building



Stony Brook Children's



## Stony Brook Children's

**RENAISSANCE SCHOOL  
OF MEDICINE AT  
STONY BROOK UNIVERSITY**  
*Department of Pediatrics*

101 Nicolls Road  
Health Sciences Tower  
Level 4  
Stony Brook, NY 11794-8434  
stonybrookchildrens.org

May 25, 2022

Welcome to Stony Brook Children's Hospital's Annual Department of Pediatrics Research Day. It is very exciting to be back in-person after two years of virtual presentations. As we continue to solidify our role as a world-class children's hospital program, we are committed to training the next generation of clinician scholars. It is my pleasure to recognize this group of residents' and fellows' research endeavors, as well as the efforts of their faculty mentors.

Under ordinary circumstances, it can be challenging to conceptualize, develop, and execute a research study. This group of trainees has had unique challenges and unprecedented circumstances as their training and research endeavors took place primarily during a global pandemic. Time, resources and research procedures were all greatly impacted during this time. Despite these challenges, today's presentations represent a diverse and rigorous group of scholarly work.

In addition to the residents and fellows, I would like to acknowledge the role of the physician mentors. These individuals were tremendously impacted during the pandemic, yet still managed to navigate oversight of research projects and collaboration with trainees. Today's scholarship represents hours of collaborative efforts between trainees and mentors often spanning several years. I am grateful to all involved in this process and would like to give special thanks to this year's Resident Scholarly Oversight Committee (RSOC) and Fellowship Scholarly Oversight Committee (FSOC) faculty. Without their efforts, today would not be possible.

Please join me in recognizing our resident, fellow and student investigators, as well as their faculty mentors. It always gives me great pleasure to celebrate their efforts, but especially for this group who performed during a very challenging time.

Sincerely

**Carolyn Milana, MD**

*Chair, Department of Pediatrics,*

*Renaissance School of Medicine at Stony Brook University*

*Physician-in-Chief, Stony Brook Children's Hospital*

*Associate Professor of Clinical Pediatrics*

## AGENDA

### 2022 PEDIATRIC RESEARCH DAY • WEDNESDAY, MAY 25 • 8 AM – 1 PM MEDICAL AND RESEARCH TRANSLATION (MART) BUILDING

8-8:25 am	<b>Registration: MART Atrium</b>
8:30 am	<b>Welcome and Chair's Opening Remarks: Dr. Carolyn Milana</b>
8:35 am	<b>Introduction of Keynote Speaker: Dr. Josette Bianchi-Hayes</b>
8:40-9:35 am	<b>Keynote Speaker: Dr. Sara Van Driest</b>
<b>PLATFORM PRESENTATIONS: SESSION 1 • 9:35-10:25 AM</b>	
9:35 am	<b>Introduction of Invited Judges: Dr. Josette Bianchi-Hayes</b>
9:40-10:10 am	<b>Resident Platform Presentations—Session Chair: Dr. Christy Beneri</b>
	<b>Dr. Nadia Asif</b> The Relationship Between Early Protein Intake and Changes to Weight Z-Score in Very Low Birth Weight Neonates <i>Presented as a virtual podium presentation at the Joint Eastern Society for Pediatric Research (ESPR)/American Federation for Medical Research (AFMR) 1st Annual Eastern Medical Research Conference, and as a poster presentation at Pediatric Academic Societies (PAS)</i>
	<b>Dr. Leora Allen</b> Point-of-Care Lead Testing Can be a Means to Achieve Health Equity in Primary Care <i>Presented as a 'flash presentation' at the APA Regional (regions 2/3) Conference and poster presentation at Pediatric Academic Societies (PAS)</i>
10:10-10:25 am	<b>Break</b>
<b>PLATFORM PRESENTATIONS: SESSION 2 • 10:25-10:55 AM</b>	
10:25-10:55 am	<b>Fellow Platform Presentations—Session Chair: Dr. Catherine Kier</b>
	<b>Dr. Lale Akaydin</b> A Retrospective Pilot Study of The Relationship Between Total Serum Bilirubin, Brain MRI Lesions and Early Interventions Services in Neonates with Hypoxic-Ischemic Encephalopathy <i>Presented at the Joint Eastern Society for Pediatric Research (ESPR)/American Federation for Medical Research (AFMR) 1st Annual Eastern Medical Research Conference</i>
	<b>Dr. Sarah Mardanlou</b> The Impact of Antenatal Magnesium Sulfate on the Initiation of Enteral Feeds in Late Preterm and Term Infants of Mothers with Preeclampsia <i>Presented a podium presentation at the 47th Northeastern Conference on Perinatal Research and a virtual poster presentation at the Joint Eastern Society for Pediatric Research (ESPR)/ American Federation for Medical Research (AFMR) 1st Annual Eastern Medical Research Conference.</i> <i>Presented a Short Talk and Received the Best Fellow Abstract Award at the 16th Annual Women in Medicine Research Day</i>
11 am -12 pm	<b>Poster Session MART Auditorium and Atrium</b> <b>Session Chair: Dr. Susmita Pati</b>
12-1 pm	<b>Resident and Fellow Lunch: Hospital Marketplace Café, Level 5, Room 5W-3000C</b> <b>Informal Career Talk: Dr. Sara Van Driest</b> <b>Presentation of Awards and Closing Remarks: Dr. Carolyn Milana</b>

## KEYNOTE SPEAKER BIOGRAPHY

---



### **SARA VAN DRIEST, MD, PhD**

Sara Van Driest (she/her) is an Associate Professor of Pediatrics (Division of General Pediatrics) and Medicine (Division of Clinical Pharmacology) at Vanderbilt University Medical Center. She is the co-director of both the Center for Pediatric Precision Medicine and the Genomics and Therapeutics Clinic at VUMC. She completed her MD and PhD at the Mayo Clinic College of Medicine followed by Pediatric residency and Clinical Pharmacology fellowship at Vanderbilt. As a physician-scientist, Dr. Van Driest uses clinically-generated data and specimens for research and as a tool for implementation of pediatric personalized medicine, while continuing clinical practice in both a general pediatric setting and performing consultations for clinical pharmacogenetics. Her research is focused on improving the dosing and understanding the effects of commonly used medications, including antibiotics, analgesics

and sedatives. Her active research projects include searching for pharmacogenomic signals in pediatric patients, developing methods to identify latent drug effects using electronic health records data, and studying pharmacokinetics and pharmacodynamics of drugs commonly used in pediatric inpatients. She has been awarded research funding from the NIH (KL2, R01, and P50), an early career award from the PhRMA Foundation, an Innovation in Regulatory Science Award from the Burroughs Wellcome Fund, and a Doris Duke Clinical Scientist Development Award. She leads the Vanderbilt Integrated Center of Excellence in Maternal and Pediatric Precision Therapeutics (VICE-MPRINT) with her colleague Dr. Prince Kannankeril, as part of the NICHD-funded MPRINT hub. Dr. Van Driest is a member of the Society for Pediatric Research and is the secretary-elect for the Pharmacogenomics Global Research Network. She serves on the Steering Committee for the Clinical Pharmacogenetics Implementation Consortium and on the Scientific Advisory Boards for PharVar, a central repository for pharmacogenomic variation, and PharmCAT, a freely available pharmacogenomics clinical annotation Tool. She is the 2019 recipient of the Leon I. Goldberg Early Investigator Award from the American Society for Clinical Pharmacology and Therapeutics and served as an associate editor for *Clinical Pharmacology and Therapeutics*.

# TABLE OF CONTENTS

Page Number

## RESIDENT PLATFORM PRESENTATIONS:

1. Nadia Asif, MD (Jennifer Pynn, MD) ..... 7  
*The Relationship Between Early Protein Intake and Changes to Weight Z-Score in Very Low Birth Weight Neonates*
2. Leora Allen, MD (Susmita Pati, MD, MPH) ..... 8  
*Point-of-Care Lead Testing Can be a Means to Achieve Health Equity in Primary Care*

## FELLOW PLATFORM PRESENTATIONS:

3. Lale Akaydin, MD (Echezona Maduekwe, MD) ..... 9  
*A Retrospective Pilot Study of the Relationship Between Total Serum Bilirubin, Brain MRI Lesions and Early Interventions Services In Neonates With Hypoxic-Ischemic Encephalopathy*
4. Sarah Mardanlou, MD (Echezona Maduekwe, MD) ..... 10  
*The Impact of Antenatal Magnesium Sulfate on the Initiation of Enteral Feeds in Late Preterm and Term Infants of Mothers with Preeclampsia*

## RESIDENT POSTERS:

5. Shantel Apesesche, MD (Erin Hulfish, MD) ..... 11  
*Bedside to Webside: Teaching Medical Students How to Conduct a Telehealth Encounter*
6. Linda Camacho, MD (Josette Bianchi-Hayes, MD) ..... 12  
*Associations Between BMI Status and Asthma Triggers for Hospitalized Children in an Urban and a Suburban Children's Hospital in New York State*
7. Mallory Carson, DO (Maribeth Chitkara, MD) ..... 13  
*Use of an Individualized Teaching Plan to Augment Teaching Skills for Pediatric Residents: Three Year Review*
8. Efren Diaz, MD (Joseph DeCristofaro, MD) ..... 14  
*Role of Protein Intake on Serum Blood Urea Nitrogen Levels in Acute Hypoxic Ischemic Encephalopathy*
9. Russell Himmelstein, MD (Shanty Sridhar, MD) ..... 15  
*Maternal and Neonatal Risk Factors for Development of Neonatal Lenticular Striate Vasculopathy (LSV)*
10. Kaitlyn Krebshevski, DO (Josette Bianchi-Hayes, MD) ..... 16  
*Impact of the COVID-19 Pandemic on Pediatric Resident Wellness*
11. Sean O'Connor, MD (Maribeth Chitkara, MD) ..... 17  
*A Nighttime Curriculum for Medical Students in the Pediatrics Clerkship: A Pilot Study*
12. Belliny Phaeton, MD (Samantha Feld-Ansbach, MD) ..... 18  
*E-Cigarette and Vaping AAP ECHO (Extension for Community Healthcare Outcomes) Project Outcomes*

13. Rebecca Polchinski, DO (Aruna Parekh, MD)	19
<i>Impact of Perinatal Factors and Golden Hour of Care Bundle on the Degree of Intraventricular Hemorrhage in Very Low Birth Weight Infants</i>	
14. Mary Helen Schwartz, MD (Jennifer Osipoff, MD)	20
<i>Longitudinal Impact of Gender-Affirming Endocrine Intervention on Depression Scores of Transgender Youth: A Second Look</i>	
15. Raizada Vaid, MD and Allison Beattie, DO (Carl Kaplan, MD)	21
<i>Retrocecal Appendicitis Identification on Point of Care Ultrasound (POCUS)</i>	
16. Christi Walters, MD (Rina Meyer, MD)	22
<i>Perceptions of Palliative Care and Shared Decision Making</i>	
17. Casey Weiser, MD (Katherine Biagas, MD)	23
<i>Understanding Personality Types in Pediatric Residents and Attending Physicians Utilizing the Myers-Briggs Type Indicator (MBTI)</i>	
<b>FELLOW POSTER:</b>	
18. Diana Kaplan, DO (Jennifer Osipoff, MD)	24
<i>Evaluating the Impact of the COVID-19 Pandemic on Children and Young Adults with Diabetes</i>	
<b>STUDENT POSTERS:</b>	
19. Rachel Choe Kim (Helen Hsieh, MD, PhD)	25
<i>Disparities in Pediatric Traumatic Brain Injury</i>	
20. Rebekah Lee (Monica Lee, MD)	26
<i>Marijuana Use and Breastfeeding: Knowledge, Attitudes, and Practices of New Mothers at Stony Brook University Hospital</i>	
<b>POSTER GROUPINGS</b>	27
<b>ACKNOWLEDGEMENTS</b>	28



## The Relationship Between Early Protein Intake and Changes to Weight Z-Score in Very Low Birth Weight Neonates

Nadia Asif, MD<sup>1</sup>; Shanthy Sridhar, MD<sup>1</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Susan Mathieson, RD, CSP<sup>1</sup>; Jennifer Pynn, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children’s Hospital; <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Background:** Practice variations exist in optimizing post-natal nutrition in Very Low Birth Weight (VLBW) infants. Protein administration in the first day of life has been shown to decrease rates of growth failure in pre-term infants at discharge, defined as growth <10th percentile. However, growth failure defined by weight percentiles may not accurately predict growth outcomes as well as changes in Z-score.

**Objective:** The purpose of this study is to identify the relationship between earlier attainment of protein intake of 4g/kg/day and a weight for age Z-score difference of no more than 0.8 standard deviations (SD) below birth weight (BW) at 36 weeks post-menstrual age (PMA) and discharge.

**Methods/Design:** This is a retrospective observational study of all VLBW neonates admitted to SBCH NICU from 2014 to 2019. Data collected included growth parameters at birth, 36 weeks PMA, and discharge; and protein intake on 4, 7, 14, and 21 days of life (DOL). Subjects were stratified into 2 groups: weight Z-score difference <0.8 (Group 1) and ≥0.8 SD (Group 2). We analyzed data using t-tests, chi-square tests, and adjusted odds ratios. Scores for Neonatal Acute Physiology

with Perinatal Extension-II (SNAPPE-II) were analyzed to control for illness severity.

**Results:** There were a total of 370 patients with a mean gestational age (GA) of 29±2weeks and BW 1089±266grams. Forty-two percent had a decline of ≥0.8 SD from BW; these neonates had a lower GA, BW, and higher SNAPPE-II score. Patients in Group 1 vs. Group 2 reached a protein intake of 4g/kg/day at a mean of 8 vs. 11 days, took first enteral feeds on day 4 vs. 6, and reached full enteral feeds on day 25 vs. 31 respectively (p<0.05). Group 2 had lower protein intake on days 7, 14, and 21 (p<0.05). Regression analysis revealed an adjusted odds ratio of 1.04 between days to protein goal of 4 g/kg/day and dropping ≥0.8 SD in weight Z-score from birth to 36 weeks.

**Conclusions:** Infants with high illness severity are at higher risk of suboptimal growth trajectories. Growth optimization in VLBW infants includes timely attainment of 4g/kg/day of protein. Higher protein intake at >7 DOL is associated with achieving a growth trajectory no more than 0.8 SD below BW. Recognizing the importance of weight Z-score differences can lead to better growth outcomes in VLBW infants.

BIRTH TO 36 WEEKS PMA	<0.8 Z-score Difference N=209		≥0.8 Z-score Difference N=161		P-Value (*<0.05 is statistically significant)
	MEAN	SE	MEAN	SE	
Gestational age (weeks)	29.6	0.2	28.2	0.2	<0.01*
Birthweight (grams)	1128	18	1038	21	<0.01*
SNAPPEII Score	18.9	1.2	25.7	1.6	<0.01*
Day of life protein goal of 4g/kg/day met	8	1	11*	1	0.01*
Protein intake day 4	3.5	0.1	3.4	0.2	0.85
Protein intake day 7	3.7	0.6	3.5*	0.6	<0.05*
Protein intake day 14	3.9	0.1	3.6*	0.1	<0.01*
Protein intake day 21	4.1	0.1	3.6*	0.1	<0.01*

**Table 1:** Demographics and Protein Intake Stratified by Z-score Difference.

## Point-of-Care Lead Testing can be a Means to Achieve Health Equity in Primary Care

Leora Allen, MD<sup>1</sup>; Jie Yang, PhD<sup>2</sup>; Hua Wang, MS<sup>1</sup>; Chencan Zhu, MS<sup>3</sup>; Junying Wang, MS<sup>3</sup>; Susmita Pati, MD, MPH<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children’s Hospital, <sup>2</sup>Department of Family, Population and Preventive Medicine, <sup>3</sup>Stony Brook University, Applied Math and Statistics

**Background:** Primary care physicians play a crucial role in delivering preventive care, including lead screening. Disparities in the risk of lead exposure, particularly related to race and socioeconomic class, are known to exist; yet interventions to achieve equity in screening rates are not well documented.

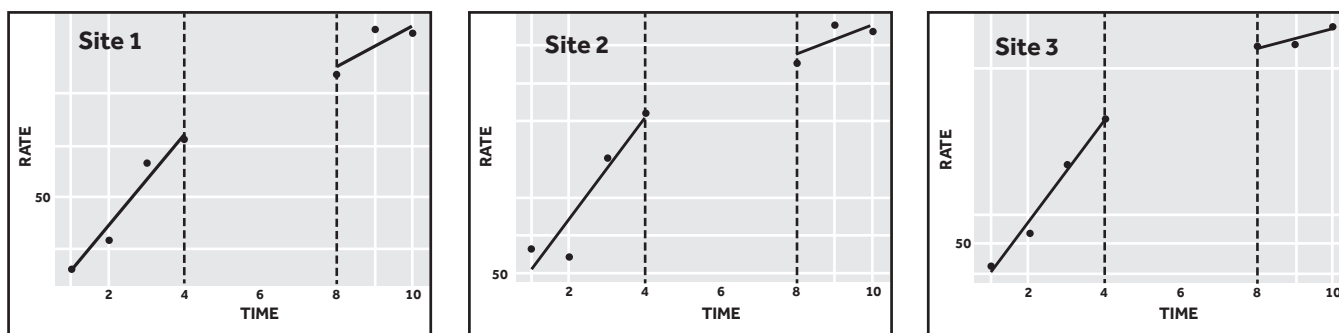
**Objective:** We hypothesized that implementing point-of-care (POC) lead testing in the primary care office as a standard operating procedure (SOP) would improve screening rates and achieve equity in screening among different racial/ethnic groups.

**Methods:** We performed retrospective analyses of lead screening completed among 2-year-old children attending three ambulatory primary pediatric offices owned and operated by a single academic medical center. POC was instated as a SOP in January 2019, with pre-intervention data collected from 9/2017-11/2018, and post-intervention data collected from 3/2019-2/2020. Total number of patients seen was 7273 divided over three practice sites. Data were stratified by race/ethnicity, as well as by insurance type (public vs. private) and were analyzed both within each

site and across all three sites. Interrupted time series analysis was performed to compare the change in quarterly rates among patients, as well as to compare pre- and post- intervention trends between different racial/ethnic groups. Data were also compared within each racial/ethnic/insurance group among all 3 sites together, and individually within each site.

**Results:** Overall, quarterly lead screening rates in post-intervention periods were significantly higher than in pre-intervention periods at all three primary care locations. Screening rates increased by 7.7% in Site 1, 10.1% in Site 2, and 13.4% in Site 3 (all  $p < 0.05$  in simple linear regression models). Furthermore, quarterly screening rates post-intervention were significantly higher than in pre-intervention in all race/ethnicity groups (Figure). Though there were some racial/ethnic disparities observed in lead screening pre-intervention, there were none observed post-intervention in any of the three sites.

**Conclusions:** Implementing POC lead screening as an SOP in the ambulatory setting can achieve equity across different racial/ethnic/socioeconomic groups.



Estimated pre-/post-intervention trends for compliance rates among overall patients by site.



# A Retrospective Pilot Study of The Relationship Between Total Serum Bilirubin, Brain MRI Lesions and Early Interventions Services Neonates with Hypoxic-Ischemic Encephalopathy

Lale Akaydin, MD<sup>1</sup>; Jennifer Pynn, MD<sup>1</sup>; Wei Hou, PhD<sup>2</sup>; Echezona Maduekwe, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital; <sup>2</sup>Department of Statistics, Stony Brook University Hospital, Stony Brook, NY

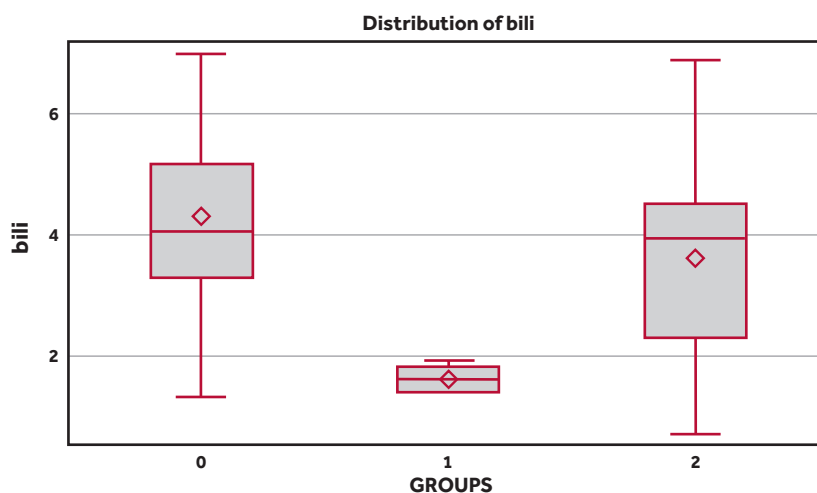
**Background:** Hypoxic-ischemic Encephalopathy (HIE) affects 1.5/1000 live birth. Twenty-five percent of survivors develop neurodevelopmental (ND) disability. An abnormal MRI is a predictor for ND disability, but is limited by false-negatives. Heme oxygenase (HO), a rate-limiting factor in bilirubin production, is activated and utilized following exposure to hypoxia. Studies have shown total serum bilirubin (TSB) levels in HIE patients are lower than those without HIE. ND outcomes in HIE neonates with TSB levels and MRI results have not been reported.

**Objective:** To explore the relationship between 24hour TSB values and severity of brain lesions in MRI performed at 5-10days of life in neonates born at gestational age (GA)  $\geq 35$ weeks with moderate-to-severe HIE who received hypothermia therapy. In addition, we explored the relationship between TSB values, brain MRI lesions, and receipt of Early Intervention (EI) services for developmental delay.

**Methods:** Data was analyzed from patients with moderate-to-severe HIE born at Stony Brook University Hospital at GA  $\geq 35$ weeks and followed up in high-risk clinic from January 2013 to November 2021. MRI findings were grouped as "0" if no lesion, "1" with positive lesion at the posterior limb of the internal capsule, basal ganglia, or thalamus, and "2" with lesion in white or gray matter. We excluded patients with congenital anomalies and analyzed results using chi-square and ANOVA. P-value  $< 0.05$  was considered statistically significant.

**Results:** Forty-six neonates were included with a mean GA  $38.6 \pm 1.6$  weeks, mean weight of  $3490 \pm 539$  grams, and 71.7% males. We observed a mean TSB of  $1.61 \pm 0.21$  mg/dL for group 1,  $3.64 \pm 1.90$  mg/dL for group 2, and  $4.24 \pm 1.46$  mg/dL for group 0. TSB distribution between groups 0 and 1 was significant ( $p=0.0002$ ), but not significant between groups 0 and 2 ( $p=0.31$ ). EI service was administered to all patients in group 1, 37.5% in group 2, and 15.6% in group 0. Patients in groups 0 or 2 whose TSB level was  $> 3.7$  mg/dL did not receive EI services.

**Conclusion:** In this observational study, the 24hour TSB levels  $< 2$  mg/dL were strongly associated with EI services in group 1 patients. In addition, TSB level  $> 3.7$  mg/dL in group 0 or 2 patients did not receive EI services. Despite our observations, future studies are required to determine whether TSB levels could be a reliable predictor of ND outcomes in patients with false-negative MRI.



## The Impact of Antenatal Magnesium Sulfate on the Initiation of Enteral Feeds in Late Preterm and Term Infants of Mothers with Preeclampsia

Sarah Mardanlou, MD<sup>1</sup>; Jennifer Pynn, MD<sup>1</sup>; Joseph Decristofaro, MD<sup>1</sup>; Wei Hou, PhD<sup>2</sup>; Echezona Maduekwe, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital;

<sup>2</sup>Department of Statistics, Stony Brook University Hospital, Stony Brook, NY

**Background:** Preeclampsia (PEC) in the US ranges from 2% to 6% in healthy, nulliparous women. Magnesium sulfate (MgSO<sub>4</sub>) is the standard treatment for seizure prevention in PEC. Despite this beneficial effect of MgSO<sub>4</sub>, there are concerns for adverse gastrointestinal (GI) consequences in neonates. Calcium replacement by magnesium in the smooth muscle cells with resultant disruption of actin and myosin interactions is considered the mechanism for GI dysmotility. While multiple studies have shown GI impact of antenatal MgSO<sub>4</sub> in preterm infants <32weeks gestational age (GA), information is lacking in neonates born ≥34weeks GA to mothers with PEC.

**Objective:** The objective of this research project was to determine if antenatal MgSO<sub>4</sub> administered to mothers with PEC who delivered at ≥34weeks GA affects the GI motility in neonates. We hypothesize that although MgSO<sub>4</sub> administered prenatally to mothers with PEC will not affect GI motility, time to first enteral feed would be delayed.

**Methods/Designs:** In this IRB-approved retrospective study, we reviewed charts of women who received MgSO<sub>4</sub> for PEC and their babies born at ≥34weeks GA between January 2013 - June 2021 at Stony Brook University

Hospital. The primary outcome was time to first stool, a measure of intestinal motility. The secondary outcomes were first feeding time and feeding intolerance defined by abdominal distention, emesis, and gastric residuals within 72 hours of life. In order to detect a medium effect size of 0.54 standard deviation with a power of 80%, we required a sample size of 100 (50 exposed, matched with 50 controls). Results were analyzed using chi-square and t-test.

**Results:** Study included 100 neonates (male:female ratio 1.2:1) weighing 1790 - 4270g with GA 34 - 40.6 weeks. No difference was seen in the time to the first stool within 24 hours of life between the MgSO<sub>4</sub> exposed neonates and their matched controls (p=0.48). Although more unexposed controls had their first enteral feeds initiated within the first 12 hours of life compared to the MgSO<sub>4</sub> exposed (p=0.02), there was no difference in feeding intolerance between the two groups (p=0.29).

**Conclusion:** Antenatal MgSO<sub>4</sub> was not associated with GI dysmotility in neonates ≥34weeks GA born to mothers with PEC. In addition, although there was no difference in feeding intolerance between the two groups, MgSO<sub>4</sub> exposed neonates were more likely to have their initial enteral feeds delayed.

## Bedside to Webside: Teaching Medical Students How to Conduct a Telehealth Encounter

Shantel Apeseche, MD<sup>1</sup>; and Erin Hulfish, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital

**Background:** The COVID-19 pandemic has led to the rapid adoption of telehealth. This has also led to the creation of telehealth competencies to address major telehealth domains. Despite these developments, there is still a lack of well-studied formalized training techniques and assessments for learners, especially with virtual physical exam skills.

**Objective:** This project sought to develop a formalized telehealth curriculum teaching virtual physical exam skills to pre-clinical students to improve confidence in conducting a virtual physical exam.

**Design:** An existing grading checklist for an in-person standardized patient curriculum was adapted for telehealth. Following completion of the existing course and telehealth elective, a "train the trainer" model prepared clinical teaching assistants capable of teaching telemedicine. Pre-clinical students completed a pre-course survey measuring confidence with telehealth. Learners were virtually instructed by trainers to conduct an encounter in preparation for a final standardized assessment for proficiency with the telehealth grading checklist. Following their final exams, all learners immediately completed a post-course survey, which was compiled and analyzed with pre-course surveys, distinguishing learners' self-reported improvement in confidence.

**Results:** The pilot course included 124 second year pre-clinical medical students. After completion of the course, there was a statistically significant improvement in the students' confidence in their ability to conduct different elements of the virtual telehealth exam. Pre and post test data was analyzed using two proportioned t-tests. There was also a significant improvement in their confidence to conduct a virtual encounter the same as an in-person encounter ( $p < 0.001$ ) There was over 99% completion of all the 74 elements of the final virtual physical exam.

**Conclusions:** Students gained confidence in their virtual skills and were able to successfully conduct a virtual physical exam. Limitations include the inability to associate learners' pre-course and post-course surveys to stratify improvements in confidence, and inability to demonstrate proficiency in conducting a virtual exam as it pertains to confidence in telehealth. There may also be variability among individual learners' propensity to self-report confidence. This curriculum is highly transferable with its ease of application using the train-the-trainer model. Its adaptation to any level of learner with adjustment for different specialties is imminent allowing for formalized educational initiatives. This could lead to inclusion in institutional privileging for telehealth.

	N (pre)	Mean	SE	N (post)	Mean	SE	p
History	149	3.120805	1.132521	124	4.024194	0.0875578	<.001
Physical Exam	149	1.865772	0.0811768	124	4.193548	0.0683988	<.001
Providing End of Visit Counseling	149	2.201342	0.0956992	124	3.379032	0.1101895	<.001
Telehealth Documentation	149	2.288591	0.1022579	124	2.879032	0.1137036	<.001

**Table 1:** Pre and Post Differences in Confidence in Ability to Conduct Different Elements of a Virtual Telehealth Encounter (Higher=More Confidence from 1-5)

## Associations Between BMI Status and Asthma Triggers for Hospitalized Children in an Urban and a Suburban Children's Hospital in New York State

Linda Camacho, MD<sup>1</sup>; Elissa Gross, MD<sup>2</sup>; Wei Hou, PhD<sup>3</sup>; Emily Leong<sup>1</sup>; Jennifer Gremmell, MD<sup>2</sup>; Josette Bianchi-Hayes, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital; <sup>2</sup>Montefiore Department of Pediatrics, Bronx, NY; <sup>3</sup>Stony Brook Department of Family, Population, and Preventative Medicine

**Background:** Asthma is one of the most prevalent childhood illnesses and a common cause for pediatric hospitalization. Childhood asthma and increased weight status are interrelated, though gaps in our understanding of this relationship remain.<sup>1,2</sup> Few studies examine the relationship between asthma triggers and weight status in hospitalized children.

**Objective:** The purpose of this study is to compare triggers in children hospitalized for an asthma exacerbation by weight status (normal weight <85th BMI percentile, overweight 85th-95th BMI percentile, obese >95th BMI percentile).

**Methods:** An IRB-approved, retrospective chart review was conducted with children 2-18 years admitted between 2017-2019 at two academic children's hospitals, Montefiore in Bronx, NY, and Stony Brook Children's Hospital in Stony Brook, NY. An original database including demographics, zip code, reported triggers, length of stay (LOS), comorbidities was created with electronic medical record (EMR) data of both sites. Patients were stratified by BMI and asthma triggers were compared between different age groups and BMI categories using chi-square tests. Logistic regression was used to estimate odds ratios for asthma triggers by BMI categories adjusting for age, gender, race, and hospital.

**Results:** N= 1931 patients, comprised of 1667 (86%) and 264 (14%) children representing urban and suburban populations, respectively. 56% of children had healthy BMI, 15% overweight, 29% obese. Sample was 59% male, mean age was 6.5 years (SD=4.4). Viral triggers accounted for 78% of all inpatient asthma triggers. Children 0-4 years were statistically more likely to report a viral trigger compared to >4 years (0-4yrs 90% vs 4-11yrs 74% vs >12 years 66% with p<0.0001). Children admitted to Stony Brook were more likely to report viral triggers compared to those admitted to Montefiore (87% vs 76% respectively, p<0.0001). There was no significant association between BMI categorization and asthma triggers (OR obese vs normal weight 1.02 and OR overweight vs normal weight 1.03, overall P=0.98). Location, age, BMI categorization and smoking exposure did not increase risk of PICU admission nor did it have a significant impact on LOS.

**Conclusion:** In our study of two academic children's medical centers, inpatient asthma admission triggers were not associated with weight status. However, non-viral triggers were nearly twice as common (24% vs 13%) at Montefiore (urban location) compared to Stony Brook (suburban location). Further exploration of this difference merits exploration, including examination of pollution levels in each location.

Supported by Dept. of Pediatrics Intramural grant-Grant number 1138908-1-5656. No financial disclosures.

References:

- <sup>1</sup>Muc M, Mota-Pinto A, Padez C. Association between obesity and asthma - epidemiology, pathophysiology and clinical profile. *Nutr Res Rev.* 2016;1-8.  
<sup>2</sup>Mangova M, Lipek T, Vom Hove M, et al. Obesity-associated asthma in childhood. *Allergol Select.* 2020;4:76-85

## Use of an Individualized Teaching Plan to Augment Teaching Skills for Pediatric Residents: Three Year Review

Mallory Carson, DO<sup>1</sup>; Rachel Boykan, MD<sup>1</sup>; Robyn Blair, MD<sup>1</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Maribeth Chitkara, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children’s Hospital, <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Background:** Medical education is more engaging when learners’ interests, motivations, and learning strategies are considered. Individualized learning plans (ILP) help residents to create learning goals and see them to completion.<sup>1,2</sup> Residents and fellows serve as teachers for junior colleagues, but may not start residency prepared for this role. Stony Brook Children’s residency program holds an annual “Residents as Teachers” retreat for incoming trainees (RAT). Prior to this study, there was no formalized follow-up on trainees’ implementation of these skills.

**Objectives:** Implement an individualized teaching plan (iTeach) modeled after the ILP in the retreat and evaluate its effect on subsequent teaching efforts by pediatric residents.

**Methods/Design:** All pediatric trainees who attended the RAT were eligible for inclusion. Subjects completed the iTeach immediately after the RAT (T1), 6-12 months after (T2), and >12 months after (T3). The iTeach tool prompted subjects to self-assess regarding nine attributes. Subjects identified newly learned teaching strategies they planned to implement and how and when they would assess their success. Trainee self-ratings were analyzed using t-tests in Stata 16. iTeachs were qualitatively analyzed independently by study investigators (MC, MBC, RB) for themes. Students assessed pediatric resident teaching skills pre- and post-retreat using a validated tool, the Intern Clinical Teaching Effectiveness Instrument (ICETI)<sup>3</sup>.

**Results:** Forty-three trainees from three academic years participated (Table 1). There were no significant differences in trainee self-ratings over time. Qualitative analysis of the iTeach tools revealed the most commonly used strategies were “what if scenarios” and “one-minute preceptor.” Comments overall reflected personal gains in critical thinking and differential diagnosis development, as well as prioritization of teaching strategies that could be delivered in a timely and clinically relevant manner. ICTEI student ratings of resident teaching skills were high, showing no significant difference, both pre- and post- RAT.

**Conclusion:** The iTeach was successfully integrated into the annual RAT. Completing the iTeach allowed trainees to consider their personal teaching skills, commit to utilizing newly gained techniques in clinical practice and reflect on successes and missteps of teaching endeavors after the RAT.

Academic Year	iTeach completed (T1)	iTeach completed (T2)	iTeach completed (T3)
2018	15	14	17
2019	13	13	12
2020	13	12	6
<b>Total</b>	<b>41</b>	<b>39</b>	<b>35</b>

**Table 1:** Study Cohorts with iTeach Completions by Academic Year

**References:**

- <sup>1</sup>Kusurkar RA, Croiset G, Ten Cate TJ. Twelve tips to stimulate intrinsic motivation in students through autonomy-supportive classroom teaching derived from self-determination theory. *Med Teach.* 2011;33(12):978-82
- <sup>2</sup>Li ST, Tancredi DJ, Co JP, West DC. Factors associated with successful self-directed learning using individualized learning plans during pediatric residency. *Acad Pediatr.* 2010 Mar-Apr;10(2):124-30.
- <sup>3</sup>Hill AG, Srinivasa S, Hawken SJ, Barrow M, Farrell SE, Hattie J, Yu TC. Impact of a Resident-as-Teacher Workshop on Teaching Behavior of Interns and Learning Outcomes of Medical Students. *J Grad Med Educ.* 2012 Mar;4(1):34-41

## Role of Protein Intake on Serum Blood Urea Nitrogen Levels in Acute Hypoxic Ischemic Encephalopathy

Efren L. Diaz, MD<sup>1</sup>; Joseph DeCristofaro, MD<sup>2</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>3</sup>; Susan Mathieson, RD<sup>4</sup>

<sup>1</sup>Department of Pediatric Medicine, Stony Brook University Hospital, Stony Brook, NY.

<sup>2</sup>Department of Neonatology, Stony Brook University Hospital, Stony Brook, NY.

<sup>3</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University, <sup>4</sup>Department of Nutrition, Stony Brook University Hospital, Stony Brook, NY.

**Background:** Perinatal hypoxic ischemic encephalopathy (HIE) is often associated with multiorgan system failure including acute kidney injury (AKI). The standard neonatal treatment for HIE is whole body therapeutic hypothermia (WBTH) to slow brain cell damage and preserve brain function. AKI can be associated with azotemia and introduction of protein intake during WBTH may exacerbate this problem. Therefore, introduction of amino acids nutrition may be delayed during WBTH. However, we recognize the importance of adequate protein for normal brain development in neonates.

**Objective:** To determine whether there is any correlation between daily protein intake in infants undergoing WBTH for HIE and the blood urea nitrogen (BUN) levels.

**Methods/Design:** We identified 37 infants with HIE who underwent WBTH from 2016-2020 at Stony Brook University Hospital NICU. Daily serum BUN and Creatinine, urine output, fluid intake and serum glutamic pyruvate transaminase (SGPT) were measured. Linear and logistic regression was used to examine the association between amino acid intake on days of life 1 and 2 and the effect on BUN, creatinine, and SGPT on days 2 and 3. Analyses were conducted in Stata 16.

**Results:** 24 of the 37 babies received amino acid solution in the first 72 hours of life. None of the infants were diagnosed with AKI during this study period. There was no difference in fluid intake and urine output in the two groups. The highest cumulative protein intake over 72 hours was 5.1 gm/kg. Regression analysis showed no association between amino acid intake and increased BUN on days 1-2 with ( $p=0.743$ ), however, amino acid intake on day 2 was associated with increase in BUN on day 3 ( $p=0.024$ ). There was a statistically significant increase in the BUN levels at 72 hours in those infants that received the most amino acids compared to those who had none, however, these remained in the normal range. Analysis showed no relationship to measured levels of creatinine or SGPT in our data set with  $p$ -values of 0.454 and 0.542 respectively. The serum creatinine was highest on day 1 and fell by 72 hours independent of protein intake.

**Conclusions:** Protein intake in infants with HIE may be safe to initiate by day 1 or 2 of life. Advancing protein intake over this time should include surveillance of serum chemistries and fluid balance.

## Maternal and Neonatal Risk Factors for Development of Neonatal Lenticular Striate Vasculopathy

Russell Himmelstein, MD<sup>1</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Shanthy Sridhar, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital, <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Background:** Lenticular Striate Vasculopathy (LSV) is an echo density of the lenticulostriate branches of the middle cerebral arteries in the region of the basal ganglia and/or thalamus and a common finding in neonatal ultrasounds performed in the NICU. However, its significance remains unknown. Neonates with this finding often get a congenital work-up done based on HUS findings in the absence of clinical or predisposing factors.

**Objective:** The aim of the study is to assess risk stratification and compare maternal and neonatal risk factors for neonates with and without LSV.

**Methods:** This is a retrospective study on infants admitted to Stony Brook University Hospital NICU from January 2016 through December 2020. All infants who had a head ultrasound done and who had mineralizing vasculopathy reported were included in the study. Each neonate with LSV was then matched by gestational age, weight, and birth year to controls without LSV. Neonatal and maternal risk factors were then evaluated and adjusted odds ratio (AOR) calculated for each risk factor to determine any association with the finding of LSV.

**Results:** Out of the 76 neonates with LSV, one tested positive for CMV and received antiviral treatment. All infants with LSV tested negative for toxoplasmosis and were without chorioretinitis. Table 1 provides maternal and neonatal variables studied along with their AOR. Apart from maternal diabetes with an AOR 0.16 (95% CI .04, 0.74), there was no significant association between maternal or neonatal demographics in infants with LSV and controls. The average day of life when LSV was identified ranged from 10-14 days, regardless of gestational age. None of the ultrasounds done at birth showed LSV.

**Conclusion:** While previously associated with congenital infections, there seems to be no specific maternal or neonatal risk factors for development of neonatal LSV. This is important as an infectious disease workup including eye exam may not be necessary for these infants. Interestingly, the presence of maternal diabetes was a protective factor for LSV, though the reason for this is unknown. As LSV developed within the same postnatal time across gestational age, the presence may very well be a normal stage of postnatal brain development. Future work may involve evaluation of the neurodevelopment outcomes in infants with LSV.

Variable	Adjusted Odds Ratio (AOR)	95% Confidence Interval (CI)	P value
Sex	1.76	(0.70, 4.42)	0.22
Birth Weight (g)	1.00	(1.00, 1.00)	0.30
Antimicrobials	1.02	(0.37, 2.84)	0.97
Methylxanthines	3.72	(0.50, 27.89)	0.20
Diuretics	0.65	(0.13, 3.30)	0.61
Delivery Type	1.26	(0.46, 3.44)	0.66
Gestation	1.23	(0.34, 4.42)	0.75
BMI >30	1.05	(0.98, 1.12)	0.18
Antenatal steroids	1.03	(0.26, 4.08)	0.97
Maternal Diabetes	0.16	(0.04, 0.74)	0.02*
Maternal Hypertension	0.59	(0.15, 1.61)	0.24

**Table 1:** Maternal and Neonatal Demographics. Cases and controls matched on gestational age, weight and birth year. P value significance set at less than or equal to 0.05. \*Significant variable.

## Impact of the COVID-19 Pandemic on Pediatric Resident Wellness

Kaitlyn Krebushevski, DO<sup>1</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Josette Bianchi-Hayes, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital, <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Background:** Healthcare workers across the world have been impacted by the COVID-19 pandemic. Even prior to the pandemic, literature showed that residents across all subspecialties suffered from burnout<sup>1</sup>. We hypothesized that the pandemic would increase resident physician burnout given the volume of patients, and the severity and uncertainty of this novel virus.

**Objective:** The objective of this study was to assess pediatric residents' burnout, their perceptions regarding their own wellbeing and to identify unique issues related to personal and systemic wellness surrounding COVID-19. Additionally, we sought to identify innovative ways to address these issues within the constraints of the pandemic.

**Methods/Design:** An anonymous, 15-question QualtricsXM survey that included validated<sup>2,3</sup> burn-out scales, multiple choice and open-ended questions regarding perceptions related to wellness was distributed to pediatric residents at Stony Brook Children's Hospital via email during the spring of 2021. Using Stata 16, frequencies were compared for self-reported burn-out scale questions regarding feelings before and after the pandemic (residents were asked to answer for both before the pandemic and currently). Mean scores and standard deviations were calculated for wellness initiatives ratings. Open-ended questions were analyzed for common themes contributing to burnout.

**Results:** The response rate was 55% (27/49 residents, 12 PGY1, 10 PGY2, and 5 PGY3). 57% of senior residents experienced symptoms of moderate to severe burn-out during the pandemic compared to only 21% prior to the pandemic (Chi-square 3.7433, p-value .053). The primary pandemic stressor noted (63% of respondents) centered around lack of socialization or in-person events/education, despite the increase in virtual opportunities. The most highly rated potential wellness initiatives to address post-pandemic climate were improved access to food/nutrition while at work followed by socially-distanced exercise meetups.

**Conclusion:** The percentage of PGY2/3 residents with moderate to severe burn-out increased from 21% prior to the COVID-19 pandemic to 57% after the start of the pandemic, though statistical significance was limited by a small sample size. Reduction of in-person professional and social events were the most common themes related to COVID related stressors. Activities related to nutrition and exercise were rated most highly as ways to address post COVID burnout. Next steps have included program-wide development of innovative interventions to address the lack of socialization and organization of focus groups to further inform change.

### References:

<sup>1</sup>Wilson PM, Kemper KJ, Schubert CJ, et al. National Landscape of Interventions to Improve Pediatric Resident Wellness and Reduce Burnout. *Acad Pediatr*. 2017;17(8):801-804.

<sup>2</sup>Keim SM, Mays MZ, Williams JM, Serido J, Harris RB. Measuring wellness among resident physicians. *Med Teach*. 2006;28(4):370-374.

<sup>3</sup>Dolan ED, Mohr D, Lempa M, et al. Using a single item to measure burnout in primary care staff: a psychometric evaluation. *J Gen Intern Med*. 2015;30(5):582-587.



## A Nighttime Curriculum for Medical Students in the Pediatrics Clerkship: A Pilot Study

Sean O'Connor, MD<sup>1</sup>; Wei-Hsin Lu, PhD<sup>1</sup>; Maribeth Chitkara, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics at the Renaissance School of Medicine at Stony Brook University

**Background:** Application of classroom content in a supervised clinical setting is a critical component of undergraduate medical education. Commonly cited impediments to learning in a clinical setting are a low level of supervision and too few opportunities to see patients. Increasing class sizes may negatively impact learning by diluting the number of patients per student and reducing the amount of direct supervision that each student receives. Evidence suggests students prefer night rotations to call schedules and perceive that night rotations offer unique educational opportunities. However, night rotations lack the structure of their daytime counterparts leading to variability in learning outcomes. We added a week of inpatient nights and an optional "scavenger hunt" was created in an attempt to standardize the educational experience of the night rotation while allowing for self-directed and individualized learning.

**Objective:** To evaluate the addition of nighttime clinical "scavenger hunt" tasks and assess the impact of and student satisfaction with the nighttime curriculum.

**Design/Methods:** Pediatric clerkship students completed a 29-item Scavenger Hunt during their night rotation. An optional anonymous survey was given at the end of the clerkship.

**Results:** A total of 168 students participated. T-tests reveal that students in the 2nd half of the clerkship year completed significantly more tasks than students in the 1st half (Mean=16 vs.12,  $p < 0.001$ ). Using the ORIME framework to categorize the tasks, there were significant differences in completion of all categories (Table 1). Completion of the tasks also provided students opportunities to demonstrate performance of the 13 core Entrustable Professional Activities. Chi-squared analyses show that students who perceived this activity as relevant to the clerkship ( $p=.01$ ) and helped the students engage in the rotation ( $p=0.01$ ) were more likely to complete half or more of the tasks.

**Conclusions:** Results suggest that students were more likely to complete tasks as they gained experience in the clinical environment, and those who completed more tasks were more likely to find the experience to be engaging and relevant. Comments suggest that a barrier to task completion, beyond a desire to study, was a perception that they might be burdensome to residents. We conclude that resident participation is a necessary element of any future nighttime curriculum and presents opportunities for further study.

	1st half of Clerkship yr Completion rate % (n=76)	2nd half of Clerkship yr Completion rate % (n=92)	p value
Overall (29 tasks)	41%	56%	.000
Observer (3 tasks)	21%	31%	.022
Reporter (16 tasks)	41%	57%	.000
Interpreter (8 tasks)	47%	62%	.000
Manager (2 tasks)	39%	52%	.034

**Table 1.** Comparison of Scavenger Hunt tasks (using the ORIME framework) completion rates between 1st and 2nd half of the clerkship year (n=168)

## E-Cigarette and Vaping AAP ECHO (Extension for Community Healthcare Outcomes) Project Outcomes

Belliny Phaeton, MD<sup>1</sup>; Samantha Feld-Ansbach, MD<sup>1</sup>; Alisa Chalmers, MD, MS<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital

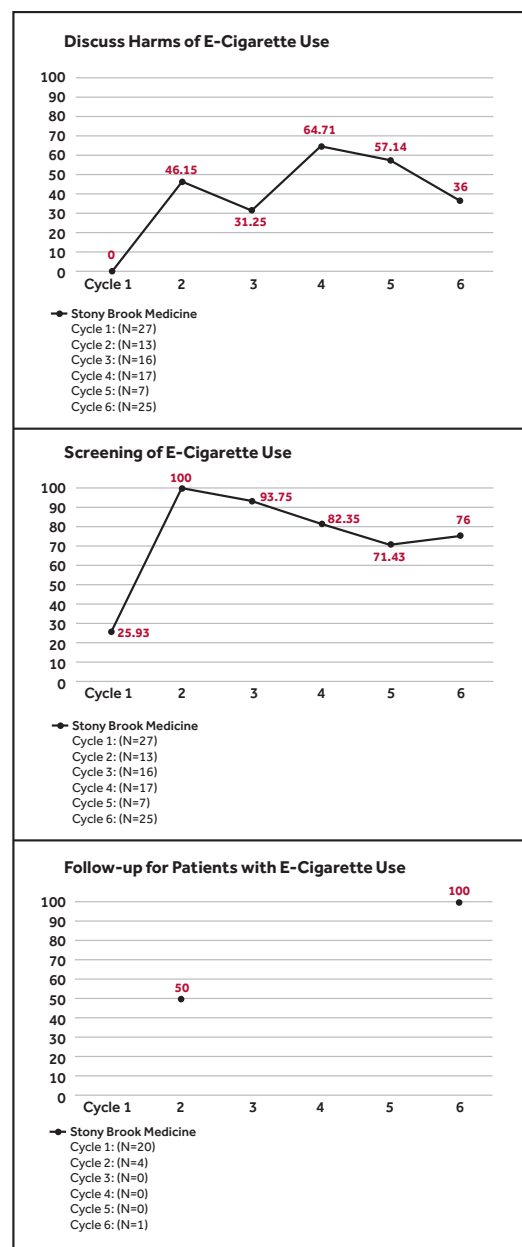
**Background:** According to the CDC, over 2 million U.S. middle and high school students reported current use of e-cigarettes (e-cigs) in 2021. E-cigs contain addictive and harmful substances. With the increasing use of e-cigs in the adolescent population, it is important that pediatricians identify e-cig users, educate their patients, and offer assistance in cessation of its usage. The AAP had a 6-month learning collaborative addressing adolescent e-cig use via an ECHO (Extension for Community Healthcare Outcomes) model. The Stony Brook Children's Primary Care office in Islip participated in this collaboration.

**Objective:** The objective was to assess current screening rates and improve them. Additional outcomes were to increase patient education about this topic as well as improving appropriate follow up with those who use e-cigs.

**Methods/Design:** Baseline data on screening for e-cig use and patient education of harms of e-cig use was collected retrospectively as cycle 1 from the electronic medical record (EMR). Then, there were five PDSA (Plan-Do-Study-Act) cycles (a problem solving model for implementing change). Data was collected monthly from the EMR and entered into the AAP QI database and a report was generated graphing the results.

**Results:** Documented screening improved from 25% to 76% by the end of the project. Education about the harms of e-cig use increased compared to baseline data (from 0% to 36%). Although sample size was small, education about cessation and arranging follow up appointments for e-cig use also increased.

**Conclusion:** There was overall improvement in adolescent e-cig screening, education, and follow up appointments over the course of this QI project.



## Impact of Perinatal Factors and Golden Hour of Care Bundle on the Degree of Intraventricular Hemorrhage in Very Low Birth Weight Infants

Rebecca Polchinski, DO<sup>1</sup>, Shanthy Sridhar, MD<sup>1</sup>, Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>, Aruna Parekh, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital; <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Introduction:** Intraventricular Hemorrhage (IVH) is a pervasive diagnosis amongst Neonatal Intensive Care Unit (NICU) patients, with stagnant rates over the past 20 years despite advancements in modern medicine. Many NICU centers have implemented Golden Hour Care Bundle elements (GHCB) to reduce neonatal morbidities including IVH. This intervention strategy was traditionally used in trauma medicine to reduce mortality within the first hour of an incident. Many studies have shown that GHCB has a positive impact on IVH, but the effect of individual components of the protocol on the degree of development of IVH has not been well studied.

**Objective:** To evaluate individual impacts of components of GHCB associated with IVH in order to devise a protocol at the Stony Brook University Hospital NICU.

**Methods/Design:** Data collection was performed via retrospective chart review. A total of 282 infants with any diagnosis of IVH born at Stony Brook University Hospital from 2016-2019 were included in the study. Infants were grouped based on degree of any head ultrasound findings reported <7 days of life. Study subjects were

divided into two groups due to the small sample size of severe IVH diagnoses: Group 1 (N=238) with Grade I and II IVH, Group 2 (N=44) infants with grades III and IV IVH. Data was analyzed via multiple logistic regressions, examining Perinatal Factors, Neonatal Demographics, and Golden Hour Care Bundle Elements (Table 1).

**Results:** There was no difference between groups 1 and 2 on prenatal interventions and delivery room interventions. Statistically significant odds ratios were seen in more severe IVH (grade III and IV) in Maternal Chorioamnionitis (OR-103, 95% CI-1.77-6019), APGAR scores at 5 minutes of age (OR-0.51, 95% CI-0.30-86) and SNAPPE (severity of illness) score at 24hrs (OR-1.15, 95% CI-1.02-1.29). No specific intervention postnatally from Bundle elements led to a statistically significant decrease in the odds of developing severe IVH.

**Conclusion:** IVH is a multifactorial diagnosis impacting neonates in NICU. In our cohort, presence of maternal chorioamnionitis, APGAR scores at 5 minutes and severity of illness seem to be most predictable of severe IVH. Individual impact of other factors contributing to IVH remains uncertain.

Variable	Odds Ratio (OR)	95% Confidence Interval (CI)
Time to surfactant	1.00	(0.99, 1.00)
Mechanical Ventilation (Y/N)	1.35	(0.22, 8.40)
CPAP	0.42	(0.12, 1.47)
NIMV	1.19	(0.29, 4.87)
Intubation Attempts	1.24	(0.66, 2.31)
Inotropic agent (Y/N)	0.59	(0.13, 2.61)
Fluid Bolus (Y/N)	0.05	(0.05, 4.70)
Air Leak (Y/N)	6.13	(0.55, 68.24)
Admission Temperature	0.95	(0.49, 1.85)

**Table 1.** Golden Hour Care Bundle Elements - Odds of Having IVH Grade III and Grade IV (N=44). Each variable is in a separate mode.

## Longitudinal Impact of Gender-Affirming Endocrine Intervention on Depression Scores of Transgender Youth: A Second Look

Mary Helen Schwartz, MD<sup>1,2</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Chrystal Achille, MD<sup>1,2</sup>; Tenille Taggart, BA<sup>1,3</sup>; Nicholas R. Eaton, PhD<sup>1,3</sup>; Kimberly Tafuri, DO<sup>1</sup>; Andrew Lane, MD<sup>1</sup>; Thomas A. Wilson, MD<sup>1</sup>; Lilian Cruz, BS<sup>2</sup>; Jennifer Osipoff, MD<sup>1</sup>

<sup>1</sup>Stony Brook University Hospital, <sup>2</sup>Stony Brook University Renaissance School of Medicine,

<sup>3</sup>Stony Brook University Department of Clinical Psychology

**Background:** Gender dysphoria is defined as psychological distress from discordance between gender identity and sex assigned at birth<sup>1</sup>. Among young gender minorities, depression is twice as prevalent as in cisgender controls ( $p < 0.01$ )<sup>2</sup>. Measures of depression include the Patient Health Questionnaire-9 for Teens (PHQ9; Spitzer et al. 1999), with scores 10 or higher signifying moderate to severe depression; and the Center for Epidemiologic Studies Depression Scale-Revised (CESDR; Eaton et al. 2004 & Radloff 1977), with scores 16 or higher indicating depression. Achille et al. demonstrated reduction in mean CESDR ( $p < 0.001$ ) and mean PHQ9 ( $p < 0.001$ ) while receiving gender-affirming care<sup>3</sup>. Linear regression also demonstrated slight decrease in male to female (MTF) patients' PHQ9 when on cross sex hormones ( $R^2 = 0.29$ ,  $p = 0.07$ )<sup>3</sup>.

**Objective:** We aim to demonstrate the medical necessity of gender-affirming interventions for transgender youth in the context of mental health. This project is a continuation of the Achille study.

**Methods:** Between 2013 and 2021, 161 patients aged 8 to 21 have enrolled. Data was collected every 6 months using the PHQ9, CESDR, and the Quality of Life Enjoyment and Satisfaction Questionnaire Short Form (QLES; Endicott et al. 1993). Mean scores were compared using

two-sample z tests. Linear regression was performed to analyze change in PHQ9 scores compared to total time enrolled. Repeat calculations controlled for gender, hormone therapy, and psychiatric medications.

**Results:** 29% of subjects are MTF and 71% female to male (FTM). Mean PHQ9 score decreased from 9.3 at Wave 1 ( $n = 159$ ) to 5.8 at Wave 4 ( $n = 66$ );  $z = 4.74$ ,  $p = 0.000002$ . Mean CESDR score decreased from 24 at Wave 1 ( $n = 157$ ) to 15 at Wave 4 ( $n = 67$ );  $z = 4.38$ ,  $p = 0.00001$ . Mean QLES percent increased from 60.3 at Wave 1 ( $n = 157$ ) to 70.9 at Wave 4 ( $n = 65$ );  $z = -4.2$ ,  $p = 0.00002$ . For subjects with at least two survey points ( $n = 107$ ), most recent PHQ9 was 2.9 times lower if on estrogen or testosterone ( $p = 0.036$ , 95% CI = -5.6, -0.2). No correlations were found between time enrolled and change in PHQ9 ( $p = 0.9$ ) or latest PHQ9 ( $p = 0.5$ ).

**Conclusions:** Improvement in mean PHQ9, CESDR, and QLES percent scores from baseline suggest mental health benefits from gender-affirming care. Difficulty arises with variations in time enrolled. The data suggests those with lower PHQ9 scores are more likely to be on hormone therapy. Insufficient data remains to correlate with improvement in PHQ9 score over time.

### References:

<sup>1</sup>Atkinson S, Russel D. 2015. Gender dysphoria. *Aust. Fam. Physician*, 44(11), 792-6.

<sup>2</sup>Reisner et al. 2016. Social epidemiology of depression and anxiety by gender identity. *J Adolesc Health*, 59(2), 203-208.

<sup>3</sup>Achille et al. 2020. Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths. *Int. J. Pediatr. Endocrinol.* 2020(8).

## Case Series: Retrocecal Appendicitis Identification on Point of Care Ultrasound (POCUS)

Raizada Vaid, MD<sup>1</sup>; Allison Beattie, DO<sup>1</sup>; Carl Kaplan, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital

**Background:** Point-of-Care Ultrasound (POCUS) has proven to be a valuable imaging modality in the evaluation of right lower quadrant abdominal pain to assess for appendicitis<sup>1</sup>. However, pediatric patients with appendicitis often have atypical presentations, especially when the disease process occurs in less-typical anatomical positions<sup>2</sup>. Retrocecal appendicitis, which often presents perforated due to its position and non-specific symptoms, poses a unique challenge to timely diagnosis<sup>3</sup>.

**Objective:** Describe a case series suggesting that an expanded POCUS protocol, including interrogation of the retrocecal area, using novel transducer and patient positioning, may decrease the number of missed retrocecal appendicitis on ultrasound.

**Methods/Design:** In this case series, 3 children were examined with POCUS and diagnosed with retrocecal appendicitis by a Pediatric Emergency Medicine attending with significant experience in POCUS. During each study, a high frequency, linear transducer was positioned in longitudinal orientation, just superior to the lateral aspect of the right iliac crest, while the patient was in left lateral decubitus (LLD) position. The POCUS was performed in 2 of the patients immediately following initial evaluation while waiting for patient to be taken for formal imaging studies. In the

third patient, educational US was performed while patient was awaiting results of imaging procedures. Of note, all patients give verbal consent and assent respectively to POCUS as it is routinely utilized in the ED. Two of the three patients also had contrast enhanced CT abdomen and pelvis.

**Results:** In 1 of 3 cases, the appendix was not visualized on RLQ US but was diagnosed using CT. In this case, POCUS using the novel technique was able to identify acute appendicitis prior to confirmation by CT. In all three cases, the diagnosis of retrocecal appendicitis was evident on POCUS using the novel technique.

**Conclusion:** This case series demonstrates the potential to enhance diagnostic accuracy of POCUS and RLQ US protocols. Retrocecal appendicitis is often diagnosed late due to its atypical presentations and elusive findings on RLQ US. This necessitates the use of other modalities, including CT scanning, which imparts inherent delays, risks, and cost. Increased accuracy with POCUS in the evaluation of appendicitis may prevent both diagnostic delay and unnecessary radiation exposure. Future studies are necessary to determine how POCUS and RLQ US enhanced by our method may lead to improved diagnostic management of appendicitis while decreasing the number of potential complications.

### References:

<sup>1</sup>Marin JR, Abo AM, Arroyo AC, et al. Pediatric emergency medicine point-of-care ultrasound: summary of the evidence. *Crit Ultrasound J* 2016;8:16.

<sup>2</sup>Ong EM and Venkatesh SK. Ascending retrocecal appendicitis presenting with right upper abdominal pain: utility of computed tomography. *World J Gastroenterol.* 2009;15(28):3576-9

<sup>3</sup>Scheier E, Budde-Schwartzman B, Kartun V, Balla U. Identifying Retrocecal Appendicitis on Point-of-Care Ultrasound (POCUS). *J Emerg Med.* 2020 Sep;59(3):413-417. doi: 10.1016/j.jemermed.2020.05.002. Epub 2020 Jun 19. PMID: 32571638.

<sup>4</sup>Mori T, Shin TS, Ong GYK. High Ascending Retrocecal Appendicitis in a Pediatric Patient Detected by Point-of-care Ultrasound. *Clin Pract Cases Emerg Med.* 2019 Mar 18;3(2):149-152. doi: 10.5811/cpcem.2019.2.41682. PMID: 31061973; PMCID: PMC6497212.

## Perceptions of Palliative Care and Shared Decision Making

Christine Walters, MD<sup>1</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Rina Meyer, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital; <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Background:** As palliative care (PC) and shared decision making (SDM) become more common, institutions need to understand how providers learn about and perceive these concepts, effectively incorporate them.

**Objective:** We surveyed neonatal and pediatric intensive care (NICU, PICU) providers (nurses/NPs and doctors/residents) regarding their training and perceptions of PC and SDM at their institution to correlate perceptions of PC and SDM with discipline and time post-training.

**Methods/Design:** Survey regarding PC and SDM education and perceptions of PC and SDM at our institution was distributed via email to NICU/PICU staff for six weeks. Survey was anonymously conducted via RedCap. Descriptive statistics were used, and statistical analysis was done via chi-square tests or Fisher's exact test (when less than five participants).

**Results:** Total response rate was 29.5% (n=59), higher in physicians (87.8%) than nurses (21.7%). Most participants (60%) were either in training or within 5 years post-training. Physicians were more likely to receive didactic education in PC than nurses (p value <0.001), while 67% of total participants received clinical teaching in SDM. There was no difference between years of training and the type of education received. Most participants found PC education helpful (mean

83%) and there were no differences between discipline or time post-training.

Physicians were more likely to report engaging in SDM (p value <0.001) than nurses. However, there was no difference between family meeting involvement or patient advocacy between disciplines. 49.2% of participants reported PC was consulted about as often as appropriate, although half of participants reported that PC consults occurred later than appropriate. 94.4% of participants reported PC involvement was helpful. About two thirds of participants (67.3%) reported that SDM occurred as often as appropriate and was helpful 81.4% of the time, with no significant differences between discipline or years post-training.

**Conclusions:** This study was limited by overall response rate and response rate by provider type. Because many trainees participated, we were not able to study differences between NICU and PICU providers, as these trainees work in both settings.

Interestingly, nurses did not report engaging in SDM regularly, although they did report participating in and orchestrating family meetings and advocating for patients, which are elements of SDM. It may be helpful to further study the perception of SDM between physicians and nurses.

## Understanding Personality Types in Pediatric Residents and Attending Physicians Utilizing the Myers-Briggs Type Indicator

Casey Weiser, MD<sup>1</sup>; Katherine Biagas, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital

**Background:** Individual personality types may have a relationship to one's choice of profession as well as being influenced by life experiences. Prior studies using the Myers-Briggs Type Indicator (MBTI) suggest that there may be differences in personality types between current residents and graduates of a Physical Medicine and Rehabilitation Program, which could then be reflected in the different aspects of a field<sup>1</sup>. Furthermore, it is thought that there may be a relationship between one's beliefs about learning and one's personality type.

**Objectives:** The primary objective was to determine the distribution of MBTI personality types among pediatric resident and attending physicians working in an academic medical center. A second objective was to explore their theories and self-impression of learning.

**Methods:** This was a mixed-methods exploratory study approved by Stony Brook IRB, utilizing the MBTI, breaking down personality types into 4 dichotomous axes and 16 subtypes. Pediatric residents and attendings were asked to take the MBTI and self-score it. Online focus groups were convened via focusgroupit.com to explore participants' reactions and their espoused theories about learning. Data were analyzed with between group comparisons (residents vs.

attendings) and in aggregate. Analyses involved comparisons between the dichotomous axes and between represented subtypes by chi-square tests, and Fisher's Exact tests. Qualitative data were open coded.

**Results:** There were 26 participants (17 attendings and 9 residents). 85% were females (22/26) and 15% were males (4/26). The median age was 38.5 (IQR 20). No MBTI subtypes or axes predominated within or between groups. Four personality types were not represented. Four respondents participated in focus groups. All strongly or somewhat agreed that their personality types were accurately represented. Participants felt that adult learners learn best through real-world practice. Furthermore, respondents identified personality types that tended to detract from or enhance learning.

**Conclusion:** In contrast to the Physical Medicine and Rehabilitation study, no MBTI personality type predominated. Two decades have passed since the previous study, and it is possible that current physicians express a wider variety of personality types. Participants were able to identify situations under which personality type may affect learning. Further studies are warranted, exploring linkages between physician personality types and learning.

Reference:

<sup>1</sup>Sliwa JA. *Am J Phys Med Rehabil*, 1994.

## Evaluating the Impact of the COVID-19 Pandemic on Children and Young Adults with Diabetes

Diana Kaplan, DO<sup>1</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>2</sup>; Andrew Lane, MD<sup>1</sup>; Kimberly Tafuri, DO<sup>1</sup>; Jennifer Osipoff, MD<sup>1</sup>

<sup>1</sup>Department of Pediatrics, Stony Brook Children's Hospital; <sup>2</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University

**Background:** There is no evidence to date that suggests that pediatric patients with type 1 diabetes are at an increased risk for severe COVID-19 infection requiring hospitalization. However, it is not well known how the early pandemic stay-at-home orders, disruption in routine office visits, social distancing measures, and transition to telemedicine impacted overall glycemic control in children with diabetes.

**Objective:** The aim of this study was to better understand how the early pandemic lockdown period impacted glycemic control in children with diabetes. Secondary aims were to evaluate changes in lifestyle and satisfaction with telemedicine during this time.

**Methods:** This was a retrospective, longitudinal study. Recruitment took place from September 2020 to June 2021. Patient and parent experiences were assessed with a 30-item questionnaire. The most recent in office HbA1c values from the 6 months before and after pandemic onset and paired time in range (TIR) values from continuous glucose monitor (CGM) data from the 3 months before and after pandemic onset were compared using a paired t-test. Descriptive data are expressed as percentages, means and standard errors.

**Results:** 254 patients were enrolled; 87% completed the questionnaire. Dexcom CGM users with sensor wear time > 70% were included in the TIR comparison. 70 patients had paired TIR values and 151 patients had paired HbA1c values for comparison.

There was a statistically significant improvement in mean TIR from 50.03% pre- pandemic to 51.66% post- pandemic ( $p = 0.04$ ). The mean HbA1c prior to the pandemic and after the onset of the pandemic remained the same at 8.2% ( $p = 0.98$ ).

In comparison to before the pandemic, the majority of patients felt they were less physically active but had similar eating habits and similar glycemic control. 58% of respondents were extremely satisfied with their diabetes telemedicine visit; 21% were somewhat satisfied, 16% were neutral, and 4% were somewhat dissatisfied.

**Conclusion:** The COVID-19 lockdown early in the pandemic did not worsen TIR in children with diabetes and did not significantly change HbA1c. These results support the idea that stable or improved glycemic control is possible during a period of lockdown. We believe that the remote analysis of CGM data and successful use of telemedicine during the pandemic will lead to expanded use of these modalities in future diabetes care.



## Disparities in Pediatric Traumatic Brain Injury

Rachel Choe Kim<sup>1</sup>; Zirun Zhao<sup>1</sup>; Eleanor Choe Kim<sup>2</sup>; Susan Fiore<sup>3</sup>; Gillian Hopgood, DO<sup>4</sup>; David Chesler, MD, PhD<sup>3</sup>; Héctor E. Alcalá, PhD, MPH, CPH<sup>5</sup>; and Helen Hsieh, MD, PhD<sup>4,6</sup>

<sup>1</sup>Stony Brook University, Renaissance School of Medicine; <sup>2</sup>University of California, Berkeley, Department of Mathematics; <sup>3</sup>Division of Pediatric Neurosurgery, Department of Surgery; <sup>4</sup>Department of Pediatrics, Stony Brook Children's Hospital; <sup>5</sup>Department of Family, Population and Preventive Medicine, Program in Public Health, Stony Brook University; <sup>6</sup>Division of Pediatric Surgery, Department of Surgery

**Background:** Traumatic Brain Injury (TBI) is a leading cause of pediatric death and disability. Nationwide pediatric TBI databases fail to provide adequate detail to understand how race/ethnicity and socioeconomic status mediate TBI outcomes. Additionally, disparities in Child Protective Services (CPS) involvement among these groups in pediatric TBI have not been studied.

**Objective:** To identify disparities in pediatric TBI and CPS involvement.

**Methods:** Retrospective chart review was conducted on all 430 cases of pediatric TBI admitted to Stony Brook Children's Hospital from 2015-2020. Racial/ethnic groups included: non-Hispanic Black, Hispanic, non-Hispanic White, and other/unknown. Injury severity indicators were Injury Severity Score (ISS) and Glasgow Coma Scores (GCS). Socioeconomic status indicators included insurance status, median income by ZIP-code, and parental marital status. CPS involvement was defined as CPS case acceptance. Data was analyzed by ANOVA, chi-squared, and logistic regression models with adjusted odds ratios (AOR) in Stata 16.

**Results:** Fifty-nine percent of patients were non-Hispanic White, 9% non-Hispanic Black, 18% Hispanic, and 14% other/unknown. Age ranged from 0-17 years (median = 9) which varied

significantly across racial/ethnic groups (p-value = 0.015). There was no significant difference in injury type, hospital origin, or median ZIP-code income across racial/ethnic groups. ISS (p-value = 0.005), GCS (p-value < 0.001), insurance (p-value < 0.001), and marital status (p-value < 0.001) were significantly different across racial/ethnic groups. CPS was involved in 28% of cases. Non-Hispanic Black (OR:2.21, 95% CI [1.08,4.51]) and Hispanic patients (OR:2.12, 95% CI [1.23,3.64]) had increased OR of CPS involvement compared to non-Hispanic White patients. After adjustment for confounders, these differences were not significant. Increased age was associated with decreased AOR of CPS involvement after adjustment for confounders (OR:0.81, 95% CI [0.77,0.85]). AOR of CPS involvement was decreased for patients with parents who were married/living as married compared to patients with unmarried parents (OR:0.33, 95%CI [0.14,0.78]). Seven percent of patients suffered from death/disability which was not significantly different across any group after adjusting for confounders.

**Conclusion:** We identified differences in pediatric TBI across racial/ethnic groups. Increased age was associated with a lower AOR of CPS involvement which may reflect higher risk of abuse in younger patients. Patients with married parents had a significantly lower AOR of CPS involvement.

## Marijuana Use and Breastfeeding: Knowledge, Attitudes, and Practices of New Mothers at Stony Brook University Hospital

Monica Lee, MD<sup>1</sup>; Margaret Connolly, MD<sup>1</sup>; Rebekah Lee<sup>2</sup>; Dennis West, MA<sup>3</sup>; Pearl Chang, MD<sup>4</sup>; Neera Goyal, MD<sup>5</sup>; and Esther K. Chung, MD, MPH<sup>4,6</sup>

<sup>1</sup>Division of Hospital Medicine, Department of Pediatrics, Stony Brook Children's Hospital;

<sup>2</sup>Renaissance School of Medicine at Stony Brook University; <sup>3</sup>BORN Network, Academic Pediatric Association; <sup>4</sup>Division of Hospital Medicine, Department of Pediatrics, Seattle Children's Hospital;

<sup>5</sup>Division of External Primary Care, Department of Pediatrics, Nemours Children's Hospital;

<sup>6</sup>Division of General Pediatrics, Department of Pediatrics, University of Washington.

**Background:** Marijuana is legal for medical/recreational use in many states, including New York as of March 2021. Through the Academic Pediatric Association (APA) Better Outcomes through Research for Newborns (BORN) Network, we participated in a national, multi-site study to assess our hospital practices and the knowledge, attitudes, and practices (KAPs) of new mothers related to breastfeeding and marijuana use. We aim to describe the KAPs of our patients and identify opportunities to improve provider awareness and patient education.

**Methods:** As a participating site in this national, cross-sectional study, we enrolled postpartum mother-infant dyads during the newborn hospitalization. Mothers (21+ years) of newborns (36+ weeks' gestation) completed a survey about their KAPs related to breastfeeding and marijuana use. Data related to sociodemographic information and maternal marijuana use were abstracted from electronic health records. Descriptive statistics were performed by calculating frequencies.

**Results:** From July to December 2011, 50 mother-infant pairs from Stony Brook University Hospital participated in the national study. Most mothers were older (64% 30+ years), highly educated (72% college degrees or higher), and Caucasian (74%)/non-Hispanic (80%). The majority, 62%, reported ever trying marijuana.

Though a minority, 10%, reported living with a household member who uses marijuana, the majority, 57%, reported having close friends who use marijuana.

Prenatally, a minority of mothers reported discussing the risk of using marijuana while pregnant (26%) or while breastfeeding (22%) with their healthcare provider. Similarly, only 10% reported that their healthcare provider discussed postpartum the risk of using marijuana while breastfeeding. Feeding practices during the birth hospitalization were as follows: 36% exclusively breastfed, 10% exclusively formula-fed, and 54% (27/50) both breastmilk and formula. The majority, 57%, had low confidence in their knowledge of the general health effects of marijuana. When asked about the best way to get information about marijuana, 48% preferred health care professionals, 36% the internet, and only 9% brochures/printed materials.

**Conclusion:** We identified a need for more counseling to new mothers from healthcare providers, both prenatally and postpartum, regarding the risk of marijuana use while pregnant or while breastfeeding. The type of educational materials provided should account for their preference for internet/web-based sources over paper sources. Future steps include improving patient educational materials and assessing the KAPs of our institution's healthcare professionals.

## POSTER GROUPINGS

### NEWBORN CARE, NEONATOLOGY, PRIMARY CARE

#8 Efren Diaz (J. DeCristofaro)	Role of Protein Intake on Serum Blood Urea Nitrogen Levels in Acute Hypoxic Ischemic Encephalopathy
#9 Russell Himmelstein (S. Sridhar)	Maternal and Neonatal Risk Factors for Development of Neonatal Lenticular Striate Vasculopathy (LSV)
#12 Belliny Phaeton (S. Feld)	E-Cigarette and Vaping AAP ECHO (Extension for Community Healthcare Outcomes) Project Outcomes
#13 Rebecca Polchinski (A. Parekh)	Impact of Perinatal Factors and Golden Hour of Care Bundle on the Degree of Intraventricular Hemorrhage in Very Low Birth Weight Infants
#20 Rebekah Lee (M. Lee)	Marijuana Use and Breastfeeding: Knowledge, Attitudes, and Practices of New Mothers at Stony Brook University Hospital

### MEDICAL EDUCATION

#5 Shantel Apesesche (E. Hulfish)	Bedside to Website: Teaching Medical Students How to Conduct a Telehealth Encounter
#7 Mallory Carson (M. Chitkara)	Use of an Individualized Teaching Plan to Augment Teaching Skills for Pediatric Residents: Three Year Review
#10 Kaitlyn Krebushevski (J. Bianchi-Hayes)	Impact of the COVID-19 Pandemic on Pediatric Resident Wellness
#11 Sean O'Connor, MD (M. Chitkara)	A Nighttime Curriculum for Medical Students in the Pediatrics Clerkship: A Pilot Study
#16 Casey Weiser, MD (K. Biagas)	Understanding Personality Types in Pediatric Residents and Attending Physicians Utilizing the Myers-Briggs Type Indicator (MBTI)

### HOSPITAL MEDICINE/EMERGENCY MEDICINE/PEDIATRIC CRITICAL CARE/SPECIALTY CARE

#6 Linda Camacho (J. Bianchi-Hayes)	Associations between BMI status and Asthma Triggers for Hospitalized Children in an Urban and a Suburban Children's Hospital in New York State
#14 Mary Helen Schwartz (J. Osipoff)	Longitudinal Impact of Gender-Affirming Endocrine Intervention on Depression Scores of Transgender Youth: A Second Look
#15 Raizada Vaid and Allison Beattie (C. Kaplan)	Retrocecal Appendicitis Identification on Point of Care Ultrasound (POCUS)
#16 Christi Walters (R. Meyer)	Perceptions of Palliative Care and Shared Decision Making
#18 Diana Kaplan (Div. of Endocrinology) (J. Osipoff)	Evaluating the Impact of the COVID-19 Pandemic on Children and Young Adults with Diabetes
#19 Rachel Choe Kim (H. Hsieh)	Disparities in Pediatric Traumatic Brain Injury

## **ACKNOWLEDGEMENTS**

---

### **INVITED JUDGES PANEL**

Sara Van Driest, MD, PhD

Matthew Lerner, PhD

Carine Maurer, MD, PhD

Elinor Schoenfeld, PhD

---

### **RESIDENT SCHOLARSHIP OVERSIGHT COMMITTEE**

Josette Bianchi-Hayes, MD (Committee Chair)

Surabhi Aggarwal, MD

Héctor Alcalá, PhD

Christy Beneri, DO

Anu Chawla, MD

Grace Gathungu, MD

Carly Gomes, MD

Andrew Handel, MD

Jeffrey Hom, MD

Eche Maduekwe, MD

Rahul Panesar, MD

Susmita Pati, MD, MPH

### **ALUMNI MEMBERS:**

Marian Evinger, PhD

Janet Fischel, PhD

---

### **FELLOWSHIP SCHOLARSHIP OVERSIGHT COMMITTEE**

Echezona Maduekwe, MD (Committee Chair)

Katherine Biagas, MD

Catherine Kier, MD

Andrew Lane, MD

Robert Woroniecki, MD

---

### **ADDITIONAL THANKS TO:**

Drs. Milana and Blair for their support and dedication to the resident and fellow research programs and this event.

Orietta Miceli-Ortiz for all of her assistance organizing this event.