Poster Session 2 Abstracts: March 25, 2021 from 4:30 - 5:30pm Eastern

A CURRICULUM TO IMPROVE RESIDENT APPLICATION OF MEDICAL EDUCATION THEORY: A CONSTRUCTIVIST APPROACH

Jamie Archambault, MD, Emma Harding, MD, Alexandra Sawyer, MD, Julia Hudnut-Beumler, MD, Laura Lockwood, MD, University of Colorado, Denver, CO

Background Residents spend significant time teaching co-residents and students. A local needs assessment revealed 96% of pediatric residents felt it was at least moderately important to receive clinician educator training, but only 34% felt that the program placed adequate emphasis on this. Many GME programs have begun incorporating Residents as Teachers curricula, but these are often limited to discrete short-term opportunities that lack in-depth instruction on medical education theory. We created a “MedEd Core Curriculum” to bridge these gaps. **Methods** We developed a curriculum using Kerns Six-Step Approach. Sessions included reflection, interactive lectures, small group discussions, and real-time application of educational models. Evaluation consisted of a retrospective pre/post survey assessing self-perceived ability to describe and apply principles of medical education theory on a five-point Likert scale. We analyzed the data using descriptive statistics and Wilcoxon-signed rank tests. **Results** Four sessions have occurred to date. Each had an average of 15 participants with an overall survey response rate of 75% (45/60). Eighty-two percent found sessions to be extremely/very helpful. After participating in a session, residents noted significant improvement in their ability to *describe* each educational model (1.62 vs 3.4, $p < 0.001$) (Figure 1). Further, they perceived significant improvement in their ability to *apply* them (1.6 vs 3.3, $p < 0.001$) (Figure 1). Residents described an improved framework for medical education, and highlighted the importance of tailoring educational strategies towards specific and measurable learning objectives. **Discussion** We successfully implemented a curriculum focused on medical education theory. Residents built on their existing knowledge and skills through interactive discussion. Their self-perceived ability to describe and apply core principles significantly improved, and they developed a strong foundation for these conceptual approaches. Next steps include evaluating teaching skills of MedEd Core Curriculum participants against non-participants.

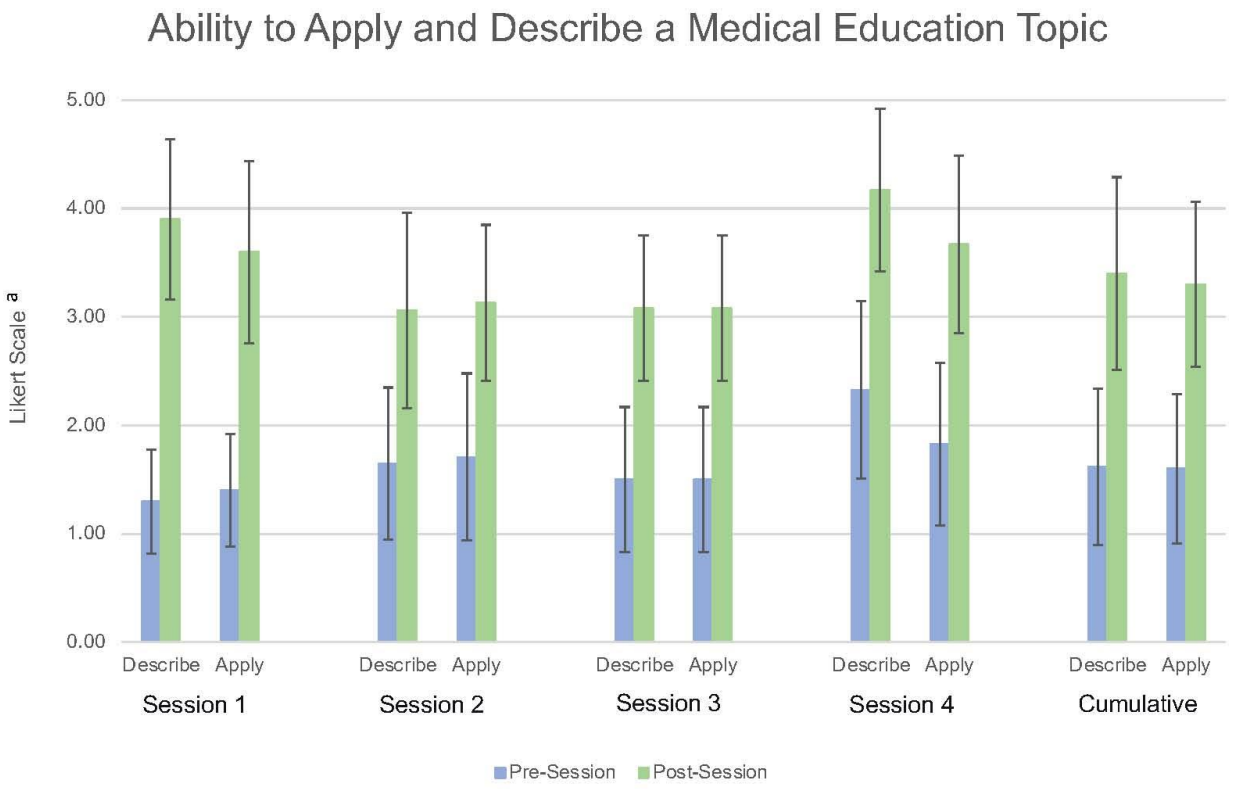


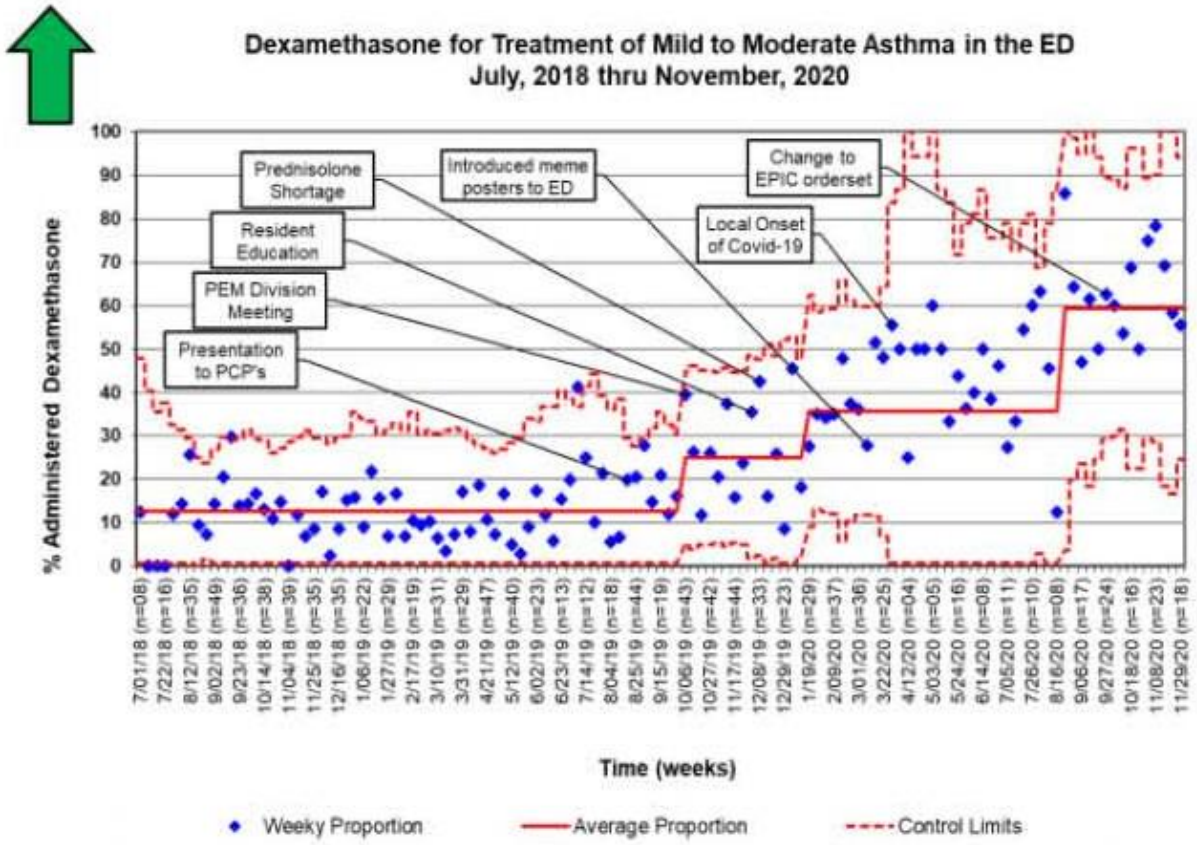
Figure 1. Residents' self-perceived ability to describe and apply principles of a medical education topic before and after each MedEd Core Curriculum session. [a] Likert Scale: 1=Not at all well; 2=Somewhat well; 3=Moderately well; 4= Very well; 5=Extremely well

A QUALITY IMPROVEMENT INITIATIVE TO INCREASE DEXAMETHASONE USE IN MILD TO MODERATE ASTHMA EXACERBATIONS IN THE EMERGENCY DEPARTMENT

Julianne Ivy, MD, Erik Hoefgen, MD, Joshua Bridges, MD, Amelia Bray-Aschenbrenner, MD, Elizabeth Messer, MD, Yasasvi Vasili, MD, Amanda Kopydlowski, MD, Washington University/B-JH/SLCH Consortium, St. Louis, MO

Background Systemic steroids are standard of care for patients with asthma exacerbations presenting to the emergency department (ED). At our institution, a 5-day course of prednisone has been the standard oral steroid treatment for these patients. Recent studies demonstrate that a one or two-day course of dexamethasone is non-inferior to prednisone in resolution of asthma symptoms. Dexamethasone is more palatable, is better tolerated with less vomiting, and has higher rates of compliance when compared to 3-5 days of prednisone. **Aim Statement** To increase dexamethasone use to 50% in low risk ED patients with a history of asthma presenting with mild to moderate asthma exacerbations over the course of one year. **Interventions** A multidisciplinary group of healthcare professionals used sequential Plan-Do-Study-Act (PDSA) cycles to implement interventions targeted at increasing dexamethasone use in patients aged 2-18 years with a prior diagnosis of asthma presenting to the ED with mild to moderate exacerbations. Interventions included outreach to community pediatricians, educating ED providers on advantages of dexamethasone, revising our institutional asthma exacerbation clinical practice guidelines, use of memesnear provider workstations, and modifying the asthma order set in our electronic health record. **Measures** Our primary outcome measure was the proportion of eligible patients receiving oral dexamethasone. Our balancing measure

was asthma-specific 30-day ED return visits. We used an annotated run chart to analyze our outcomes. A Pearsons Chi-Squared test was performed to assess for difference in 30-day return utilization data by treatment. **Results** The weekly rate of patients receiving dexamethasone increased from 9.8% to 58.9% over our study period, (Fig. 1). There was no difference in 30-day return utilization rate between dexamethasone and prednisone (3.9% vs 4.6%, p = 0.4), which remained unchanged over the study period. **Conclusions and Next Steps** Our interventions improved dexamethasone use for mild to moderate asthma exacerbations in the ED without increasing 30-day ED return rates.

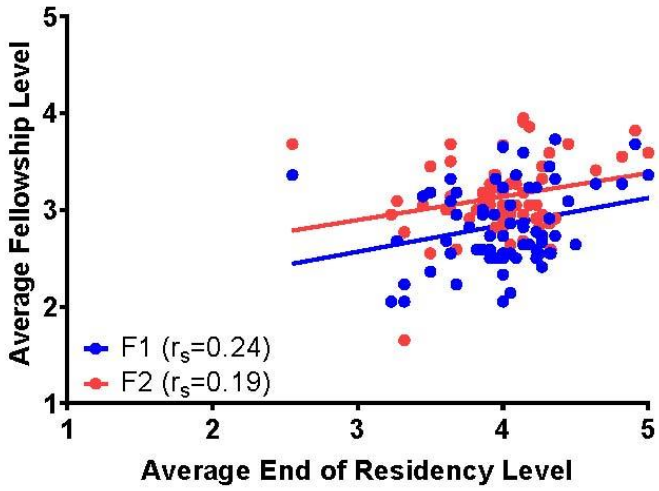


ACGME MILESTONE SCORES AMONG PEDIATRIC TRAINEES: EXPLORING THE RELATIONSHIP BETWEEN RESIDENCY AND EARLY FELLOWSHIP SCORES

Laura Tyrrell, MD, Joseph Stanek, MS, Claire Stewart, MD, Suzanne Reed, MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH

Background The ACGME requires milestone-based assessments of all trainees. Milestones are divided into core competencies, and further divided into subcompetencies. Trainee performance is rated on a scale from levels 1 to 5 for each subcompetency milestone. In pediatrics, 11 subcompetencies are common to both residency and subspecialty fellowship training. It is unknown whether milestone scores achieved during residency are related to milestone scores achieved in early fellowship. Objective To determine the relationship between final residency milestones scores and first-year fellowship milestones scores in the 11 common subcompetencies (CSCs) within pediatrics. Methods We conducted a retrospective, single-institution, cohort study of pediatric fellows who began fellowship training between July 2016 and July 2019. Program directors provided de-identified milestone score sets for the 11 CSCs for the following time points: end of residency (R), mid- first year of fellowship (F1), and end of first year of fellowship (F2). Average score across the 11 CSCs was calculated for

each fellow. Spearman correlation and regression analyses were used to assess relationships between residency and fellowship scores. Results Complete data for 76 fellows representing 11 different pediatric subspecialties were obtained. R milestone scores for all 11 CSCs were weakly correlated with F1 and F2 scores, indicating that a better R score was associated with a slightly greater F1 and F2 score. F1 scores for all fellows were lower than R scores. Score relationships did not differ based on residency institution. Conclusion For the 11 common subcompetencies in pediatric training, final residency milestone scores are only weakly associated with the scores achieved during the first year of fellowship. These findings suggest that residency milestones may be of limited use to fellowship program directors in guiding individualized education for early fellows. This single-institution pilot study provides important groundwork for a larger study of these milestone relationships.



AN EDUCATIONAL INTERVENTION UTILIZING STANDARDIZED PATIENT ENCOUNTERS TO IMPROVE THE COMMUNICATION SKILLS OF PEDIATRIC RESIDENTS IN SUBSPECIALTY REFERRAL

Elise A. Stave, MD, Larrie Greenberg, MD, Ellen Hamburger, MD, Mary C. Ottolini, MD, Dewesh Agrawal, MD, Children's National Medical Center, Karen Lewis, PhD, Not Affiliated with Program/Institution listed above, John R. Barber, MS, James E. Bost, PhD, Ashraf Harahsheh, MD, Children's National Medical Center, Washington, DC

Introduction: A critical skill for primary care providers in the evaluation of patients with potentially serious concerns is to determine the need for subspecialty referral. A well-executed referral includes thoughtful, informative communication with patients and families. While a previous report showed improved clinical triaging after working with standardized patients (SPs), little is known about residentsperformance when faced with difficult family circumstances. To address this gap, we created a curriculum to improve residents' referral performance and assess behavior change (Kirkpatrick level 3). Methods: We utilized multimodal educational interventions to improve resident referral skills. Trainees participated in both an interactive online module on syncope focusing on "red-flag" symptoms that would warrant cardiology referral and a 4-hour intervention with SPs focusing on communication skills. Communication skills were assessed with two pre- and post-SP Objective Structured Clinical Examination encounters of patients with syncope, with SP evaluation by a 20-item checklist. Trainees were provided with relevant history/physical findings, diagnosis, and need for referral, with the goal to counsel the family. The intervention portion included: (1) review of the principles of referral, (2) refresher on "red-flag" symptoms of syncope, (3) intervention on communication skills to address concerns and manage referral logistics, and (4) practice with SPs in a group setting. Pre/post scores analyzed using McNemar's and paired T-tests. Results: 70 trainees participated. Table 1 displays SP checklist results pre-post intervention, with 13/20 items demonstrating significant improvement post-intervention and overall improvement (81.1±14.2% to 91.2±5.9%, p-value <0.001). Conclusions: By participating in this curriculum, residents' short-term communication skills improved. Further research is needed to assess if this intervention improves patient care by providing residents with enduring skills to judiciously manage the referral process.

Table 1: Pre- and Post-Intervention results for Standardized Patient Objective Structured Clinical Examination (OSCE) By Checklist Item

	Pre-intervention (n=70)	Post-intervention (n=69)	
	Mean (SD)	Mean (SD)	P-value*
The resident showed interest in me as a person	83.1 (12.3)	90.6 (10.8)	**<0.001**
The resident made me feel that he/she was glad that I brought my child in today	81.0 (13.0)	87.5 (10.8)	**<0.001**
The resident used words that I understood	82.9 (12.4)	89.0 (9.4)	**0.002**
The resident used nonverbal behaviors that conveyed attentive listening	82.6 (13.5)	90.7 (9.9)	**<0.001**
The resident asked me what was the most concerning factor for us today	53.6 (41.1)	82.6 (26.9)	**<0.001**
The resident asked me how I feel about the situation	64.3 (41.0)	76.8 (31.6)	0.080
The resident validated my concern/feelings	94.3 (21.8)	97.8 (10.3)	0.727
The resident noted that I seemed sad/mad/ distressed/worried	58.6 (40.8)	73.2 (34.9)	**0.020**
The resident made empathetic statements (That must be difficult)	91.4 (24.0)	91.3 (24.2)	1.000
The resident engaged me in an exchange to arrive to the plan	84.3 (32.5)	97.1 (11.8)	**0.002**
The resident made a final decision with regard to referral	98.6 (8.4)	98.6 (8.4)	1.000
	n (%)	n (%)	
If no referral was made, the resident successfully helped you to feel reassured that this not a life threatening condition	41 (82.0)	49 (98.0)	**0.005**
If a referral was made, the resident helped you understand the reason for the referral	53 (96.4)	54 (98.2)	0.564
If a referral was made, the resident explained that this could be a life threatening condition	40 (72.7)	44 (80.0)	0.285
If a referral was made, the resident explained what you could expect when you see the cardiologist	29 (51.7)	42 (75.0)	**0.007**
If a referral was made, the resident recognized and managed the logistics of the referral	43 (76.8)	53 (94.6)	**0.002**
If a referral was made, the resident clarified plan with the family and ensured conceptual understanding and agreement on logistics of the plan	41 (75.9)	53 (98.2)	**0.001**
If a referral was made, the resident explained that exercise restriction is needed	47 (85.5)	55 (100)	**0.005**
If a referral was made, the resident decided on the urgency of the referral	51 (91.1)	54 (96.4)	0.257
	Mean (SD)	Mean (SD)	
Provided ongoing patient care and informed us when to call her/him back	58.7 (39.3)	77.5 (37.9)	**<0.001**
Total Score	81.1 (14.2)	91.2 (5.9)	**<0.001**
*Analysis by paired T-test for items 1-11, 20, and total score; McNemar's test for items 12-19			

BIRTH OF A SOCIAL MEDIATRICIAN: ADOPTING TWITTER, INSTAGRAM, AND SLACK FOR RESIDENTS

Samantha Scanlon, MD, Bradford Nguyen, MD, July Lee, MD, Stanford University, Palo Alto, CA

Research Question: How will integrating Twitter, Instagram, and Slack into our pediatrics program and curriculum impact residents' education, wellness, engagement and sense of community.
Background Physicians have increasingly used social media platforms such as Twitter and Instagram to gain exposure to new research, expand networks, increase engagement, and more easily disseminate information. With the pandemic, training programs have quickly shifted to virtual formats for medical education, community building, and recruitment.
Design/Methods This is a cohort study of pediatrics residents at Stanford in 2020-2021. All residents were invited to complete a 22-item baseline survey to assess self-perception of wellness, educational engagement, and sense of community, as well as baseline use of social media and methods of learning about new evidence in medicine. Residents were enrolled in Twitter and Slack. Impressions and interactions from Twitter and Instagram posts were collected, as well as Slack usage data. A follow-up survey is planned with analysis using Paired T-tests to compare linked pre/post data.
Results Baseline survey response rate was 98% (100/102), with 42% using Slack and 21% using Twitter as methods of communication. 44% of residents reported using social media to read medical literature. 65% of residents never used Twitter in the context of learning. To date, Twitter posts (n=107) have made over 185,225 impressions with 551 followers (Table 1). Instagram posts (n = 56) have made over 106,952 impressions with 1239 followers (Table 1). 32/58 Instagram posts were initiated by residents related to recruitment efforts. Slack has averaged 72 weekly active and 26 weekly posting members since the start of the academic year.

Table 1: Twitter and Instagram posts broken down by category with average number of impressions made by post. Some posts were assigned multiple categories.

Twitter Post Category	n =	Average Impressions (Number of times the tweet was seen including by non-followers)	Instagram Post Category	n =	Average Impressions (Number of times the post was seen including by non-followers)
Advocacy	9	7225	Advocacy	3	1,978
Contains Polling	20	1088	In the hospital	15	1,848
Didactic Summary	59	889	Recognition of colleagues	5	1,574
Recognition of colleagues	10	1248	Related to recruitment	10	1,642
Related to recruitment	12	2001	Resident feature	13	2,344
Retweet	11	707	Social	10	1,855
Social	17	1915			
Video	11	3240			

Conclusion Social media platforms have been successfully integrated into our residency program with Slack utilized most for connectedness and interclass communication and Twitter for disseminating educational content and promoting advocacy. Instagram and Twitter were used by residency applicants and may be an effective recruitment tool.

DESIGN AND EVALUATION OF A PEDIATRIC RESIDENT HEALTH CARE TRANSITION CURRICULUM

Ruchi Kaushik, MD, MPH, Baylor College of Medicine (San Antonio), San Antonio, TX

Introduction/Background: The American Academy of Pediatrics (AAP) has published consensus statements urging physicians to acquire knowledge and skills to safely transition youth with special health care needs (YSHCN) to an adult model of care. Methods: Prior to design of this curriculum, no formal HCT process existed within our health system and no formal curriculum existed in the

residency program. Therefore, first, a new portable medical summary (PMS) was embedded into the Athena electronic health record (EHR); next, a HCT curriculum was embedded within the elective Complex Care pediatric resident rotation. Residents completed a HCT knowledge pre-test, viewed four animated HCT didactic video lectures (created using Powtoons web-based software), and completed a HCT post-test and didactics evaluation. Residents were asked to create a PMS for one complex care patient, which was subsequently reviewed by the precepting pediatrician, and were then explicitly taught how to create a PMS using a template of 18 nationally recommended items. After self- and faculty-critique, residents submitted an edited version of the PMS within the EHR. Residents then evaluated PMS development and critique process by electronic survey. Results: Nineteen residents participated in the curriculum. Average pre-test and post-test scores were 60% and 88.7% respectively. All residents selected 4 or 5 on Likert scales evaluating their reaction to the video lectures. On average, resident PMSs included 8.1 (46.5%) and 17.1 (98.2%) of 18 recommended elements prior to vs. following the PMS critique process. On Likert scales for post-critique self-assessment of skills, percentage of residents selecting 4 or 5 increased from 14.3% prior to critique to 100% following critique. Conclusion: Use of an explicit HCT curriculum, with opportunity to create a PMS within the EHR and receive faculty critique, improved residents' knowledge and self-assessment of HCT practices. Further evaluation of the value of this curriculum may include objective assessment of resident behavior and patient/family satisfaction with the PMS.

DEVELOPING A STANDARDIZED PREMEDICATION PROTOCOL TO IMPROVE SAFETY OF NON-EMERGENT INTUBATIONS IN THE NEONATAL INTENSIVE CARE UNIT (NICU)

Ellen K. Diego, MD, Julie Ross, MD, Carol Wagner, MD, Medical University of South Carolina, Charleston, SC

Background Use of premedication for intubation improves procedure conditions and minimizes # of attempts and adverse events. In 2010, the AAP recommended premedication use for all non-emergent intubations. A premedication order set was generated for use in our regional level IV NICU following this clinical report, yet, there remains significant variation in compliance with this standard of care.

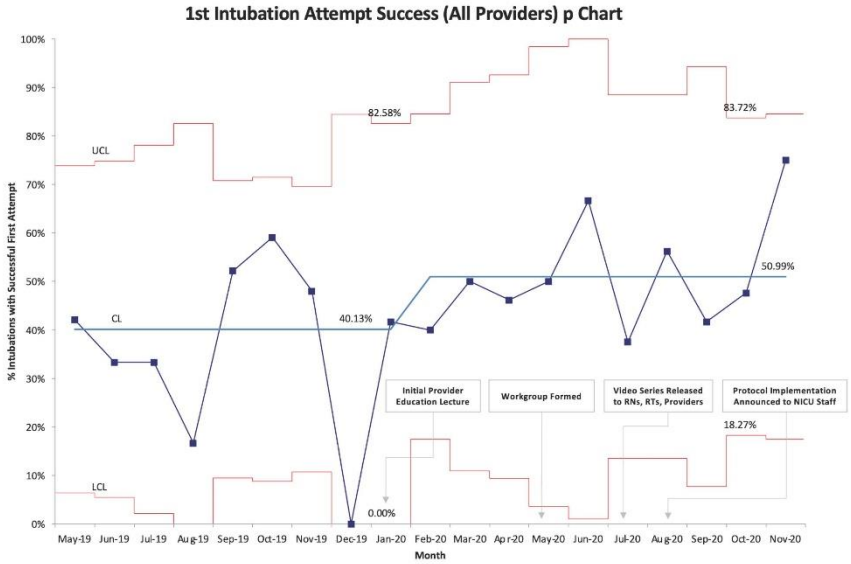
Aim Statement We aim to increase the number of infants intubated on the first attempt from a baseline of 39% to 50% and decrease overall adverse events during non-emergent intubations from a baseline of 62% to 40% by August 2021.

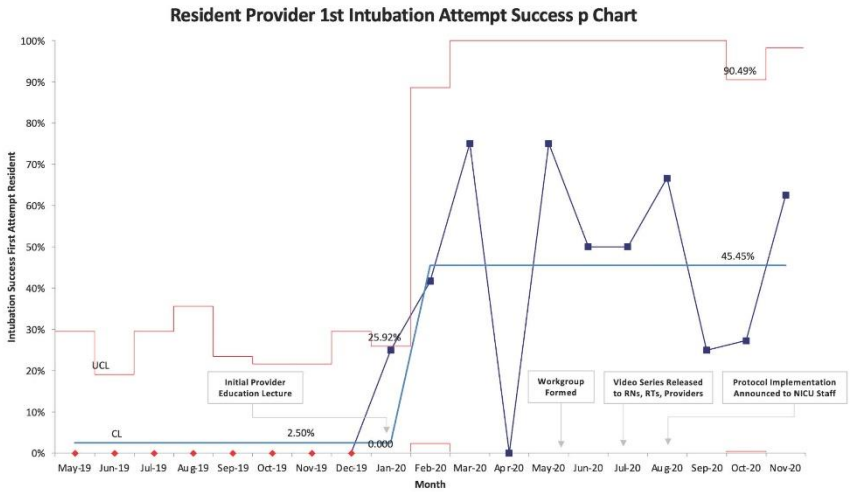
Interventions An educational video series was developed to train bedside staff on the novel premedication protocol and introduce the role of bedside recorder, whose responsibility is to audit adverse events and notify providers when 30 sec is exceeded for an intubation attempt.

Measures Process measures included rate of protocol use and audit form completion. Outcome measures included # of intubation attempts and adverse events. Balancing measures included medication errors and side effects and rate of infant decompensation awaiting premedication administration.

Results 97/206 (47%) of bedside staff viewed video content ahead of protocol launch. 67 patients met inclusion criteria and completed the protocol. Compared to the preceding 9-month baseline, we observed a statistically significant increase in success rate on 1st intubation attempt from 62/158 (39.2%) to 77/152 (50.7%). There was a notable improvement in rate of resident success on 1st attempt from 1/40 (0.0%) to 25/55 (45.5%). The decrease in overall # of intubation attempts (2.1 ± 0.4 vs. 1.8 ± 0.2) was approaching statistical significance (p=0.052). The rate of adverse events increased from a baseline of 62.4% to 75.2%. No infants decompensated awaiting medication. Rate of tachycardia with atropine use was 1.75 ± 1.2%. No statistically significant change in rate of chest wall rigidity or # of infants unable extubate following surfactant.

Conclusions and Next Steps Written policies are needed to increase compliance and guide staff in appropriately administered premedication. The initial rise in adverse events was anticipated given the introduction of a patient safety reporting system through the designated bedside recorder. Next steps include educational promotion to increase video views by all bedside staff and continued adverse event tracking to evaluate for a projected downtrend as protocol proficiency increases.





DEVELOPMENT OF A RESEARCH-IN-RESIDENCY AND PHYSICIAN SCIENTIST TRAINING PROGRAM

Leonid Bederman, MD, Jennifer Villasenor, Susie Buchter, MD, Barry Warshaw, MD, Stacy Heilman, PhD, Ann Chahroudi, MD, PhD, Emory University, Atlanta, GA

Background: The US physician-scientist workforce has been declining over many years. This trend has especially impacted pediatrics, with pediatrics departments making up only 5.4% of research funding awarded by the NIH in 2019. Moreover, limited access to mentorship and structured research training have been identified as key barriers to recruitment and retention of physician-scientists. We developed the Pediatric Residency Investigative Scholars at Emory (PRISE) program to address this area of opportunity within our institution.

Objective: Our objective was to establish a program to train high-caliber pediatrician scientists, involving both MD-only and MD-PhD trainees, and to foster a supportive and collaborative community for trainees interested in research.

Methods: Our resident research committee reviewed components from successful clinician-scholar training programs at peer institutions. We adopted a previously modeled three-pillared approach focusing on mentorship, longitudinal educational content, and structured professional development. Residents and division chiefs were engaged to identify mentors who could serve as “research champions” in each subspecialty division. A curriculum was designed based on best practices from literature review, the committee members’ own experiences, and a research course offered to fellows at our institution. This program was also integrated into our residency recruitment materials to attract additional MD-PhD applicants.

Results: The PRISE program formally launched in 2020 and has successfully enlisted its first class of 9 residents (8 MD-only and 1 MD-PhD). 22 residents attended a “meet and greet” with research champions, 20 (91%) of whom reported finding a potential mentor following this event. The number of MD-PhD applicants during the 2020-2021 recruitment season increased to 24 from 14 in 2019-2020.

Conclusions: During the first six months following program initiation, we were able to match nearly all interested residents with a mentor in their field of interest. The PRISE program may have also spurred additional interest in our program from MD-PhD applicants.

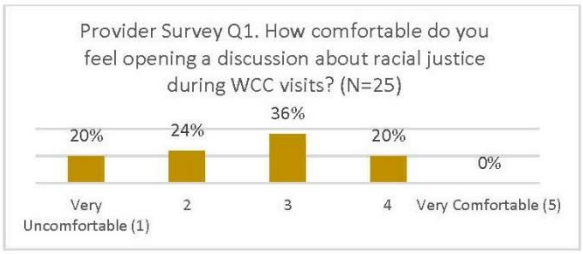
DISCUSSING RACIAL JUSTICE WITH KIDS: PEDIATRICIANS CAN PROMPT AT-HOME DISCUSSIONS

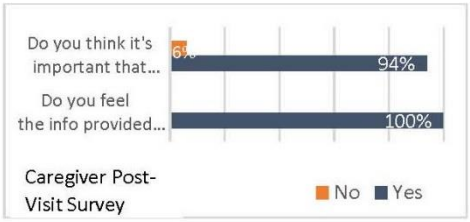
Ian T. McConnell, MD, Children's Hospital/Boston Medical Center, Brookline, MA, Colleen Monaghan, MD, Residents BWH/BCH Internal Medicine-Pediatric Residency, MD, Children's Hospital/Boston Medical Center, Boston, MA

Background Structural racism is deeply rooted in all aspects of our society, including healthcare, and results in inequitable health outcomes for patients who identify as Black, Indigenous, and People of Color. This is a healthcare issue and providers must be knowledgeable and comfortable discussing how race and health intersect. Racial Justice is the creation and reinforcement of policies, practices, attitudes, and actions that produce equitable power, access, opportunities, treatment, and outcomes for all people. Children as young as 6 months can perceive differences in skin tones, and as young as 3 years old can show racial biases. The American Academy of Pediatrics (AAP) recommends that pediatric providers initiate conversations about racism and race at WCCs.

Aim Statement 1. After 3 months, 80% providers will initiate discussions about Racial Justice during WCCs and their comfort level will increase 2. Equip families with useful tools to start these conversations

Interventions 1. Created a handout with tips and resources for discussing Racial Justice with kids 2. Incorporated smartphrase into WCC templates with sample provider statement 3. Educated providers about shared definitions regarding racism. Collected pre-intervention survey and then advised discussing in all WCCs from 6 months to 18 years





Measures 1. Provider survey regarding practices and attitudes pre-intervention and at 3, 6 and 9 months 2. Caregiver post-visit survey regarding attitudes and utility of the resources provided.

Results 1. Provider Baseline Survey: a. 0/25 providers regularly discussed Racial Justice, 84% thought it was important, 44% admitted discomfort with doing this b. 40% of providers thought parents would be at least somewhat receptive to these discussions, 60% were unsure. 2. Caregiver survey: a. 94% caregivers thought providers should initiate these discussions b. 100% found the resources useful

Conclusions and Next Steps Most pediatric providers believe it is important to address Racial Justice with families but have not done so due to concerns including their own lack of comfort and beliefs about caregiver receptivity. Our findings suggest that concerns about caregiver receptivity are unfounded and families find resources useful. Next steps: 1. Roll out at the next 2 sites 2. Follow-up surveys to assess changes in provider comfort in and frequency of initiating discussions.

EFFECT OF 3+1 SCHEDULING ON RANKING PREFERENCES OF PEDIATRIC RESIDENCY APPLICANTS

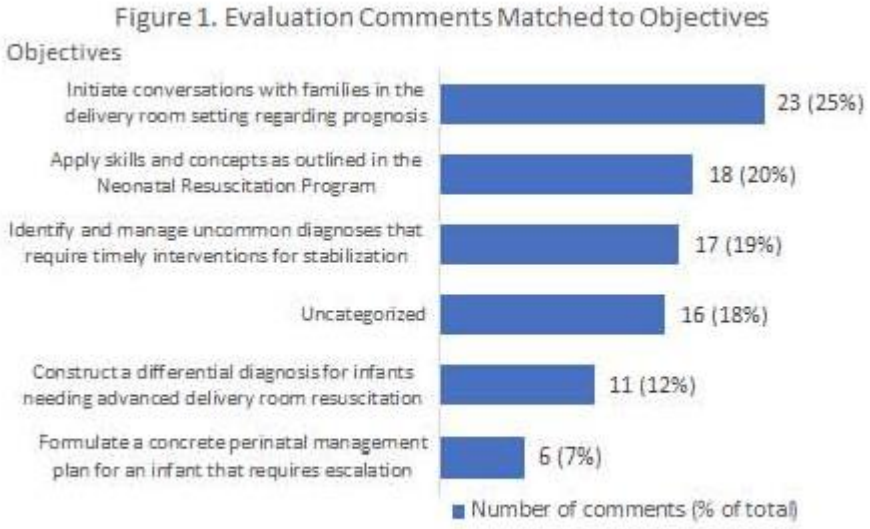
Abigail Ginn, DO, Hollis Redmon, DO, Svetlana Kravtchenko, MD, Kathryn Weedon, MD, Joanna Lewis, MD, Advocate Health Care (Advocate Children's Hospital/Park Ridge), Park Ridge, IL

Background: Beginning with the 2017-2018 academic year, the pediatric residency program at Advocate Children's Hospital-Park Ridge (ACH-PR) began the process of implementing modified X+Y scheduling for their medium-size program. In 2018, ACH-PR, along with 4 other sites, was approved by the ACGME to begin true X+Y scheduling. The potential appeal of this manner of scheduling to pediatric residency applicants was unknown. Objective: Assess the impact of X+Y scheduling on the ranking preferences of pediatric residency applicants. Methods: Post-match surveys were sent via Survey Monkey (2018) and Qualtrics (2019, 2020) 3-5 days after Match Day to all ranked applicants. Surveys evaluated the interview experience at ACH-PR as well as factors involved in applicant decision making for rank. All applicants were asked to self-report their view of X+Y scheduling and how the presence of this scheduling modality may have affected their rank list. Results: Response rate each year ranged from 61-74%. A total of 297 applicants responded over the three-year period. In 2018, 66 out of 68 (97.06%) of applicants stated that they liked 3+1 scheduling. Of those, 67% ranked the program higher because of the 3+1 scheduling. In 2019, 89 out of 95 (93.9%) liked 3+1 scheduling with 55% ranking the program higher because of it. Similarly, in 2020 129 out of 134 (96.3%) of applicants liked 3+1 scheduling with 71.3% ranking the program higher due to this type of scheduling. Among all respondents, only 8 (2.7%) total applicants stated that they did not like the concept of 3+1 scheduling. Conclusion: The presence of 3+1 scheduling at a pediatric residency program may impact the ranking preferences of residency applicants.

FINDING TIME TO TEACH IN THE NICU: TARGETED SHORT SIMULATIONS CAN FILL GAPS IN DELIVERY ROOM EDUCATION FOR PEDIATRIC RESIDENTS

Rena Linderer, DO, Rachel Yudkowsky, MD, MHPE, University of Illinois College of Medicine at Chicago, Chicago, IL

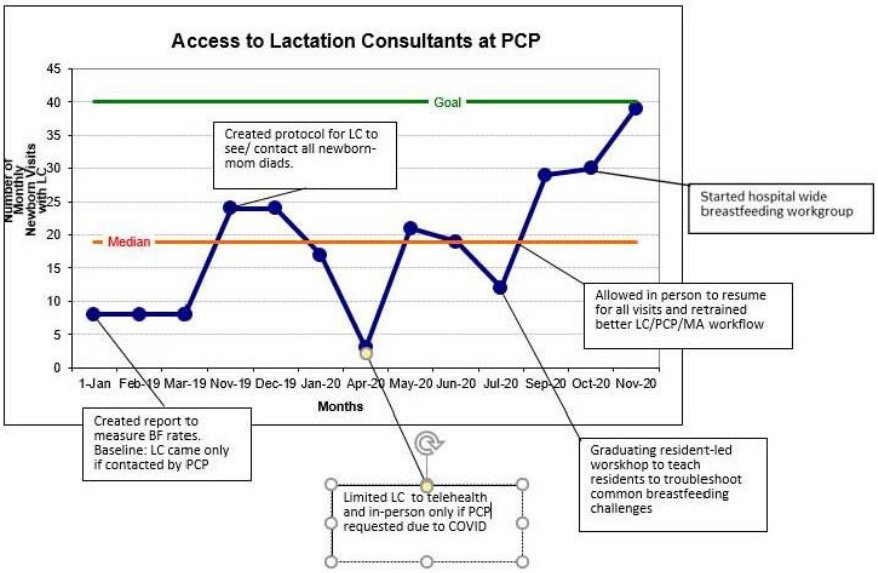
Delivery room experiences for pediatric residents have decreased due to the decreases in duty hour limits and required weeks of rotation in the neonatal intensive care unit (NICU). Compounding this are many clinical tasks that compete for time to teach. This pilot study evaluates the feasibility of conducting targeted short simulations (sims) at night to fill specific gaps in pediatric residency education during the neonatology rotation. A needs assessment was conducted via a focus group of pediatric residents and interviews of program directors. Goals and objectives were developed based on the results. Four sims were written based on topics highlighted as gaps. Neonatology fellows were trained to conduct and debrief sims for pediatric residents on night float during their neonatology rotation. Residents completed an anonymous evaluation after each sim. Two persons independently mapped free text responses to the question "Write three things you learned today" to the curricular objectives. Discrepancies were discussed and resolved. Descriptive analysis of the data was performed. The study was approved by the UIC Institutional Review Board. During the pilot, 18 sims were conducted over a 10-week period for 5 pairs of pediatric residents (10 total) who consented to participate in the study. A total of 31/36 post-sim evaluations were completed, providing a total of 91 comments regarding what was learned from the sim. 75/91 comments mapped directly to one of the curricular objectives. The two most represented objectives were initiating conversations with parents in the delivery room regarding varying prognosis and applying skills and concepts as outlined in NRP, with 25 and 20% of comments, respectively (Figure 1). This curriculum facilitated by neonatal fellows was feasible and effective in meeting the educational goals to fill the gaps identified by residents. It allowed for making time for educational activities at night, when there are less clinical duties. This provided a supplemental curriculum without disrupting the clinical work flow of a busy day shift in the NICU.



FIRST STEPS TO BETTER SUPPORT BREASTFEEDING IN A CONTINUITY CLINIC PRACTICE

Kristen E. Samaddar, Jennifer Farabaugh, MPH, Heeral Patel, Jackie Severson, RN, IBCLC, Phoenix Children's Hospital, Phoenix, AZ

Background Breastfeeding is associated with a spectrum of health benefits for mother, child, and society at large. The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for 6 months followed by complementary foods and continuation of breastfeeding for as long as mutually desired. While there have been marked improvements in the 6 indicators for breastfeeding set by Healthy People 2020, breastfeeding rates continue to fall short of benchmarks. Disparities continue to exist despite interventions. **Aim Statement** By July 2021 our continuity clinic team aimed to: (1) provide immediate access to lactation consultants (LC) at >80% of newborn visits (2) improve breastfeeding rates by 10% for all 6-month olds **Interventions** 1. Created reports to monitor and publicize breastfeeding rates 2. Created a protocol for LC to visit or contact all newborn-mother dyads at their first primary care physician (PCP) visit and then as needed 3. Trained providers to document feeding method in a uniform way 4. Resolved COVID and non-COVID related workflow issues for coordinating care between providers 5. Implemented a resident-led workshop to teach residents strategies to overcome common breastfeeding challenges 6. Initiated a hospital-wide breastfeeding workgroup **Measures** 1. Number of monthly newborn visits including a LC (initially reported as number and then determined percentage of all newborn visits) 2. Breastfeeding rates at each preventative care visit from newborn to 6 months (partial plus exclusive breastfeeding/all feeding methods) **Results** Number of monthly lactation consults at initial newborn visits increased from an average of 8/month to 32/month. In the last 3 months of 2020, 95% of all newborn visits included a LC (75% in person, 20% telehealth). Median breastfeeding rates were stable at newborn, 1, and 6 months throughout interventions (76%, 67%, 30%).

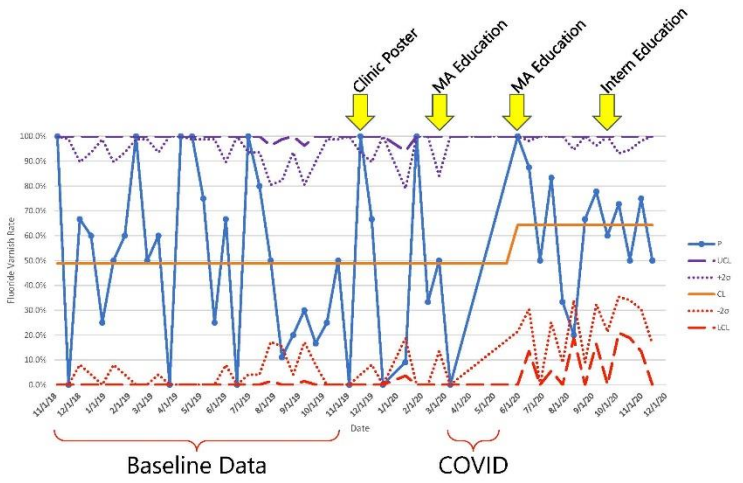


Conclusions and Next Steps Helping mothers initiate and sustain breastfeeding is critical yet challenging. Our initial goal is to support a positive breastfeeding experience from the first visit by providing lactation expertise and support for all families. Through persistent efforts during a year affected by a pandemic, our team was able to connect 95% of infants and mothers with a LC. Though actual breastfeeding rates have remained stable, we hope ongoing interventions and collaborations will help mothers reach their feeding goals.

FLUORIDE VARNISH: PROMOTING ORAL HEALTH TO THE UNDERSERVED

Nathan Albrecht, DO, Kaitlyn Lemes, DO, Monica Palacido, DO, Robert Lisac, MD, Matthew Garber, MD, University of Florida College of Medicine-Jacksonville, Jacksonville, FL

Background Dental caries is the most common chronic disease affecting young children in the United States with 43.1% of youth aged 2-19 years of age having dental caries. The rates are highest in Black and Hispanic children and dental caries disproportionately affect children of low-income families. The American Academy of Pediatrics recommends fluoride varnish for all children every 36 months from the age of tooth emergence until they have a permanent dental home. We believe that incorporating fluoride varnish application during pediatric well child visits, aged 9 months to 3 years old, is an efficacious strategy to promote oral health care, especially for those with diminished resources at the San Jose clinic in Jacksonville, Florida. **Aim Statement** To increase the fluoride application rate during well visits for children 9 months to 3 years of age from a baseline of approximately 50% to a rate of 75% in 1 year. **Interventions** We conducted 3 PDSA cycles. First, we created and displayed fluoride posters in the resident work room to remind residents to apply varnish at appropriate visits. Next, we educated medical assistants on the intervention and asked them to place varnish in patient rooms when applicable. Due to significant staff changes and a pause in resident clinic duties during the beginning of the COVID-19 epidemic, this intervention was repeated when the residents returned to clinic which was also concurrent with the hiring of new medical assistant staff. Finally, after the new resident class arrived, we educated the new interns regarding our QI project and the appropriate use of fluoride varnish application for eligible patients. We received feedback by monthly data reports of fluoride varnish application rates. **Measures** The number of visits with a fluoride varnish application over all eligible well child visits for children 9 months to 3 years of age, plotted as a percentage biweekly. **Results** Fluoride varnish application increased from a mean of 48% to a mean of 64% one year after beginning interventions (see annotated control chart for proportions (p-chart) with percentages plotted bi-weekly). Special cause variation was met after our third intervention and the process has been in control since. **Conclusions and Next Steps** Our Quality Improvement project's AIM was to increase fluoride application rates from a baseline of approximately 50% to a rate of 75% in 1 year. Although we did not achieve this goal, we did increase the rate to 64%, with special cause variation demonstrated after our 3rd intervention. We believe because there was a completely new staff, the intervention of placing fluoride varnish in patient room drop boxes was not seen as something new, but rather was standard and expected. This then reinforced to residents the important of applying the varnish that had already been provided to the patient rooms. The gains were sustained, even after a new class of interns started, possibly related to our educational interventions with the interns. We also reduced variability and do expect to reach the goal of 75% fluoride application rate as the project continues. Members of this QI project plan to sustain the intervention through continued resident and medical assistant refreshers on the importance of fluoride varnish application among other future interventions. We also plan to spread the initiative to other UF LOE clinics, which serve a similar population of majority Medicaid patients.



HOW DO CLINICAL COMPETENCY COMMITTEES DETERMINE LEVEL OF SUPERVISION FOR THE PEDIATRIC SUBSPECIALTY ENTRUSTABLE PROFESSIONAL ACTIVITIES

Melissa L. Langhan, MD, MHS, Yale-New Haven Medical Center, New Haven, CT, Diane Stafford, MD, Stanford University, Stanford, CA, David A. Turner, MD, Not Affiliated with Program/Institution listed above, Chapel Hill, NC, Pnina Weiss, MD, Yale-New Haven Medical Center, New Haven, CT, Megan Curran, MD, Angela S. Czaja, MD, University of Colorado, Denver, CO, Bruce Herman, MD, University of Utah, Salt Lake City, UT, Angela Myers, MD, Children's Mercy Hospital, Kansas City, MO, Richard Mink, MD, UCLA David Geffen School of Medicine/UCLA Medical Center, Torrance, CA

Background: Entrustable Professional Activities (EPAs) represent essential activities that physicians perform in practice. Assessment is based on the level of supervision needed to safely and effectively perform these tasks. The process used by clinical competency committees (CCCs) to assign a fellow's EPA supervision level is unknown. We aimed to investigate CCC processes for assigning EPA supervision levels and the role of EPAs in determining fellow readiness for graduation. Methods: A qualitative study using semi-structured interviews was performed with a purposeful sample of pediatric fellowship program directors (FPDs). FPDs self-reported understanding of EPAs and current use or non-use to assess fellows. The guide used open-ended questions and prompts to explore perceptions about the CCC process and the use of EPAs as a summative assessment at graduation. Interviews were audio recorded and professionally transcribed. Medical educators were trained and then independently coded the transcripts. The code structure was refined to reflect group discussion and consensus. Iterative data collection and analysis continued until theoretical sufficiency was achieved. Results: Transcripts from 26 FPDs in 11 subspecialties were coded (Table 1). Three central themes emerged (Table 2): 1) The CCC process among programs is variable, including people involved, data used for assessment, and the process of assigning supervision levels, 2) entrustment is an intuitive concept, globally and related to specific goals and activities, and 3) EPAs may be useful for determining readiness for graduation, but need more validity data. Discussion: While CCC process for assigning EPA supervision levels may be variable, consensus is easily achieved given the intuitive nature of entrustment. FPDs generally support EPA use for fellow assessment, but desire more validity evidence and better understanding of supervision levels appropriate for graduation.

Table 1. Participant demographics, N=28

Median Years as Program Director (IQR)	6 (4-11)
Median Number of Total fellows (IQR)	3 (2-5)
Self-rated Understanding of EPAs, N (%)	
Unfamiliar	4 (14%)
Basic	8 (29%)
In-Depth	15 (54%)
Expert	1 (4%)
Self-Reported Use	
User	16 (57%)
Non-User	12 (43%)
Subspecialty	
Adolescent Medicine	3 (11%)
Child abuse	4 (14%)
Critical Care	3 (11%)
Developmental and Behavioral Pediatrics	1 (4%)
Emergency Medicine	3 (11%)
Endocrinology	2 (7%)
Gastroenterology	2 (7%)
Hematology-Oncology	3 (11%)
Infectious Disease	4 (14%)
Neonatology	2 (7%)
Pulmonary	1 (4%)

Table 2. Codes mapped to each theme and representative quotes

Primary Themes	Codes	Representative Quotes
The CCC process is variable	Variability in people involved: CCCs are made up of varying numbers and types of people. Occasionally people outside of the CCC are needed to assess certain EPAs. Reliability of assessors can factor into assessments.	I try to have representation from the different clinical areas where the fellows are working...So we feel that then we're able to evaluate them in the different domains of inpatient GI, inpatient hepatology, procedures and outpatient. Our CCC committee is comprised of a multi multidisciplinary group of providers, which includes attending physicians, nurse practitioners, nurses, social workers, and pharmacists.
		For level of supervision, I think it depends on the person. There are some people that like to micromanage and hover, the helicopter parents. And then there are the ones that drop their kids off and say, call me when you need a ride.
	Data used for assessment: Both objective and gestalt data are used for assessments.	We are bogged down with a lot of paperwork that we're referring to and it is sort of a gut and we're going by our most recent experiences with those fellows
	The CCC process of assessment: The CCC group reaches consensus about assessment levels. The process may involve making assessment individual by individual, or EPA by EPA. Peers may be used as a measure of comparison, and there are typically expectations for each year of training.	What's been so surprising is that for something that is sort of a gut feeling based on your experience with the fellow, it's surprising how much we agree from the get go when we start discussing it.
The concept of entrustment	Entrustment as a global concept: This relates to a supervisor's sense of comfort with a trainee and the ability of the trainee to practice autonomously.	It was kind of a novel concept though...but I think people have found it much easier to think about because this is sort of the way you really think when you're training someone, are they ready to go off and do it on their own?
	Entrustment as it relates to specific goals and activities: This relates to entrustment for specific activities, graduation goals and a trainee's ability to ask for help when needed.	I would entrust a fellow or a trainee of any kind to complete an activity if I felt confident that the trainee was capable of completing that activity in the preponderance of situations. And also had the ability to recognize when they were not in one of those situations, and appropriately ask for guidance or additional resources or help.
EPAs are seen as one tool to determine readiness for graduation	The meaning of EPA assessment for graduation: There is a lack of clarity about requirements for graduation and a desire for data on outcomes.	I think it's always the struggle of, at what point do you not advance a fellow based on EPAs. So if I have for instance an end of second year fellow, or even a fellow about to graduate and people are saying they're not entrusted to do something independently, should I be graduating them? I feel like that's a question, and what are the ramifications? I mean that you're putting an EPA out there in a discoverable way, and yet I'm theoretically graduating that person to practice independently as a Pediatric Emergency Medicine doctor. We don't have explicit cutoffs for our Fellowship, like you must be there so there's going to be remediation. I just don't know that they've been validated to the point where it's really appropriate to do that.
	Practical implications of EPA assessments for graduation: Priorities for EPAs are tied to relevance and frequency of activity in practice. A trainee's experience may vary based on their institution and employers could consider using EPAs to assess trainees as job applicants.	Those are the basic things that we would want somebody to be able to do no matter what kind of a job they were going to take after they left their training. And then some of the other things are more or less important depending on what that particular person's interests or desires would be. Thinking about what a fellow is going to do after they graduate, that they're going to be seeing patients, or doing research, or doing education, doing procedures with less supervision and in practice, then it's helpful to know what are they actually going to do in those situations and how much help do they need.

IMPACT OF A RESIDENT ONLY ROUNDING TEAM IN THE NICU

Bianca E. LoVerde, DO, UPMC Medical Education, Pittsburgh, PA

Background: Pediatric residents spend fewer weeks in the Neonatal Intensive Care Unit (NICU) than in the past. At UPMC Children's Hospital, they now complete only two NICU months. Concurrently, procedures have declined with clinical advances, reducing experience prior to graduation. Educational opportunities have also diluted with a surge in non-physician providers (NPPs). In a needs assessment, academic neonatologists believe residents are safe, but only 21% prefer to work with them, and a mere 4% feel their care is equivalent to NPPs. At UPMC, lack of exposure has resulted in decreased resident directed education and clinical experience, setting up a cycle of mistrust in resident autonomy, decreasing resident satisfaction. Objective: To determine if a resident-only rounding team increases satisfaction, improves knowledge, increases procedure attempts, and maintains patient outcomes. Methods: We created a resident-only rounding team at UPMC Magee-Womens Hospital, a 65 bed level III academic NICU. At the same time, we made several curricular interventions: updated lectures, procedure & lecture checklists, and a weeklong NICU "boot camp.Attendings on the resident team were limited to provide continuity. Measures included resident rotation evaluations, procedure logs, ITE scores, and patient chart reviews. Chi-square tests will compare discrete characteristics and Wilcoxon tests will compare continuous characteristics. Rotation evaluations will receive qualitative analysis. Results: The first end-point concluded in October 2020. Statistical analysis of resident and patient metrics are pending and expected prior to presentation. Informal review of resident evaluations suggests improved satisfaction. Colloquial feedback has been positive, with the improvement recognized by the residency program leadership. Implications: A resident-only rounding team in the NICU is feasible and has received positive feedback at all levels without apparent detrimental effects on patient care. Should increases in procedural attempts be statistically significant, this has national implications as a hot topic in medical education.

Resident Satisfaction via Rotation Evaluations

	FY20	FY17-19
I received timely and useful feedback about my performance on this rotation. (Y/N)	*n= 47* 0.91	*n=156* 0.83
I received bedside teaching on this rotation (Y/N)	*n= 47* 1.00	*n=66* 0.89
During this rotation, there was a good balance of supervision and the opportunity to develop independent decisions. (Likert 1-5)	*n=47* 4.26	*n=169* 3.98
The learning experience on this rotation was valuable. (Likert 1-5)	*n=47* 4.53	*n=169* 4.20

FY20 = Academic year 2019-2020, FY17-19 = Academic years 2016-2019

IMPLEMENTATION OF A MODIFIED SEDATION TAPERING SCHEDULE TO REDUCE LENGTH OF STAY IN HOSPITALIZED CHILDREN UNDERGOING SEDATION WEAN

Erum Kazim, MD, James N. Crooks, MD, Nadia Shaikh, MD, University of Illinois College of Medicine at Peoria, Peoria, IL

Background Prolonged use of opiates and benzodiazepines may lead to withdrawal effects when abruptly discontinued. To prevent the risk of withdrawal symptoms, patients undergo sedation weans by gradually transitioning to oral medications such as methadone or lorazepam. We identified that despite using the WAT-1 scoring system, our sedation protocol was managed variably by intensivists and hospitalists leading to recurrence of symptoms, extended length of stays (LOS), and increased costs. We implemented a multimodal sedation wean strategy on patients undergoing sedation wean under the pediatric inpatient teaching service. **Aim Statement** To standardize the process of pediatric sedation weans and to reduce the duration of opioid and benzodiazepine use leading to reduced LOS as well as fewer 7 and 30 days readmissions. **Interventions** We devised sedation wean protocols for various withdrawal risk levels with pediatric pharmacists. Our interventions included safe sedation education for residents, nursing huddle education, implementing daily standardized pharmacy notes for expedited weaning recommendations based on the daily WAT-1 scores and monthly reminders of the project. All patients on sedation weans transferred to the pediatric inpatient service were included. **Measures** To assess the impact of our quality improvement project, we used process control charts to identify trends in the sedation wean in our pre intervention (Jan. 2019 - Nov. 2019) and post intervention (Nov. 2019 - Dec. 2020) cohorts. **Results** The study included a total of 22 patients (13 pre-intervention and 9 post-intervention). The intervention resulted in a 13% and 27% reduction in the number of doses of lorazepam and methadone, respectively. This led to a shorter LOS by 16% (at least 1 day) in the benzodiazepine group and by 29% (average 3 days, range 2-6 days) in the methadone group. None of the patients in the post intervention group were readmitted for withdrawal symptoms. Median cost reduction was approximately $3358/patient. **Conclusions and Next Steps** Safe and expedited sedation weans can be achieved in patients on low, medium and high risk protocols leading to shorter LOS and decreased hospital costs.

IMPROVEMENT OF PEDIATRIC RESIDENT CROSS-CULTURAL CARE THROUGH A LONGITUDINAL CURRICULUM

Erin P. Allmer, MD, Pratichi Goenka, MD, Rashi Kabra, MD, Kelly Murphy, MPA, Anu Anish, MPH, Stephen Barone, MD, Zucker School of Medicine at Hofstra/Northwell at Cohen Children's Medical Center, New Hyde Park, NY

The ACGME identified trainee education on health care disparities as an area of need in 2018 after the CLER national report noted trainees can identify populations at risk for disparities but felt unprepared to address their needs. This gap was reflected at our large pediatric residency program; two thirds of our residents reported lack of skills in delivering cross-cultural care (CCC). In response we developed a Health Equity, Diversity and Inclusion (HEDI) curriculum that has been delivered for 3 years. We aimed to create a longitudinal curriculum to teach foundational topics of CCC and improve skills in delivering CCC. We developed a longitudinal HEDI curriculum, delivered over the course of an academic year via monthly, hour-long noon conference sessions designed to be didactic based with interactive components. The topics selected deliver basic foundational concepts of HEDI on a yearly basis (social determinants of health, cultural competent care, LEP), in addition to allowing for dedicated sessions to cover topical issues integral to cross cultural care (structural racism, microaggressions). Ten lectures were delivered each academic year. To assess resident knowledge and skill in cross-cultural care and health disparities, the validated cross-cultural care survey (CCCS) was administered yearly. A one-way ANOVA was completed to determine if self reported skill level

differed between PGY 1, 2 and 3. Analysis of the annual validated CCCS results indicated that for the following skills: identifying patient mistrust, identifying cultural customs that may affect clinical care, and working effectively via interpreter, there was a statistically significant difference in mean scores of self-reported skill level between years(p= 0.04, 0.003, and 0.002 respectively). Our HEDI curriculum, which provides foundational concepts in CCC in addition to interchangeable topical sessions, is a successful venue for improving resident knowledge and skills in CCC. With this improved skill, pediatric residents can provide conscious care for diverse populations and improve health outcomes in the face of health disparities.

IMPROVING RESIDENT IN-TRAINING EXAM SCORES: IMPLEMENTATION OF REVIEW QUESTION GOALS AND FORMALIZED MONTHLY COACHING

Susannah M. Kisvarday, MD, Michaelyn T. Notz, DO, Thomas W. Davis, MD, Geisinger Health System, Danville, PA

Background In-Training Exams (ITEs) are commonly used assessments of strengths and weaknesses in resident general knowledge. ITE scores have been clearly shown to be predictive of future board pass rate (1-7). Higher percentage scores with each subsequent test administration is essential to ultimately passing the certifying exam (4). Residents in our program begin residency with below average ITE percentiles, and our baseline data showed that residents were not consistently improving over the course of their training. **Aim Statement** Geisinger Med-Peds Residents' ITE scores will increase by 5% each academic year for 4 years. **Interventions** We conducted a root cause analysis which highlighted an absence of a "culture of independent study" in our program. In the first cycle, implemented 2016-2017, every resident in the program participated in monthly one-on-one coaching meetings with an assistant program director (APD). The resident was encouraged to set monthly learning goals and would report out on progress made toward goals during the previous month. A second PDSA cycle was developed and implemented 2017-2018 wherein a standardized template was used to conduct the monthly meetings. In the third cycle, monthly coaching meetings using the standardized template were continued and a new, monitorable question bank was added to the individual learning plan program. Additional cycles will be planned after analysis of results of this third cycle. **Measures** The primary outcome measure was in-training exam scores. We obtained qualitative survey data to measure resident satisfaction as a secondary outcome measure. Balancing measures such as APD time invested were also assessed after each cycle. **Results** Eighteen of Nineteen Med-Peds residents have shown year over year improvement of Pediatric ITE scores since initiation of the program. All residents have improved Internal Medicine ITE scores with average improvement of 5% per year. Risk calculation predicts that current residents have an 84 to >99% chance of passing the IM certifying exam (8). End of year survey data showed that the program gained resident approval with each subsequent year. Qualitative data indicated that the program had an unintended, but positive impact on improved resident wellness and career goal-setting. **Conclusions and Next Steps** After implementing a formalized ITE score improvement plan, ITE scores improved but not consistently to the desired 5% for every resident each academic year. There is a trend toward higher probability of passing the American Board of Pediatric and American Board of Internal Medicine certifying exams than at the start of the improvement project. The program required significant APD time investment (5-10 hours per month); this time was deemed well invested in the improved culture of learning and improved resident wellness.

KEY DRIVERS OF RESIDENT AUTONOMY: A MULTI-CENTER NEEDS ASSESSMENT

Nicole R. Washington, MD, Children's Hospital of Philadelphia, Philadelphia, PA, Michael Perry, MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH, Matthew Malloy, MD, MPH, Austin Ostermeier, MD, MS, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Karen Allen,

MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH, Marquita Genies, MD, MPH, Johns Hopkins University, Baltimore, MD, Annie Gula, MD, Children's Hospital of Philadelphia, Philadelphia, PA, Rena Kasick, MD, Charlie Macias, MHA, John Mahan, MD, Mohammed Najjar, MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH, Brittany Player, DO, Kelsey Porada, MA, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI, Christina Rojas, MD, Children's Hospital of Philadelphia, Philadelphia, PA, Claire Sevov, MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH, Heather Toth, MD, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI, Ndidi Unaka, MD, MEd, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Mike Weisgerber, MD, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI

Background: Resident autonomy is essential for developing clinical competence and independent practice. However, clinical training environments and level of faculty supervision can vary widely, significantly influencing resident autonomy and professional growth. Five academic institutions collaborated to explore key drivers of autonomy on pediatric hospital medicine (PHM) rotations. Objectives: (1) Understand perceived barriers and drivers of resident autonomy on PHM rotations; and (2) Utilize identified key drivers to create a composite score to measure changes in perceived autonomy. Methods: We performed a multi-center, cross-sectional study of pediatric senior residents and PHM faculty during the 2019-20 academic year. Participants completed a 32-item needs assessment regarding perceptions of resident autonomy on PHM services. Themes identified from this assessment led to the development of a key driver diagram. We used the key drivers to develop a Resident Autonomy Composite Score, a 6-question Likert scale survey, to measure changes in perceived autonomy over time. Results: 197 residents and 128 PHM faculty across the 5 institutions completed the needs assessment. Quantitative and qualitative analysis of results showed resident perceptions of autonomy are closely linked to the level of faculty oversight, aligned expectations in regards to this oversight, opportunities to make medical decisions independently, and faculty feedback on resident performance. Barriers to autonomy noted by residents included complexity of patients, clinical fellows, culture, and attending inexperience. Barriers noted by faculty included engagement and trustworthiness of the senior residents. Using QI methodology, we identified key drivers of resident autonomy and developed a Resident Autonomy Composite Score to measure perceived autonomy and its change over time after implementation of interventions. Conclusions: A needs assessment of senior residents and PHM faculty at five academic institutions revealed important factors that influence resident autonomy. We created a novel composite score to measure perceived resident autonomy. Next steps include implementing a change package at our institutions to improve pediatric senior residents' perceptions of autonomy.

The Resident Autonomy Composite Score is a 6-question Likert scale survey derived from our needs assessment. See below.

1.	*I feel that my input is taken seriously by my attending when it comes to making important medical decisions.*
2.	*I feel that I'm encouraged to make medical decisions for straightforward cases on my own.*
3.	*I feel that my attending allows my plan to be followed even if they prefer an equivalent alternative.*
4.	*I feel that I receive constructive feedback from my attending to help me improve my medical decision-making skills.*
5.	*I feel like I am the leader of my medical team.*
6.	*I feel that the level of attending oversight regarding patient care activities is just right.*

MED ED IN THE TIME OF COVID-19: UTILIZING SIMULATION AND ZOOM FOR FELLOW FEEDBACK TRAINING

Jennifer C. Yu, MD, Kyung Rhee, MD, MSc, MA, Zephyr Dworsky, MD, Annie Larrow, MD, MS, University of California (San Diego), San Diego, CA, Patrick J. Passarelli, MD, Not Affiliated with Program/Institution listed above, Elmira, NY, Aarti Patel, MD, MEd, University of California (San Diego), San Diego, CA

Feedback is essential for trainees to improve their clinical and communication skills. However, most healthcare providers do not receive formal feedback training. Our goal was to provide training to fellows using an Observed Structured Feedback Examination (OSFE) format and assess changes in feedback skills and confidence. Pediatric fellows completed baseline self-assessments on prior exposure to feedback training, application of skills, and confidence using a 5-point Likert scale. Then during the OSFE in the simulation center, the fellow gave feedback to a standardized trainee recipient using a scripted scenario, while faculty observers watched via live-stream video. Fellows then participated in brief feedback training and received individualized feedback on their OSFE. Immediately after, they repeated the OSFE with the same scenario and completed a post-training confidence self-assessment. Three months later during the COVID-19 pandemic, fellows completed 3-month-post self-assessments, followed by an OSFE over Zoom to assess retention. Observers and recipients completed a standardized checklist to evaluate performance in each OSFE using a 5-point Likert scale. Descriptive statistics and signed rank sum test were used for analysis. Nineteen fellows participated in the feedback training with 100% follow-up. All reported prior exposure to the Feedback Sandwich Model and most to the Ask-Tell-Ask Model (63%). Most fellows had no prior exposure to other feedback concepts. All had improvement in all confidence metrics and in OSFE performance after feedback training, which was sustained three months later (Table 1). Prior to training, only 11% reported giving sit-down feedback and only 21% for Just-In-Time feedback; this improved 3 months after training, with 21% reporting sit-down feedback ($p = 0.06$) and 63% for Just-In-Time feedback ($p = 0.01$). Use of innovations such as simulation and Zoom can help adapt educational training during a pandemic. Conducting feedback training with creation of the OSFE and individualized feedback can improve fellow confidence and performance, which can be sustained.

Confidence in Giving Feedback		Pre-Training Score Median (IQR)	Mean change in score from pre to post-training (SD)	Mean change in score from pre-training to 3-month follow up (SD)
Knowledge	Definition of Feedback	3 (1)	1.21 (0.71)***	0.68 (0.75)**
	Problems if Feedback Does Not Occur	3 (2)	1.32 (0.95)***	1.11 (0.94)***
	Effective vs Ineffective Feedback	3 (1)	1.26 (0.81)***	1.11 (0.88)***
	Ende's Rules of Feedback	1 (0)	2.63 (1.01)***	1.74 (1.24)***
	Feedback vs Evaluation	3 (1)	2.21 (0.71)***	1.58 (0.77)***
	Just-in-Time Feedback	1 (2)	2.58 (1.07)***	2.26 (1.15)***
	The Feedback Sandwich Model	3 (1)	1.11 (0.81)***	1.21 (1.03)***
	The Ask-Tell-Ask Model	2 (2)	2.26 (0.93)***	2.05 (1.22)***
Skills	How to Deliver Just-in-Time Feedback	1 (2)	2.37 (1.30)***	2.16 (1.07)***
	How to Deliver Formal Sit-down Feedback	3 (1)	1.74 (0.87)***	1.47 (0.96)***
	How to Direct Learner Self-Assessment	2 (1)	2.21 (0.92)***	2.00 (0.94)***
	How to Use Feedback Sandwich Model	3 (2)	1.11 (0.81)***	1.05 (0.85)***
	How to Use Ask-Tell-Ask Model	2 (2)	2.47 (0.77)***	2.16 (1.17)***
	How to Deliver Feedback to a Problem Learner	2 (2)	1.42 (0.96)***	1.37 (0.76)***
	How to Receive Feedback	3 (2)	0.74 (0.81)**	0.89 (0.74)***

Table 1: Changes in fellow self-assessment of confidence in feedback knowledge and skills pre, post, and 3-month post feedback training session; assessed by 5-point Likert scale (1 – Not at all confident; 5- Very confident); SD = standard deviation; Signed Rank Sum Test: * = p of < 0.05, ** = p of < 0.01, *** = p of < 0.001

PEDIATRIC RESIDENTS EXPERIENCES WITH HIGH VALUE CARE

Alexis Ball, MD MPP, Emma Nathaniel, MD, Sheilah Jimenez, BS, Leonard Seltz, MD, Michael Tchou, MD MSc, University of Colorado, Aurora, CO

Background Residents are expected to incorporate consideration of cost awareness into patient care. Yet, resident self-reported practice of high value care (HVC) varies, and in-depth understanding of resident perspectives on trying to practice HVC in the clinical setting is limited. Objective To explore pediatric residents' experiences with HVC in the clinical setting Design/Methods We performed a qualitative study (February-November 2020), with a phenomenology approach, using focus groups (n=5) and interviews (n=3) of pediatric residents at a large academic children's hospital. We used a semi-structured interview guide focusing on resident experiences with HVC and their perceptions of institutional HVC practice. Data were analyzed using the constant comparative method. Codes were built using an iterative approach and organized into themes. Sampling continued until reaching saturation. Results Twenty-two residents (n= 10 interns, n= 12 PGY-2/PGY-3) participated. Data analysis yielded five themes: Resident Practice, Institutional Culture, Patient Factors/Family Experience, Education, and Incidental Findings (Table 1 shows illustrative quotes).

Table 1:

High-Value Care Theme	Example Quotation
Resident Practice	"For me, getting more experience in different clinical scenarios to understand what to order would be helpful." "I don't want to miss something and fear causing the patient harm because of a lack of a test that would have revealed a diagnosis or [affected] change in treatment."
Institutional Culture	"We typically order whatever a consultant wants. We consulted them for a reason. It's hard to say "Oh, I know that's not right. Certainly I think we default to doing everything a consulting team wants which may not be the best care." "The ICU is just a different type of medicine. You order a lot more and maybe you definitely could practice high value care, it's just not done as much."
Patient Factors/Family Experience	"You walk into the room and the first thing you hear is both parents yelling at you, "I want VP [ventriculoperitoneal] shunt tapped, a urinalysis, and a GIP [gastrointestinal pathogen panel]. You fight the hardest you can within reason. But situations like that come up very frequently and makes providing high value care extremely challenging." "Sometimes families are your allies. If you're not wanting a lab and they don't want to have the child experience a poke or procedure that you don't think will change management, they you are on the same page. Family is satisfied and you've reduced unnecessary testing."
Education	"Sometimes you get a really good role model who challenges you by asking "What are you looking for on that RFP [renal function panel]? That has been helpful when you get really good role modeling." "What is the cost of the hospital stay? No one ever tells us that. What is the cost of each of these labs or treatments? How much does it cost to put a kid on low flow nasal cannula versus high flow? These are not things we talk about."
Incidental Lab Findings	"In primary care clinic, you get a screening CBC [complete blood count] and the kid is slightly leukopenic. What do you do with that? Do you have to repeat it until it's normal? It can cause more harm to the patient who is otherwise clinically well."

Residents described practicing HVC but felt limited by clinical inexperience. Some residents feared missing diagnoses, but few worried about liability. Autonomy in patient care decisions encouraged HVC; even low value interventions, observing their minimal usefulness, provided important learning. Communicating reasons for decisions to families and staff

promoted HVC though impeded by time constraints and cognitive fatigue. Consistent messaging, when it occurred, to families from interdisciplinary team members supported HVC. Residents described inconsistent HVC practice due to variation by clinical setting, attending physicians making final patient care decisions, and perceived need to adhere to all consultants' recommendations. Residents struggled with studies that wouldn't change management but would improve family experience. Practicing HVC was simple for patients with common illnesses but less clear for those with medical complexity or rare diagnoses. Residents valued informal HVC discussions but felt more education, such as greater cost transparency, was needed. Finally, incidental abnormalities identified on screening laboratory studies led to perceived low value care. Conclusion Residents often practice HVC but face several complex challenges in a large academic health center. Residency program curricula and broader institutional work are needed to help residents mitigate these challenges.

PERSPECTIVES ON COMPLEX CARE TRAINING IN A LARGE ACADEMIC PEDIATRIC TRAINING PROGRAM

Sinead Murphy Salem, MD, Brenna Chase, MD, Lori Newman, MEd, Amy Cohen, MEd, Christine Cheston, MD, Kathleen Huth, MD, MMSc, Children's Hospital/Boston Medical Center, Boston, MA

Background: Standardized curricula have been recommended to support high-quality care for children with medical complexity (CMC), yet pediatric residency programs offer variable training. A recent study identified essential complex care (CC) curricular topics; but effective educational strategies have not been described. Design: A cross-sectional survey was conducted with pediatric residents in an academic pediatric residency program. The survey asked about: training experiences in CC; confidence in clinical activities in CC using a modified Chen entrustment scale; priorities for curriculum development; and demographics. We used descriptive statistics for quantitative data and qualitative content analysis for free-text responses. Results: Of 160 residents surveyed, 110 (69%) participated. Most reported prior clinical exposure to CMC (106, 96%), including inpatient (82, 75%) and outpatient (88, 80%) rotations. Overall mean confidence in CC (2.44, SD 0.59) increased across postgraduate years (PGYs) and was at or below somewhat confident in all clinical activities for all PGYs (Fig 1). Activities with highest reported confidence were evaluating aspiration (2.97, SD 0.84), nutrition (2.82, SD 0.90), care coordination (2.82, SD 0.89), and pain assessment (2.80, SD 0.81). Lowest confidence was reported for care of medical technology (1.78, SD 0.82), musculoskeletal issues (2.05, SD 0.83), and transition to adult care (1.66, SD 0.89). Participants recommended inpatient encounters with expert preceptors for evaluating aspiration, pain, and dysmotility (>50%); teaching with patients/families for advocacy, difficult discussions and transition to adult care (>40%); and hands-on practice with medical technology (>40%). Recommendations for CC curricula included longitudinal care of CMC, direct observation and feedback, and hands-on practice with simulation. Conclusion: Pediatric residents report limited confidence in performing key clinical activities in CC across all PGYs. Future curriculum development should incorporate observed clinical encounters with expert preceptors, partnership with families, and hands-on practice.

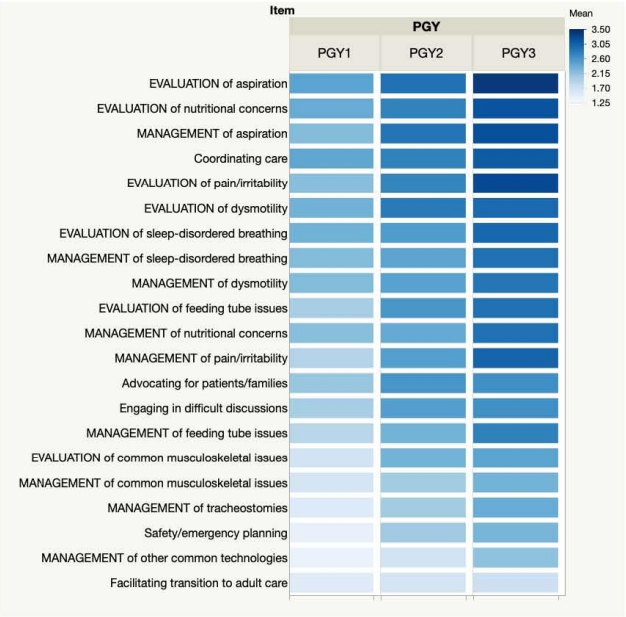


Figure 1. Mean reported confidence in key clinical activities in complex care using a modified Chen entrustment scale, stratified by postgraduate year (PGY).

Modified Chen entrustment scale
1 = Not at all confident: I could watch a fellow or attending perform this task during a patient encounter
2 = Slightly confident: I can do this task myself with my fellow or attending teaching me how to complete the task during a patient encounter
3 = Somewhat confident: I can do this task myself with my fellow or attending available if I need help during a patient encounter
4 = Very confident: I can do this task myself with my fellow or attending available if needed (but they are not in the patient encounter)
5 = Extremely confident: I can do this task myself and teach another more junior resident how to do it during a patient encounter

RESIDENT REFERRAL TO A PRIMARY CARE FOOD PANTRY FOLLOWING SOCIAL DETERMINANTS OF HEALTH TRAINING

Michelle March, MD, MPH, Daniel Schumacher, MD, MEd, Andrew Beck, MD, MPH, Mary Burkhardt, MD, MHA, Allison Reyner, MS, Melissa Klein, MD, MEd, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Social determinants of health (SDH) significantly affect child health. Food insecurity (FI) is an important SDH - impacting 14.3 million households in America. Pediatric academic health centers with resident continuity clinics are uniquely situated to identify and address FI as children have frequent visits. This retrospective study occurred at the Pediatric Primary Care Center (PPCC) at Cincinnati Children's Hospital Medical Center (CCHMC) from 1/1/2019-6/30/2020. All CCHMC residents received SDH training through a combination of didactic and experiential learning. PPCC residents can directly apply this learning to patient care by interpreting and acting on results of social screening questionnaires collected at every visit and stored in the electronic health record (EHR). Data on encounters resulting in provider referrals to the PPCC food pantry were extracted from the EHR and supplemented with information captured in food pantry logs. The primary exposure was provider type, categorized as: residents, attendings, and other clinic providers. Residents were further divided based on year of training. The primary outcome was referral to the PPCC food pantry. Referral rates were calculated by dividing the total number of referrals by the total number of visits seen by each group. Referral rates across exposure variables were compared using Chi-square tests. The PPCC food pantry was accessed at 852 visits for 730 distinct patients. Approximately 64% of all referrals were placed by residents and 35% by attendings, despite attendings seeing 45% of all patient visits. Approximately 89% of attendings and 86% of residents referred to the food pantry at least once. The referral rate among residents was significantly higher than that among attendings (2.55% vs. 1.73%; $p<0.0001$). Referral rates to a food pantry embedded in a primary care center were higher among residents who received SDH training, than attendings. Further work is needed to understand these differences and to

determine whether food pantry referrals may serve as an objective measure of performance addressing SDH within resident continuity clinics.

Table 1. Referral Rates by Physician Provider Type and Comparison between Groups

Physician Provider Type	Number of Referrals to the PPCC Food Panty*	Number of Visits to the PPCC	Referral Rates	P-value
Attendings (N=19)	299	17,312	1.73%	
Residents (N=156)	545	21,344	2.55%	< 0.0001
First Year	198	7,414	2.67%	0.0056
Second Year	147	6,719	2.19%	1.0000
Third Year	200	7,211	2.77%	0.0006

*Numbers do not add to totals due to missing values for other clinic providers.

SMART ROUNDING

Charles Maloy, DO, Adrienne DePorre, MD, Erica Adams, MSN, Jessica Olson, BSN, Amber Hunley, DNP, Darcy Weidemann, MD, Children's Mercy Hospital, Kansas City, MO

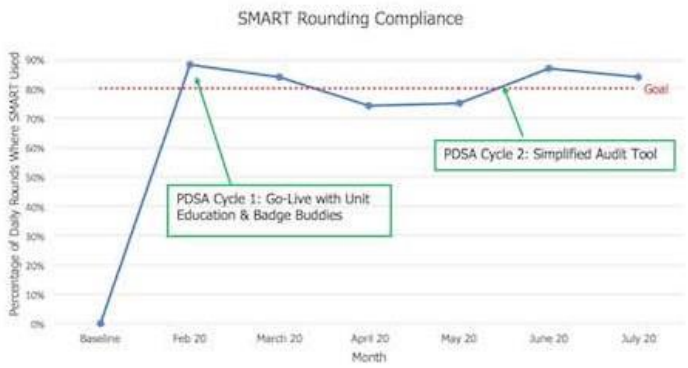
Background Poor communication in healthcare contributes to sentinel safety events, poor patient experience, and care delays. Use of checklists in healthcare can lead to the development of high reliability units. At our tertiary care freestanding pediatric hospital, there was no widely used rounding checklist used outside of the intensive care unit. Baseline data indicated safety and discharge planning task discussion during 9-83% of daily rounds.

Aim Statement We will develop and implement a daily rounding checklist with at least 80% daily checklist use sustained over 6 months. Team members will report improved multidisciplinary discussion of patient safety and clinical plans

Interventions Stakeholders in the rounding process modified a checklist used in the PICU for use on a medical unit at our hospital. Iterative Plan-Do-Study-Act (PDSA) cycles tested changes to improve checklist compliance. To foster interdisciplinary communication and project sustainability, bedside nurses prompted checklist review during rounds using badge buddies.

Measures The primary outcome measure was daily checklist use. A 6-month post implementation survey of nurses, residents, and staff measured acceptability (balancing measure) and perceived efficacy (secondary outcome measure) of the checklist.

Results A checklist entitled SMART (Situational Awareness, Medications, Access, Routine, and Transition) was created. The first PDSA cycle studied the effect of unit-wide education and badge buddy roll-out. Daily audits showed between 75%-88% checklist use. Our second PDSA cycle improved compliance with use of a simpler audit tool. Daily audits showed 75%-88% checklist use.(Figure 1) 29%



of eligible providers completed the survey (n=51). 77% of respondents perceived communication improvement with SMART use with 4% disagreement. Only 2% found the checklist led to patient care delays.

Conclusions and Next Steps This project emphasizes the importance of multidisciplinary teams in development and implementation of a rounding checklist for a pediatric floor. We demonstrate the feasibility and acceptability of inserting a rounding checklist into the workflow of a multidisciplinary pediatric care team. Further study is needed to determine long-term effects on process of care outcomes.

SUSTAINABLE QUALITY IMPROVEMENT MEASURES TO IMPROVE NURSING PRESENCE ON PEDIATRIC HOSPITALIST ROUNDS AT A LARGE ACADEMIC CENTER

Katie R. Conover, MD, David P. Johnson, MD, Beth Loats, RN, MSN, NE-BC, Jessica Binkley, BSN, RN, CPN, Alison Herndon, MD, Vanderbilt University, Nashville, TN

Background Family-centered rounds (FCRs) improve patient/family satisfaction and decrease communication errors. According to the American Academy of Pediatrics, FCRs should involve the care team, including the bedside nurse. Despite prior interventions, the entire team was rarely present during pediatric hospitalist FCRs at our 339-bed tertiary care center.

Aim Statement We sought to increase the percent of pediatric hospitalist patients at our childrens hospital for whom a nurse was present during FCR to 80% over 18 months.

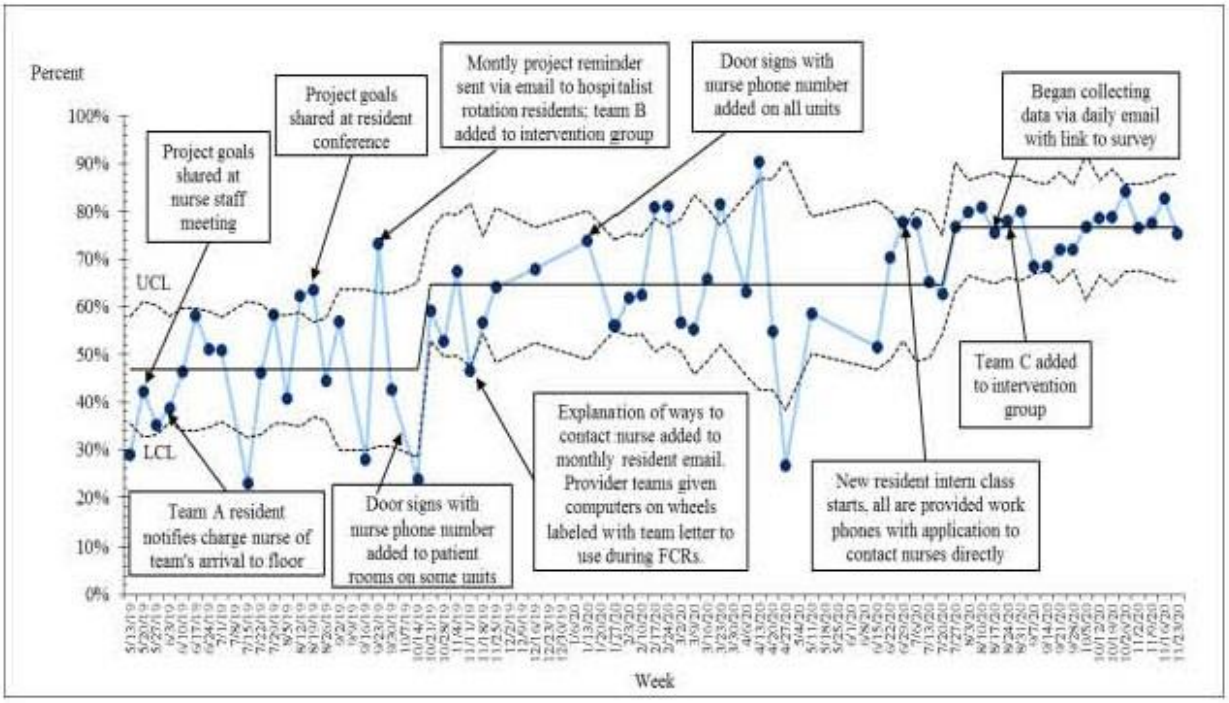
Interventions This multidisciplinary quality improvement (QI) project included multiple plan-do-study-act cycles based on focus group feedback and real-time data analysis using control charts. Focus groups included hospitalists, residents, bedside nurses, and nurse managers. Primary interventions included adding erasable door signs with nurse assignment and work phone number to patient rooms and disseminating information about the initiative to pediatric residents and bedside nurses via email and meetings. During the study, residents were also provided with work phones housing an application to call/text nurses.

Measures The primary measure was the percent of hospital medicine patients for whom the bedside nurse was present during discussion of the care plan during FCRs each week. Data capture was performed by hospitalist attendings, initially by a weekly email, and later by a daily emailed survey link. Statistical Process Control was used to analyze data weekly.

Results Nursing presence during FCR improved from a mean of 38% to 75% which has been sustained for 18 weeks (Figure 1). The first center-line shift to a mean of 65% followed adding door signs with nurse name and contact information to patient rooms. The second shift occurred after disseminating project information to new pediatric residents at the start of their intern year and after residents were provided work phones with capabilities to call/text nurses.

Conclusions and Next Steps Team-based interventions and QI methodology led to a sustainable increase in nursing presence during FCRs on our pediatric hospitalist service. Creating methods for direct communication between team-members were temporally associated with our demonstrated improvements. Next steps include gathering data of resident/nurse perceptions of the project and

involving nurses more directly during FCRs.



THE DOCTOR WILL ZOOM YOU NOW: AN EXPERIENTIAL TELEMEDICINE CURRICULUM FOR PEDIATRIC RESIDENTS

Jonathan Lebowitz, MD, Purnahamsi Desai, MD, Meaghan McGrath, Sondra Zabar, MD, Rachel Ramsey, Heather Howell, MD, New York University School of Medicine, New York, NY

Background: Virtual visits will be part of pediatric healthcare in a way that was not anticipated prior to the COVID-19 pandemic. We developed a virtual Objective Structured Clinical Exam (OSCE) curriculum to prepare residents for remote encounters and assess the need for future learning experiences. Objective: To evaluate pediatric residents' abilities with regard to best practices of virtual encounters and assess learners' needs to inform future telehealth curricula. **Methods:** Pediatric residents completed two virtual OSCE cases in random order: a general pediatrics case and an adolescent mental health case. Deploying a patient and family faculty program developed at our institution, the residents received individual feedback after each encounter from the standardized patient (SP), an expert clinician, and a member of the Family Faculty (FF), adolescent patients and parents of patients cared for at our children's hospital. The SP and FF were trained in checklist evaluation of the learner. There was a large group debrief featuring content experts and FF. Residents were evaluated by behavioral anchored competency checklist by SP and FF. The items were rated as not done, partly done or well done, with well done indicating mastery. **Results:** 89% (51/57) of pediatric residents participated. Less than 35% of residents demonstrated mastery, by SP evaluation, in the following competencies: confirmed patient identifiers (9% in case #1 and 19% in case #2), actively optimized technical aspects of the encounter (15% in case #1 and 29% in case #2), partnered with patient to perform physical exam (31%, applicable only to one case). Greater than 90% of residents demonstrated mastery, by SP evaluation, for each of the following competencies: avoiding interruption, avoiding jargon, and communication of concern or intention to help. **Conclusion:** There was minimal mastery of important virtual healthcare competencies. There was improvement from the first case to the second case. A virtual OSCE curriculum with feedback is necessary, and potentially effective, for teaching residents about remote healthcare.

THE FEELING IS MUTUAL: DEVELOPMENT AND IMPLEMENTATION OF AN INTERPROFESSIONAL CURRICULUM FOR PEDIATRIC RESIDENT PHYSICIANS

Christina R. Rojas, MD, Annie Gula, MD, Zoe Bouchelle, MD, Timothy Nelin, MD, Jeanine Ronan, MD, MEd, MS, Jill Posner, MD, MSCE, MEd, Children's Hospital of Philadelphia, Philadelphia, PA

Background: Effective collaboration between health care providers is critical to optimal patient care, yet there are few established interprofessional education curricula involving resident physicians, particularly in pediatrics.

Objectives: Objectives were developed based on the Interprofessional Education Collaborative (IPEC) core competencies. Specific aims were to 1) enhance mutual knowledge of roles and responsibilities, 2) improve interprofessional communication, and 3) promote interprofessional teamwork.

Methods: Stakeholders in the residency program, nursing, case management, and social work collaboratively developed half-day sessions, with content ranging from direct clinical care to case-based discussion. Residents and nurses filled out a retrospective pre-post survey after each session to assess for changes in interprofessional knowledge, attitudes, and skills. Respondents were asked to assess their level of agreement with statements related to educational preparation, professional responsibilities, communication, and teamwork, mirroring IPEC competencies. Quantitative data analysis was performed using the Wilcoxon signed-rank test. Qualitative data was organized using thematic analysis.

Results: 78 unique residents and 55 unique nurses have participated in the curriculum thus far. Nurses demonstrated statistically significant increases in agreement with all statements. Residents demonstrated statistically significant increases in agreement with all statements for all three types of sessions: nursing, case management, and social work (Table 1). Qualitative themes centered on responsibilities, communication, teamwork, and respect.

Conclusions: An interprofessional curriculum for pediatric residents enhanced the mutual understanding of educational preparation, roles, and responsibilities among healthcare team members. Nurses and residents also reported improved ability to communicate and collaborate within interprofessional teams. Further work will focus on evaluating effects of this curriculum on collaborative behaviors as well as patient care outcomes.

Table 1: Resident Perspectives on Interprofessional Collaboration with Nurses, Case Managers, and Social Workers

	Residents at Nursing Sessions (n = 58)			Residents at Case Management Sessions (n = 22)			Residents at Social Work Sessions (n = 26)		
	Before Session *Median (q1, q3)*	After Session *Median (q1, q3)*	p-value	Before Session *Median (q1, q3)*	After Session *Median (q1, q3)*	p-value	Before Session *Median (q1, q3)*	After Session *Median (q1, q3)*	p-value
I can describe the educational preparation of [interprofessional partner].	4.0 (3.0, 5.0)	5.0 (4.0, 6.0)	0.00	3.0 (2.0, 4.0)	5.0 (5.0, 6.0)	0.00	4.0 (3.0, 4.0)	5.0 (4.2, 6.0)	0.00
I am able to describe the role/responsibilities of [interprofessional partner] in collaborative patient care work.	4.0 (3.0, 5.0)	5.5 (5.0, 6.0)	0.00	4.0 (3.0, 4.0)	5.5 (5.0, 6.0)	0.00	4.0 (4.0, 5.0)	6.0 (5.0, 6.0)	0.00
I understand how my daily responsibilities intersect with those of residents.	4.0 (3.0, 5.0)	6.0 (5.0, 6.0)	0.00	4.0 (3.0, 4.8)	6.0 (5.0, 6.0)	0.00	4.0 (4.0, 4.8)	6.0 (5.0, 6.0)	0.00
I understand the importance of [interprofessional partner] in providing patient care.	6.0 (5.0, 6.0)	6.0 (6.0, 6.0)	0.00	4.0 (3.0, 5.0)	6.0 (5.2, 6.0)	0.00	5.0 (4.0, 6.0)	6.0 (6.0, 6.0)	0.00
I feel competent in my ability to communicate effectively with the [interprofessional partner].	4.0 (3.0, 5.0)	5.0 (5.0, 6.0)	0.00	3.0 (3.0, 4.8)	5.0 (5.0, 6.0)	0.00	4.0 (4.0, 5.0)	6.0 (5.0, 6.0)	0.00
I feel competent in my ability to develop a patient care plan collaboratively with [interprofessional partner].	4.0 (4.0, 5.0)	5.0 (5.0, 6.0)	0.00	4.0 (3.0, 4.0)	5.5 (5.0, 6.0)	0.00	4.0 (3.2, 5.0)	5.0 (5.0, 6.0)	0.00
I understand how the team approach improves quality of care.	6.0 (5.0, 6.0)	6.0 (5.2, 6.0)	0.00	5.5 (4.0, 6.0)	6.0 (6.0, 6.0)	0.00	6.0 (6.0, 6.0)	6.0 (6.0, 6.0)	0.02

1.0 indicates strongly disagree, 2.0 indicates moderately disagree, 3.0 indicates somewhat disagree, 4.0 indicates somewhat agree, 5.0 indicates moderately agree, 6.0 indicates strongly agree.
Q1 refers to 25th percentile, and q3 refers to 75th percentile.

THE IMPACT OF TELEHEALTH ON RESIDENT LEARNING: ARE WE DOING ENOUGH TO TEACH WITH THIS NEW PARADIGM?

Claire Gibson, MD, University of California (San Francisco), San Francisco, CA, Honora Burnett, MD, Meredith Laguna, MD, Cherise Masunaga, BA, Meg McNamara, MD, Emily Roth, MD, University of California (San Francisco), San Francisco, CA

BACKGROUND: The COVID-19 pandemic brought a quick scale-up of ambulatory pediatric telehealth services to maintain patient access to care, while decreasing COVID community spread. However, there is very little data on the overall impact of the telemedicine modality on resident goals for training and autonomy. OBJECTIVE: Determine UCSF residents' perceptions of the impact of telehealth practice on their ambulatory care learning. METHODS: 24 Residents rotating in ambulatory care in early months of the pandemic (July 29-Sept 29 2020) completed a nine question qualitative and quantitative Qualtrics survey to identify aspects of their in-person and remote training experiences. We used descriptive statistics to analyze perceptions of impact on learning goals. We also collected qualitative feedback, and established early themes. RESULTS: Residents were asked to what degree telehealth has impacted their ability to achieve their learning goals on this rotation. Results spanned from 'it improved the rotation' (n=3) to 'no impact' (n=6) to 'somewhat negative impact' (n=12),' to 'very negative' (n=3). We also asked when doing video visits are you 'mostly observing' (n=13), 'doing' (n=4), or 'both observing and doing' (n=13) the visit. Early qualitative themes included: enthusiasm for resident-led telehealth ambulatory visits (rather than preceptor-led), dissatisfaction with telehealth 'shadowing' experiences, and the educational nature of telehealth observation in areas where the specialty was less familiar. Residents suggested novel approaches to using telehealth techniques. CONCLUSIONS: Our preliminary survey suggests in the ambulatory setting, residents report some negative impact of telehealth on their learning goals, including observing more than conducting visits. This survey helped identify which rotations needed more telehealth resident autonomy and we were able to offer feedback and strategies for such. Faculty also shared the data with the residents to encourage further conversations about telehealth impact on education in continuity clinics. In addition, they created a PowerPoint to share strategies for best telehealth practices with residents. Moving forward, we recommend further assessment of the impact of telehealth on resident ambulatory training and the development of telehealth training strategies for both residents and faculty to help encourage resident autonomy and learning. We believe telehealth is here to stay, and exploration is urgently needed to empower resident learning and provision of care.

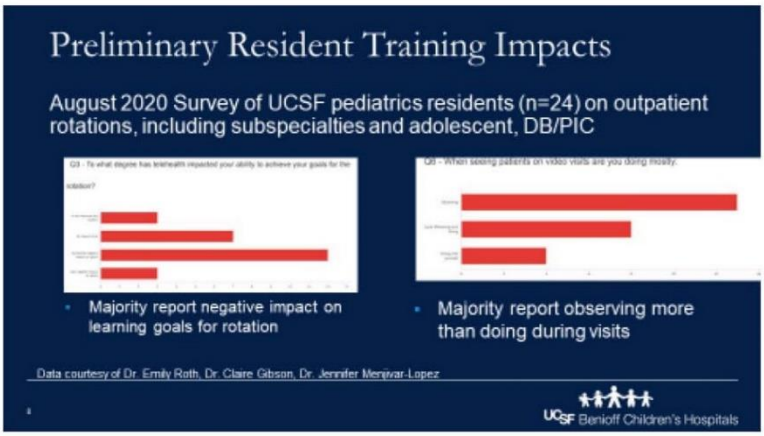


Figure 1: Preliminary Resident Training Impacts

USING THE THINK ALOUD METHOD TO EXAMINE FACULTY DECISION-MAKING IN A CLINICAL COMPETENCY COMMITTEE

Sara M. Multerer, Emily Noonan, PhD, Laura Weingartner, PhD, Tara McKinley, PhD, University of Louisville, Louisville, KY

Introduction: Clinical Competency Committees(CCC) are a cornerstone of residency program administration. Guidance has been published regarding the appropriate development, make-up, and structure of CCCs. However, additional study of decision-making processes of individual faculty CCC

members and how these processes inform group decisions would better inform CCC portfolio content, assessment methods, and member training. The primary aim of this study was to better understand the mental processes that faculty use during CCC decision-making and how they weigh different performance factors. Methods: Faculty participants (n=10) reviewed standard resident portfolios in the presence of a qualitative researcher using Think Aloud Methodology, where the participant was instructed to verbalize all thoughts, ideas, and decisions while reviewing the information. This was followed by a brief semi-structured interview. Both sessions were recorded and transcribed. We performed thematic analysis on session transcriptions with three independent coders using an initial framework established by Pool and colleagues. Results: We observed that faculty use a similar process for making CCC portfolio rating decisions: general review of portfolio data, formation of an initial anchoring impression, review of milestone language to search for confirmation of or incongruities with the initial impression, and making final milestone judgment. Despite using a similar process in making decisions, faculty weighed portfolio information differently: some weighed quantitative numeric data heavily, others relied heavily on written comments, and some drew on personal experience outside of the provided portfolio information. Faculty often sought confirmation of their initial impression more than seeking incongruities. We found that faculty often focused on the residents level of training over portfolio information when anchoring milestone scores. Finally, faculty also expressed concern with giving residents a perceived low rating and often expressed a desire to please and have their scores fit inwith other raters or program director expectations. Discussion: Our findings indicate that faculty have expectations about resident performance that are grounded to their post-graduate year which impacts final milestone ratings. This struggle to separate resident chronology from their performance is inconsistent with the aims of competency-based training.

WHAT PROCEDURAL SKILLS ARE PRACTICED BY PEDIATRICIANS IN NEW MEXICO?

Christal P. Chow, MD, Grace McCauley, Deirdre A. Hill, PhD, Hengameh Raissey, MD, E. Anne Greene, MD, University of New Mexico, Albuquerque, NM

Background By the end of residency, ACGME requires pediatric residents to be competent in 13 clinical procedures identified as essential for general pediatric practice. However, the procedures performed vary and are dependent on multiple factors - location, patient population, practice type, etc. There are few studies available that evaluate the procedural skills used in clinical pediatric practice today, and no studies have evaluated the procedural skills of pediatricians who practice in a primarily rural/frontier state, such as New Mexico. **Objective** To determine the common procedural skills utilized by pediatricians practicing in New Mexico, specifically among rural and Indian Health Service (IHS) providers. **Methods** A structured survey was developed and distributed via the New Mexico Pediatric Society e-mail list serve and 2 pediatric provider groups working at rural IHS locations. Descriptive statistics were used to profile participants and describe survey responses. Chi-square tests were used to evaluate differences by urban setting or government practice type. Fisher's exact test was employed to further assess differences if cell sizes were less than five. All p-values were two sided with alpha=.05 **Results** The majority of pediatricians performed each of the 13 recommended procedures less than 11x per year. 32 of 51 respondents submitted free-text responses recommending procedural competence with tracheostomy changes, gastrostomy tube changes/cares, ultrasound-guided procedures, and circumcision. These skills were echoed by both rural and IHS pediatric providers, whom also emphasized competence in neonatal based procedures. **Conclusion** The majority of pediatricians practicing in New Mexico rarely perform the ACGME Required clinical procedures and recommended competence in different clinical procedures.

X+Y SCHEDULING INCREASES INDIVIDUALIZED CAREER DEVELOPMENT OPPORTUNITIES IN A PEDIATRIC RESIDENCY PROGRAM

Rachel T. Zipursky, MD, Erin H. Sieke, MD, MS, Gia Yannekis, MD, Helen M. Stanley, MD, Michelle Shankar, MD, Gayathri Prabhakar, MD, Stephanie Wanamaker, MD, Colin Crilly, MD, Brittany Van Remortel, MD, MPH, Hannah R. Ford, MD, Christopher Teng, MD, Elizabeth Kuhn, MD, Joshua Kurtz, MD, Brittany Guttadauria, MD, Christina Rojas, MD, Annie L. Gula, MD, Brooks Lanham, MD, MBA, Jay Mehta, MD, MS, MSEd, Jeanine Ronan, MD, MS, MSEd, Children's Hospital of Philadelphia, Philadelphia, PA

Background: Traditional residency block scheduling provides limited opportunities for longitudinal career development, such as individualized clinical electives, independent research, and mentorship. Our program transitioned to an X+Y scheduling model, consisting of 6 weeks of inpatient, ED, and elective blocks (X) followed by 2 weeks of primary care and elective experiences (Y). There is scarce literature examining the impact of X+Y scheduling on resident career development.
Objective: To assess the impact of X+Y scheduling on individualized career development in the largest pediatric residency program to date to transition to this scheduling model. Methods: Residents enrolled in our freestanding quaternary care center's training program completed a baseline survey at the time of curricular transition and a follow up survey after the completion of two X+Y cycles (16 weeks). Quantitative data were analyzed using univariate statistical techniques and qualitative data were coded and organized using thematic analysis.
Results: Baseline survey response rate was 53% (85/160 eligible residents) and follow up survey response rate was 56% (92/165 eligible residents). Based on the 2020-2021 academic year, baseline respondents were 33% PL2, 42% PL3, and 25% recent graduates. Follow up survey respondents were 38% PL1, 29% PL2, and 33% PL3+. Compared to baseline, more residents reported having adequate time for career development opportunities (82% vs. 52%, p<0.01), pursuit of personal interest projects (79% vs. 40%, p<0.01), and longitudinal mentoring relationships (84% vs. 52%, p<0.01). Qualitative responses revealed appreciation for protected research time, non-clinical career exploration, and perceived increased autonomy as learners since transitioning to X+Y scheduling (Figure 1).
Conclusion: Residents reported increased opportunities for career development, individualized mentorship, and pursuit of advocacy, research, and medical education projects following transition to X+Y scheduling. Future research should target whether X+Y impacts long-term career development and academic pursuits.

Figure 1: Qualitative resident comments about career development and learning after transitioning to X+Y scheduling