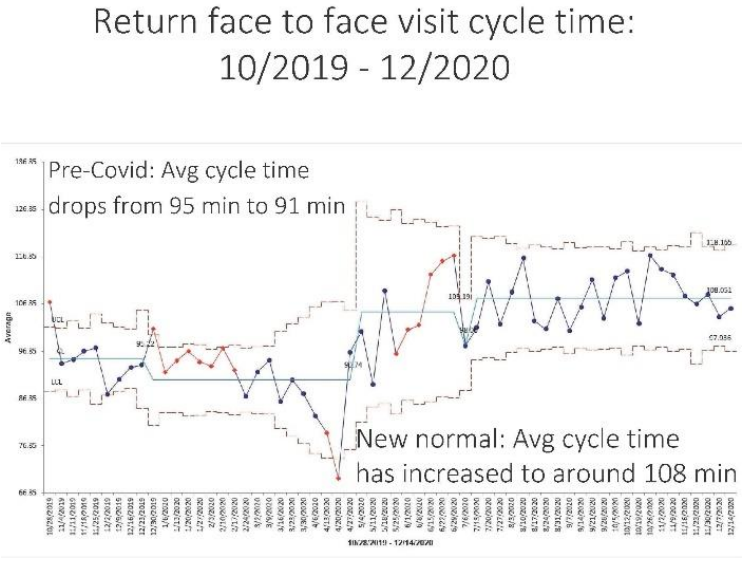
ELS Top of Mind Sessions

Wednesday March 24, 2:40 - 4:10PM Eastern

Top of Mind Sessions 1: The Impact of COVID-19 on Clinical Practice

A RESIDENT QI PROJECT TO IMPROVE CLINIC CYCLE TIMES DURING THE COVID-19 PANDEMIC
Ellene Sandoval, MD, Christy Syriac, MD, Eric Fein, MD, Los Angeles County-Harbor UCLA Medical Center, Torrance, CA

Background The length of clinic visits (cycle time) reflects on the efficiency, timeliness, and patient-centeredness of healthcare. Little is known about cycle time QI projects during the during the COVID-19 pandemic, which required most outpatient clinics to change standard tasks and workflows. In October 2019, our resident continuity clinic, which serves patients on Medicaid in Southern California, reported an average weekly cycle time of 95 minutes. Aim Statement To decrease cycle time by 20% by December 2020



Interventions We hypothesized the primary drivers were: making common resources easily available, standardizing resident work, and reducing pauses in resident workflow. Measures Face-to-face visit cycle time was measured by clinic staff and tracked on a statistical process control chart. We used the Model for Improvement and serial PDSA cycles to determine the effect of our interventions. We also tracked resident workload (patients seen per clinic half day); and continuity of care (total number of unique providers the patient saw in the year preceding the visit). Results Resident-led interventions included a resource binder with handouts (February 2020), a poster with QR codes linking to handouts in each room (June 2020), electronic order sets (July 2020), and job

aids with required clinic tasks taped to computer monitors (August 2020). From October 2019 to November 2020, the number of non-resident clinic staff did not change, but in April-June 2020 staff tasks and workflows were revised to accommodate a shift to more phone visits, triage, and screening. Average cycle time shifted up from April to June 2020 and then settled at 108 minutes after June. From October 2019 through December 2019, resident workload remained unchanged (4.4 patients per half day). Continuity of care did not change: patients had seen an average of 3.1 unique providers in the year preceding. Conclusions and Next Steps Resident interventions did not appear to impact cycle time as much as changes in staff tasks and workflows. Resident QI projects to improve clinic cycle time should consider non-resident staff tasks and workflows as a key intervention target.

CAREGIVER PERSPECTIVES ON COVID-19-RELATED CHANGES TO ROUNDING PRACTICES

Stephanie Harlow, MD, Ross Myers, MD, Case Western Reserve Univ/Univ Hosps Cleveland Med Ctr/Rainbow Babies and Childrens Hospital, Cleveland, OH

Introduction: The COVID-19 pandemic forced hospitals to shift practices to comply with social distancing recommendations. At Rainbow Babies and Childrens Hospital (RBCH), significant changes were made to morning rounds. This study investigated the perceptions of Pediatric interns, senior residents, attendings, and nurses regarding these changes. Methods: The period of interest included the 2019-2020 academic year, with focused comparison of rounds before and after March 15. Specific changes made to rounds at RBCH included: (1) computer-based pre-rounding only; (2) table rounding, rather than bedside; and (3) attending + 1 resident in-person rounding, with physical exams being done by the resident. Retrospective pre/post surveys included Likert-style and free-response questions assessing family-centeredness, communication, and educational aspects of rounds. Results: Surveys were distributed by email to 35 interns, 41 senior residents, 67 attendings, and 86 nurses, with 8 interns (23%), 17 seniors (41%), 28 attendings (42%), and 26 nurses (30%) responding. Forty-three percent of interns described increased comfort with revealing a knowledge gap, and 85.7% noted increased frequency of attendings observing their physical exam skills. Most nurses (79%) described communication with residents to be worse. Family-centeredness was globally described to be worse (interns: 100%, seniors: 71.4%, attendings: 90.9%, nurses: 100%). Conclusion: While aspects of resident education were perceived to improve, communication and family-centeredness were perceived to worsen. These results indicate a need to consider how rounds could be adjusted to improve communication while retaining the positive perceived educational experiences, even in the post-COVID era.

CULTIVATING 'WEBSIDE MANNER' IN THE GME TELEMEDICINE LEARNER

Roya Samuels, MD, Zucker School of Medicine at Hofstra/Northwell at Cohen Children's Medical Center, Great Neck, NY, Stacy McGeechan, MD, Stephen Barone, MD, Erin Allmer, MD, Stephanie Sayres, DO, Joesph Castiglione, MD, Zucker School of Medicine at Hofstra/Northwell at Cohen Children's Medical Center, New Hyde Park, NY

BACKGROUND. The 2020 COVID-19 pandemic forced a rapid surge in the burgeoning health care field of telemedicine. 'Webside manner', the counterpart to 'bedside manner', is a distinct communication skill requiring particular instruction which traditional medical education may not afford. A critical window of instructional opportunity in the use of telemedicine exists at the GME level. METHODS. During the swell of the 2020 COVID-19 pandemic, we at Cohen Children's Medical Center quickly worked to formalize telemedicine training for our incoming Pediatric trainees. Telemedicine education literature was explored and adapted to create a self-directed, five unit online curriculum. Evaluation of our curriculum involved assessment of communication skills of our incoming pediatric interns (n=33). These interns acted as telemedicine providers on a baseline mock virtual encounter and were then randomly assigned to either the

intervention (telemedicine curriculum) or control group (no curriculum). The intervention group was given one week to complete the curriculum. Both groups were then invited for another observed telemedicine encounter. A 'Communication Checklist', a measurement tool created to assess communication skills on a virtual platform, was used to evaluate each intern on eight communication skills during their sessions. RESULTS. Results from independent t-tests demonstrated a statistically significant improvement (P<.001) in total scores of interns who completed our telemedicine curriculum (Delta +3.6; R=.627, p=.007). In comparison, scores of those who did not complete the curriculum (Delta +0.9; P=.074) did not show significant improvement (p=.074). Post-curriculum participants' scores increased significantly in categories of privacy assurance, rapport establishment, demonstration of empathy and partnership-building. DISCUSSION. Our formalized training significantly improved core communication skills in our telemedicine learners. Areas of improvement include: assessing interrater reliability in use of our 'Communication Checklist Tool', as well as testing our tool with a larger cohort of interns for more robust results.

DEPLOYMENT OF PEDIATRIC TRAINEES DURING THE COVID-19 PANDEMIC IN NYC: PERSPECTIVES, REFLECTIONS AND LESSONS LEARNED

Cynthia J. Katz, MD, Emily Hertzberg, MD, Sonali Tatapudy, MD, Lindsey C. Douglas, MD, Diana S. Lee, MD, Stephanie Pan, MS, Karen M. Wilson, MD, Laura N. Hodo, MD, Icahn School of Medicine at Mount Sinai (Kravis Children's), New York, NY

BACKGROUND: In April 2020, the COVID-19 pandemic brought a surge of adult patients to our New York City hospital, creating the need to reassign providers to COVID units. Pediatric trainees were deployed to internal medicine teams; 41% of residents and 25% of fellows were deployed. Objective: To understand the perception and experience of pediatric trainees before and after deployment. METHODS: Pre-deployment surveys were sent to all pediatric trainees (n=140), and post-deployment surveys were sent to deployed trainees (n=29). Surveys assessed demographics, fears, deployment details, and reflections. Descriptive data was reported as frequency and percentage and median and interquartile range where appropriate. Responses were analyzed to assess association between residents and fellows, living situation, and deployment details. For free text responses, authors independently performed an inductive approach to thematic analysis to form codes, and came to consensus on themes. RESULTS: Pre and post deployment survey response rates were 39% and 72%, respectively. Pre-deployment, 74% of trainees felt uncomfortable taking care of adults, while 81% felt uncomfortable post-deployment. The most frequently reported fears were not knowing enough about general medicine (78%), getting sick (64%), working with unfamiliar people (57%), bringing home illness to family (52%) and running out of PPE (52%). Four themes emerged from free text responses: harm to self, harm to loved ones, harm to patients, and unfamiliar culture. Trainees expressed a desire for more predictability and logistical knowledge in preparation for deployment. They reflected positively on camaraderie, teamwork and supportive working environment. CONCLUSION: In anticipation of deployment to adult COVID units pediatric trainees had fears about medical knowledge gaps and personal and family safety, which persisted post deployment. Lack of predictability and logistical knowledge were also concerns. Trainee concerns may be mitigated by more consistent and proactive communication, targeted training, and specific support around safety.

TELEMEDICINE IN PEDIATRIC RESIDENCY TRAINING: A NATIONAL NEEDS ASSESSMENT

Melissa Fitzgerald, MD, Nicole Paradise Black, MD, MEd, Jaclyn Otero, MD, University of Florida, Gainesville, FL, Lindsay A. Thompson, MD, MS, University of Florida, Florida, FL, Dana A. Schinasi, MD, McGaw Medical Center of Northwestern University, Chicago, IL, Pamela Carpenter, MED, University of Utah, Salt Lake City, UT, Avni Bhatt, PhD, University of California (Davis) Health System, Sacramento, CA, Aaron O. Thomas, PhD, Julie S. Thomas, MEd, University of Florida, Gainesville, FL

Background: Prior to the COVID-19 pandemic, telemedicine use was gaining momentum in clinics nationwide and in the wake of COVID-19, numerous institutions rapidly adopted this care modality. As a result, graduate medical education (GME) programs increased trainee utilization of telemedicine. Given this increased use it is imperative that pediatric GME programs provide adequate training in the responsible use of telemedicine. Objective: To describe the current state of telemedicine in residency training in order to inform next steps in developing a national telemedicine training curriculum for pediatric trainees. Methods: We conducted an anonymous cross-sectional survey of pediatric residency program directors from October 2020 to December 2020 through the APPD Research and Scholarship Learning Community on the current state of telemedicine in pediatric residency training. We used descriptive statistics to quantify telemedicine use and settings, both prior to and since the COVID-19 pandemic, as well as to discern provider perceptions of important aspects of and limitations to implementing a telemedicine curriculum. Results: A total of 48 (24%) U.S. pediatric residency programs completed the survey with responses from programs in each of the eight APPD regions. Pre-COVID-19, 4% of respondents utilized telemedicine. Post-COVID-19, 92% used telemedicine with the most common settings for use by trainees in the longitudinal outpatient experience (78%) and subspecialty clinics (85%). Almost 90% of respondents agreed that a formalized telemedicine curriculum is important, but more than 52% reported not yet having a curriculum. Expanding access to care was ranked by 78% of respondents as a "Very Important" or "Important"reason for curriculum implementation. Respondents ranked the following topics as the most important for a telemedicine curriculum: provider-patient interactions, scope of care, scope of exam, appropriate documentation, and ensuring patient confidentiality. Eighteen percent of respondents were unsure/not likely to add a telemedicine curriculum to their program citing barriers such as: time (66%), cost (66%), and logistics (44%). Conclusions: Our needs assessment indicates significant increase in the use of telemedicine by pediatric GME programs with less than half the respondents having a formalized training curriculum. Telemedicine presents a unique opportunity to expand care as a complement to in person care, and most agreed that a curriculum is important to facilitate this expanded access. Therefore, it is imperative that pediatric trainees are educated and trained on the unique challenges and appropriate use of telemedicine. While some programs reported lack of interest in a pediatric telemedicine curriculum, the barriers reported (time, cost, and logistics) can be overcome by a national, open-source pediatric telemedicine curriculum, such as the Telemedicine in Pediatric Training program (TIPT), which will begin its pilot in January 2021.

Wednesday March 24, 2:40 - 4:10PM Eastern

Top of Mind Session 2: Strategies for Maintaining Mental Health and Mitigating Burnout

HOW DO ORGANIZATIONAL AND ENVIRONMENTAL FACTORS SHAPE RESIDENT PERCEPTIONS OF BURNOUT AND WELLNESS DURING THEIR PEDIATRIC INTENSIVE CARE UNIT (PICU) ROTATION? A MULTI-CENTER QUALITATIVE STUDY

Rebecca J. Jacobowitz, MD, New York Presbyterian Hospital (Cornell Campus), New York, NY, Jennifer Shenker, MD, New York University School of Medicine, Megan Toal, MD, New York Presbyterian Hospital (Cornell Campus), Laura Schroeder, MD, New York University School of Medicine, Erika Abramson, MD, New York Presbyterian Hospital (Cornell Campus), NY, NY

Background: Burnout and compassion fatigue is known to affect physicians and nurses working in the critical care setting, with some of the highest rates amongst those in pediatric critical care. Both can negatively impact provider mental health and patient care outcomes. Identifying modifiable environmental factors contributing to burnout, rather than individual provider characteristics, is emerging as a strategy to

Table: Themes

Theme	Examples
1. Fostering a 'culture of education' by emphasizing patient-based teaching and resident autonomy in decision-making while minimizing tasks that pull residents away from the bedside	"I just really love the fact that the PICU dedicates time specific to teaching but then, also does teaching on the fly during rounds. And it…doesn't necessarily have to be an hour or two [long] lecture but teaching can be very quick tidbits that are just done on rounds or in the moment or on the fly." "Anything that is very task-oriented and will take some considerable time, I feel can be a detractor to the PICU experience...I've been frustrated about having to transport a patient to a procedure. And of course, a medical provider has to be at the bedside. But then, they're missing out on other things that could be happening in the unit."
2. Recognition of the resident as a part of the PICU team including by providing dedicated work space, resident-focused debriefings following patient death and limiting patient load to maintain safety (ideally ~6 patients per resident)	"We don't really have a call room and it's on a different floor than the resident lounge, so most people are not comfortable nor really supposed to probably leave the unit. But we really don't have a place to relax, so that's kind of I think overwhelming for people." "Sometimes I feel like the one thing that I'm unhappy about is how brave-faced my attendings are. Or maybe – who knows – like how jaded my attendings are when something like this is happening, we know a kid's going to die. I feel like they just kind of take it as a fact and you know, we talk about it in a very scientific way…But then when I go through (resident) meetings…where we openly are talking about feelings and people dying, I feel like it's helpful and it should be the norm."
3. Facilitating relationships between residents and regular unit-staff, enforcing residents as 'first call' for patients	"I felt all the members of the team work so closely together and because you're just there in the space for your whole shift, you're constantly communicating with the bedside nurse, and the RT, and the perfusionists. And I think it's hard, initially, as a resident …every month, there's a new set of residents and some of them have never been there and don't know what they're doing. And I think it takes a little time to be trusted as part of that team." "The nurses should also try to make an effort to come to us first as opposed to the fellows because if the fellows are there we definitely fall back on them."
4. Helping residents find meaning by depth of involvement with patients and families	"Actively encourage residents to participate and be part of these discussions that happen behind closed doors... I think that sets the tone for the patient's family as well that, you know, we're just not order monkeys, or sitting around. But we are actively trying to figure out [things] with you as part of the medical care team"."

mitigate burnout and compassion fatigue in the critical care environment. While all pediatrics residents must rotate in the pediatric intensive care unit (PICU), it is not known how the rotation should be structured from the perspective of optimizing resident education and to minimize the risk of burnout syndrome. Objective: To identify modifiable factors related to resident perceptions of burnout and wellness during the PICU rotation. Design/Methods: We conducted semi-structured interviews of 28 pediatrics residents from 9 different residency programs in the New York and New Jersey region. We used constant comparison analysis to derive themes from interviews until achieving thematic saturation. Results: The residents who were interviewed represented a variety of program sizes and post-residency career interests. We identified 4 themes representing strategies to reduce resident perceptions of burnout and improve perception of wellness and education (Table). These themes included: 1) Fostering a culture of education by emphasizing patient-based teaching and resident autonomy in decision-making while minimizing tasks that pull residents away from the bedside; 2) Recognition of the resident as a part of the PICU team by providing dedicated work space, resident-focused debriefings following patient death and limiting patient load to maintain safety (ideally ~6 patients per resident); 3) Facilitating relationships between residents and regular unit-staff, enforcing residents as first callfor patients; and 4) Helping residents find meaning through their inclusion in family discussions and interactions. Conclusion: Attention to the resident experience in the PICU is important given the risks of burnout syndrome in worsening resident mental health and on patient outcomes. This study highlights strategies identified by residents with varying career interests that can be used by pediatric educators to best support pediatrics residents during the PICU rotation.

IMPACT OF NARRATIVE MEDICINE CURRICULUM ON BURNOUT IN PEDIATRIC CRITICAL CARE TRAINEES

Jessica C. Becker, MD, Mindy Dickerman, MD, Nemours Children's Hospital Program, Wilmington, DE

Introduction/hypothesis: Intensive care units have staff burnout levels reported to be as high as 47%. A recent study demonstrated high levels of burnout in pediatric intensive care unit (PICU) trainees. The practice of narrative medicine is one potential intervention to mitigate burnout. Narrative medicine could help medical trainees foster empathy and resilience, and renew compassion. While many narrative programs exist in medical training, there are no studies describing a narrative curriculum for PICU fellows.

There are also few studies evaluating the effect of such programs on burnout. We hypothesized that a narrative medicine program is feasible to incorporate into the curriculum of a PICU fellowship, and that it will improve validated burnout metrics in ICU trainees. Methods: The primary fellow investigator developed a literary curriculum for all of our PICU fellows (total of eight fellows). Each fellow completed baseline burnout evaluations, the abbreviated Maslach Burnout Inventory (aMBI) and the Professional Quality of Life Scale version 5 (ProQOL5). Each month, participants read a short narrative with group discussion facilitated by the primary fellow investigator. Fellows provided qualitative evaluation at the end of each session. Validated burnout scores and curriculum feedback were collected at the end of the study. Results: Narrative medicine was a feasible addition to the fellowship curriculum, with 87.5% reporting they enjoyed the sessions. When asked if these sessions influenced their capacity to respond to peers, 62.5% responded favorably. Only 37.5% perceived that these sessions helped them respond to patients. Interestingly, qualitative feedback suggested sessions were more enjoyable and more appreciated after the start of the Covid-19 pandemic. aMBI average Emotional Exhaustion scores decreased, from 8 to 5.75 (p=0.001) and Depersonalization scores also decreased. Personal Accomplishment and Satisfaction scores increased. In addition, ProQOL Burnout and Secondary Trauma scores decreased. Compassion scores were unchanged. Conclusions: A narrative medicine curriculum is feasible and accepted within the educational structure of a PICU fellowship program. Burnout metrics improved after participation in the narrative medicine sessions. Further evaluation with a larger sample size is warranted.

	Time 1	Time 2	p value	Difference (Time 2-Time 1)
Depersonalization			0.14	
Mean (SD)	4.63 (3.54)	2.88 (3.09)		-1.75 (2.49)
Median (Range)	3.50 [0.00, 12.0]	2.50 [0.00, 8.00]		-1.50 [-5.00, 1.00]
Emotional Exhaustion			0.01	
Mean (SD)	8.00 (4.41)	5.75 (3.85)		-2.25 (1.39)
Median (Range)	8.00 [1.00, 15.0]	5.00 [0.00, 12.0]		-2.00 [-5.00, -1.00]
Personal Accomplishment			0.28	
Mean (SD)	11.5 (4.63)	12.9 (4.79)		1.38 (2.67)
Median (Range)	10.5 [6.00, 17.0]	14.5 [6.00, 18.0]		0.500 [-1.00, 6.00]
Satisfaction			0.43	
Mean (SD)	13.3 (3.96)	13.8 (4.20)		0.500 (1.51)
Median (Range)	13.0 [7.00, 18.0]	15.0 [7.00, 18.0]		1.00 [-2.00, 3.00]

INVESTIGATING DRIVERS OF BURNOUT AMONG PEDIATRIC FELLOWSHIP TRAINEES

Colleen E. Bennett, MD, MSHP, Marissa J. Kilberg, MD, MSEd, Dorene Balmer, PhD, Jay Mehta, MD, MSEd, Anna Weiss, MD, MSEd, Children's Hospital of Philadelphia, Philadelphia, PA

Background/Objective: Factors contributing to burnout among pediatric fellows are poorly characterized; consequently, how to address their burnout is not well-understood. Based on pilot data from our institution demonstrating 50% of pediatric subspecialty fellows meet the threshold for burnout, we sought to explore drivers of burnout and wellness among fellows using qualitative methodology. We also sought to understand their perceptions of the impact of COVID-19 on their wellness. Methods: We conducted focus groups with a convenience sample of pediatric fellows at our freestanding tertiary-care children's hospital. We facilitated focus groups using a semi-structured interview guide. Focus groups were recorded, transcribed, and de-identified. Using thematic analysis principles, we inductively derived codes, applied codes to data segments, and iteratively scrutinized coded data to identify emerging themes emphasizing protective factors for wellness, and avoidable and unavoidable drivers of burnout based on the study's

conceptual framework. Results: We conducted 9 focus groups with 43 fellows representing 24 fellowship programs. Fellows identified avoidable drivers of burnout: administrative burden, workforce-workload misalignment, lack of transparent expectations, technology burden, and scheduling challenges. Unavoidable drivers included: work-life conflict and inherent demands of the medical profession. Fellows noted factors protective of wellness: strong interpersonal/interprofessional relationships; program support/responsiveness; and the ability to find meaning in work. Regarding COVID-19, fellows reported feeling supported by their programs, but described feelings of anxiety and increased work-life conflict. Conclusions: Our study identified avoidable and unavoidable drivers of burnout among pediatric fellows, providing valuable insight into programmatic and institutional changes that may ameliorate burnout. Consistent fellow input and feedback in burnout prevention strategies are critical and should be actively solicited. Our study also informs how programs may support trainees in extreme circumstances like COVID-19.

THE PRIVATE ZOOM ROOM: A VIRTUAL OSCE ADDRESSING ADOLESCENT MENTAL HEALTH

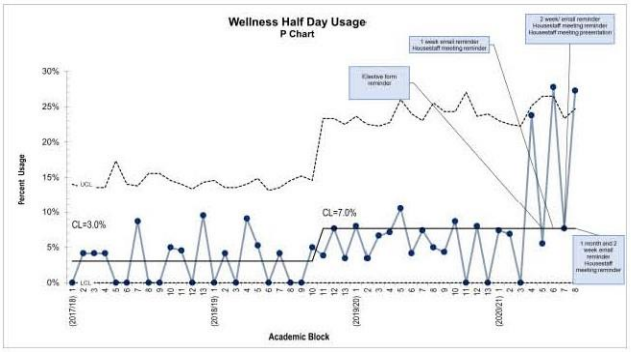
Jonathan Lebowitz, MD, Purnahamsi Desai, MD, Meaghan McGrath, Chanelle Coble-Sadaphal, MD, Ron-Li Liaw, MD, Sondra Zabar, MD, Rachel Ramsey, Heather Howell, MD, New York University School of Medicine, New York, NY

Background: With the COVID-19 pandemic we have seen a rise in adolescent mental health issues presenting to outpatient settings. It is also clear that virtual visits will be part of pediatric healthcare in a way that was not anticipated pre-pandemic. We developed a virtual Objective Structured Clinical Exam (OSCE) to train residents in recognition and management of adolescent mental health complaints in a virtual encounter. Objective: To evaluate pediatric residents abilities to perform confidential adolescent visits virtually and assess the need for future educational content. Methods: We designed an OSCE in which a standardized patient (SP), playing an adolescent, presents to a virtual visit with non-specific complaints. History and clues during the encounter reveal stress/anxiety as the etiology of the symptoms due to financial insecurity provoked by the pandemic. Deploying a patient and family faculty program developed at our institution, the residents received individual feedback after the encounter from the SP, an expert clinician and Family Faculty (FF), adolescent patients and parents of pediatric patients cared for at our children's hospital. The SP and FF were trained in checklist evaluation of the learners. Competencies were rated as not done, partly done or well done with well done indicating mastery. Residents also participated in a large group debrief featuring content experts and FF. Results: 89% (51/57) of our program’s residents participated. Few residents met mastery, as evaluated by the SP, in the following competencies: ensured privacy and discussed confidentiality (33%), pacing of the encounter (49%), discussed coping mechanisms (12%). A majority of residents met mastery, as evaluated by the SP, in important competencies including: demonstrated acceptance and lack of judgement (96%), honestly and transparently shared information (90%). Conclusion: There are several areas for improvement in communication and rapport building. This suggests, as we hypothesized, the residents have minimal experience with virtual encounters and would benefit from additional education on this timely topic.

WORTH A POUND OF CURE: RESIDENT WELLNESS HALF-DAYS AS AN "OUNCE OF PREVENTION" TO PROMOTE RESIDENT WELLNESS AND PREVENTIVE CARE

Melissa Chiu, MD, Paula Soung, MD, Joseph Bartoletti, MD, Laura Goeser, DO, Joana Dimo, DO, Victoria DeVere, DO, Michael Weisgerber, MD, Medical College of Wisconsin Affiliated Hospitals, Wauwatosa, WI

Background The Medical College of Wisconsin pediatric residency wellness program focuses on multiple domains including preventive care. We created wellness half-days (WHD) in 2017 to promote attendance of preventive care visits. Initially these were infrequently utilized. Aim Statement We sought to increase the use of eligible WHD to 35% by the end of the 2020-2021 academic year and up to 75% use by the end of the 2021-2022 academic year. Interventions PDSA cycles were conducted with interventions including reminders, increased awareness, and standardized scheduling process. WHD usage was tracked each block over 4 academic years between 2017-2021 using a p-chart. Measures The model for improvement was used to evaluate the impact of interventions aimed at increasing usage of WHD to attend preventive care visits among our residents. An initial needs assessment revealed key barriers to WHD usage included a) lack of awareness of upcoming WHD-eligible blocks and b) insufficient time to successfully schedule a preventive visit. Our primary outcome measure was the percentage of WHD used per eligible block. Our process measure was the percentage of residents who took at least one WHD per year. Our balancing measure was the number of schedule changes made within 2 weeks of the start of a block. Results



Baseline WHD usage was 3% with an increase in use of 7% prior to current interventions. Special cause improvement following interventions was demonstrated with >27% WHD usage exceeding upper control limits (Figure 1). The percent of residents taking at least one WHD increased from 7% year one to 20% in year 4. There was no change in frequency of schedule changes within 2 weeks of the start of a block. Conclusions and Next Steps Resident preventive health wellness half-day use increased after instituting reminders on elective request forms, emails prior to the start of a rotation, and announcements at housestaff meetings. Future interventions may further increase advance notice to facilitate visit planning.

Thursday March 25, 2:40 - 4:10PM Eastern

Top of Mind Session 3: The Impact of COVID-19 on Training

ADAPTATION: FELLOWSHIP TRAINING OVER THE COURSE OF THE COVID-19 PANDEMIC

Eleanor A. Sharp, MD, Traci Kazmerski, MD MS, Erika Friehling, MD, Benjamin Miller, MD, Emily Trauernicht, MD, Andrew Nowalk, MD PhD, Arvind Srinath, MD MS, Hiren Muzumdar, MD, UPMC Medical Education, Pittsburgh, PA

BACKGROUND: The COVID-19 pandemic led to a variety of changes to traditional medical education. Fellowship directors (FD) face unique challenges reconciling fellows'need for continued high-quality education with the increased COVID-19 infection risk from direct patient care. This study investigated the adjustments made to fellow education and clinical responsibilities in the era of COVID-19 and whether those adjustments were sustained over the course of the pandemic. METHODS: We surveyed medical and

surgical pediatric FDs at a tertiary-care pediatric hospital from April 16 - April 23, 2020 (initial) and November 23 - December 7, 2020 (follow-up). We asked about changes to inpatient rounds, outpatient clinics, and the use of telemedicine, in addition to assessing perceptions of the role of trainees during the pandemic. We used descriptive statistics to analyze results with $p<0.05$ considered significant. RESULTS: We had 22 and 24 respondents to our initial and follow-up surveys, respectively (response rates of 73% and 80%). At the pandemic onset, statistically significantly fewer fellows were performing inpatient responsibilities (Fig 1A). In April, 79% of FDs with fellows performing bench research stated that fellows were no longer physically entering the lab and were instead working from home; this rate decreased to 22% by December. FD perception of the role of trainees as "essential personnel" did not change significantly from April to December, however, as the pandemic progressed, significantly more FDs felt that it was very or extremely important for trainees to provide direct patient care. Considering the balance of training and risk of infection, by December, FDs were significantly more likely to feel the balance lies towards usual patient care and training despite increased infection risk (Fig 1B). DISCUSSION: Fellowship directors adapted to COVID-19 in a variety of ways. Moving forward, innovative methods to recoup missed clinical experiences, promote scholarly work, and maintain high-quality educational opportunities for fellows will be of paramount importance.

Figure 1A: **Changing Clinical Responsibilities of Fellows during the COVID-19 Pandemic**

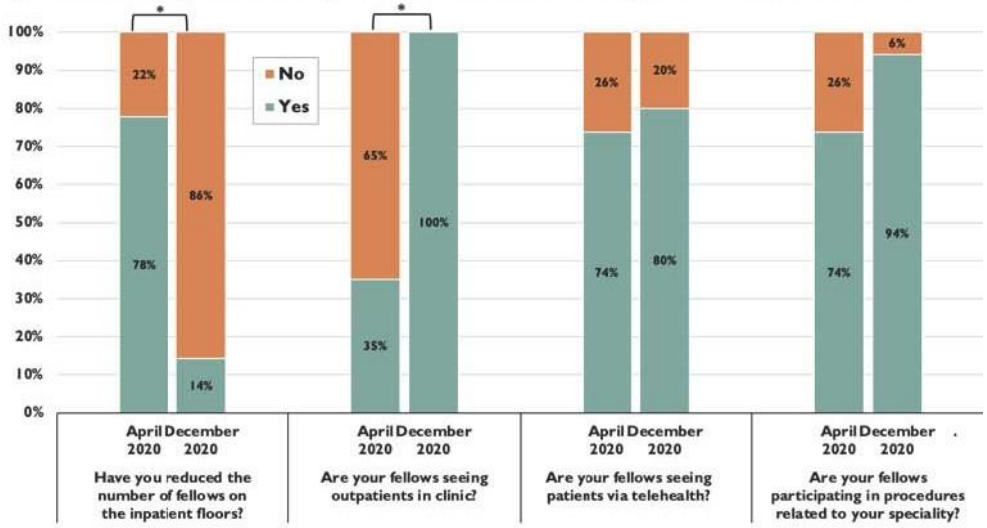
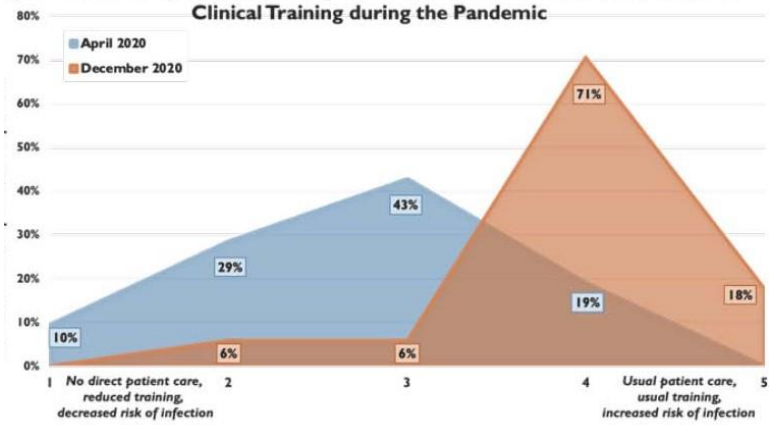


Figure 1B: **Fellowship Director Perception of the Balance of Risk of Infection and Clinical Training during the Pandemic**



BURNOUT IN THE TIME OF COVID: YOU DON'T KNOW UNTIL YOU MEASURE IT!

Linessa Zuniga, MD, MEd, Baylor College of Medicine (Houston), Houston, TX, Abigail Schuh, MD, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI, Patty Seo-Mayer, MD, Inova Fairfax Medical Campus/Inova Children's Hospital, Fairfax, VA, Matt Kapklein, MD, New York Medical College at St. Vincent's Hospital and Medical Center of New York, Valhalla, NY, Rachel Cramton, MD, University of Arizona College of Medicine-Tucson, Tucson, AZ, Kira Sieplinga, MD, Spectrum Health/Michigan State University/Helen DeVos Children's Hospital, Gran Rapids, MI, Ruchi Kaushik, MD, MPH, Baylor College of Medicine (San Antonio), San Antonio, TX, Alan Schwartz, PhD, University of Illinois College of Medicine at Chicago, Chicago, IL, Maneesh Batra, MD, MPH, University of Washington, Seattle, WA, John D. Mahan, MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH

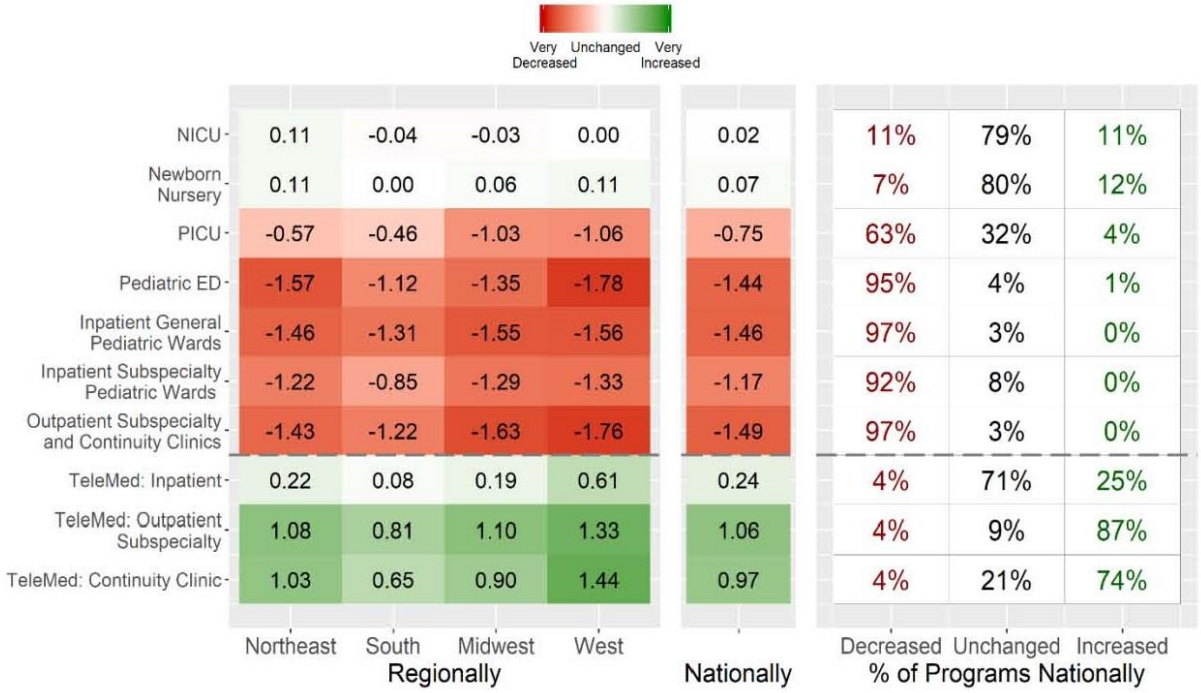
Background: The high prevalence of burnout among health care providers has been well documented. The Pediatric Resident Burnout and Resilience Consortium has sought to describe the epidemiology of burnout in pediatric residents over the last 6 years. Due to the COVID-19 pandemic, residency programs experienced marked changes: low patient volumes, social distancing, virtual care and education, and personal concerns about COVID infections. Considering this, we hypothesized that residents would experience increased rates of burnout. Objectives: This study explored resident burnout during initial stages of the COVID-19 pandemic and its relation to workload, training, and personal life. Methods: An annual, confidential survey has been sent to more than 30 pediatric and med-peds residencies since Spring 2016. For 2020, 7 Likert-scale items were added to explore the impact of COVID-19 on training and personal life. Data was de-identified, collected, and maintained by APPD-LEARN. Results: While participation was lower in 2020 (21 programs) compared with 2019 (46 programs), participating program characteristics were similar in size and regional distribution. Percentage of respondents with burnout in the spring was lower (31%), compared with previous years (40% in 2019, 52% in 2018). However, rates of burnout were significantly and independently higher among residents who reported increased workload (OR=1.4, 95% CI 1.2-1.7) or concerns regarding effect of the pandemic on family (OR= 1.3, 95% CI 1.1-1.5) or training (OR=1.2, 95% CI 1.0-1.4). Conclusions: Unexpectedly, cumulative burnout rates within reporting programs were lower than in previous years, but burnout was associated with COVID-related increases in workload and concerns of effects on training and family. These associations with increased burnout rates are not surprising, while the reasons for lower cumulative percentages of burnout during this stressful time are unclear. This phenomenon deserves further exploration, and it will be interesting to compare the impact of the ongoing pandemic on pediatric residents assessed again in Spring 2021.

EARLY IMPACT OF THE COVID-19 PANDEMIC ON PEDIATRIC RESIDENCY PROGRAMS

Monique Naifeh, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Michelle D. Stevenson, MD, MS, University of Louisville, Louisville, KY, Erika L. Abramson, MD, MSc, New York Presbyterian Hospital (Cornell Campus), New York, NY, Christopher E. Aston, PhD, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Su-Ting T. Li, MD, MPH, University of California (Davis) Health System, Davis, CA

Background and Objectives: Pediatric residency programs must ensure residents are competent for independent practice upon graduation. The COVID-19 pandemic has disrupted pediatric care and training. Our objectives were to understand the COVID-19 pandemic's effects on pediatric residency training and identify ways to mitigate them. Methods: We conducted a national survey of pediatric residency program directors early in the COVID-19 pandemic. Data analysis included descriptive statistics, chi-square and Wilcox rank sum tests. Multivariable modeling identified factors associated with resident redeployment. Results: 110/199 programs responded (55%). More than 95% of programs reported significantly decreased in-person clinical care in all areas except NICU and newborn nursery. 87% of programs reported increased use of telemedicine and 27% reported redeployment of residents to adult care. Redeployment more commonly occurred in community-based programs and where COVID-19 burden was higher. Almost all programs (95%) reported some residents missed work due to the pandemic and nearly 50% of PDs reported significant concerns about access to personal protective equipment (PPE). Future employment was negatively impacted in 28% of programs, more commonly in the west region. Conclusion: The COVID-19 pandemic led to decreased in-person pediatric care, increased telemedicine use, redeployment of pediatric residents to adult care, and resident missed work. As the COVID-19 pandemic evolves, programs must carefully consider how to protect resident health and ensure their clinical competence. Ready access to appropriate PPE and COVID-19 vaccination for trainees is critically important to protect resident health. Supplementing resident experiences and altering competency assessments may be necessary to ensure clinical competence.

Effect of COVID-19 Pandemic on Volume of Patients Cared for In-Person and via Telemedicine Across Different Healthcare Settings by Region



*Answer choices were on a 5-point Likert-type scale. Each answer choice was assigned a value: -2 Very decreased, -1 decreased, 0 unchanged, 1 increased, 2 very increased. Programs were sorted by region and the mean score for programs in that region is presented.

THE IMPACT OF PHYSICAL DISTANCING DUE TO CORONAVIRUS DISEASE 2019 (COVID-19) ON RESIDENT CONTINUITY CLINIC

Bruce Leewiwatanakul, MA, DO, Megan Aylor, MD, Oregon Health and Science University, Portland, OR

The impact of physical distancing due to coronavirus disease 2019 (COVID-19) on resident continuity clinic Background: Continuity clinic is a core component of pediatric resident education. Longitudinal preceptorship with faculty can be associated with improved resident and faculty satisfaction, increased opportunities to assess clinical skills development, and may influence primary care career decisions. COVID-19 infection prevention and control recommendations of physical distancing have engendered workspace limitations that may affect resident/faculty longitudinal preceptorship. Objective: To determine whether the implementation of physical distancing has impacted continuity clinic opportunities with residents' longitudinal preceptors. Methods: Reviewed residents' continuity clinic schedules from 2 sites during July-December of 2019 (AY19) and 2020 (AY20), noting the frequencies each resident had continuity clinic with their assigned preceptors (cohort). Site 1 adhered to physical distancing recommendations without affecting the limitations on the number of residents per day whereas Site 2 decreased by 1. The data were analyzed by Welch's and independent t-tests. Results: The mean percentages of residents attending continuity clinic with their assigned cohort during AY19 at Site 1 (n=18) was 81.85% and Site 2 (n=29) was 77.18%. During AY20, Site 1 (n=20) was 79.99% and Site 2 (n=29) was 68.17%. There was no statistically significant difference when comparing Sites 1 and 2 during AY19; however, Site 2 had less frequent attendance of their cohort during AY20 (P<.01). In comparing AY19 to AY20 at each site, there were no statistically significant differences, pre- and post-physical distancing restrictions. Conclusions: In a single institution sample, physical distancing limitations due to COVID-19 has impacted pediatric residents' ability to attend continuity clinic with their cohort. To counter the likely impact to trainees' education,

educational curriculum and workplace logistical planning must account for continued infection prevention and control measures as the pandemic persists.

VIRTUAL SOCIAL MEDIA BASED CURRICULUM IN THE ERA OF COVID

Stephanie C. Sayres, DO, Erin P. Allmer, MD, Joseph A. Castiglione, MD, Stephen R. Barone, MD, Zucker School of Medicine at Hofstra/Northwell at Cohen Children's Medical Center, New Hyde Park, NY

Background: The COVID-19 pandemic has altered the typical curriculum for many residents. At our large (100 resident) pediatric program, schedules have been modified based on census, redeployment, quarantine requirements, and illness. This has required, many times at a moment's notice, the creation of a "pop up" or "virtual curriculum" for residents. The virtual curriculum, designed by the chief residents, incorporates teaching via Instagram and has been utilized most frequently when residents are displaced from their inpatient rotation or need to quarantine. We have previously reported our experience with the use of Instagram as a novel educational pedagogy. Objective: To create an educationally fulfilling virtual alternative when residents are reassigned from the traditional curriculum. Methods: When residents are assigned to the "virtual curriculum" they are required to create Instagram stories which help solidify their own knowledge as well as educate their colleagues. In addition to the Instagram stories, residents are required to complete PREP ® self-assessment questions on Pedialink (recommended 20 questions per day) and contribute COVID-based educational material to the residency weekly newsletter. Results: To date, 14 Instagram stories have been created and posted by seven residents who took part in the curriculum. An average of 72 residents viewed each story. Six of the seven residents responded to a brief survey; 100% (6/6) of responses indicated that completing the PREP questions contributed to their education and 83.3% (5/6) of responses indicated that posting stories to the Instagram enhanced their knowledge. Conclusion: The positive feedback from residents on the virtual elective indicates that this mode of education is a suitable educational experience for residents who are unable to work clinically due to census or the need to quarantine.

Thursday March 25, 2:40 - 4:10PM Eastern

Top of Mind Session 4: The Impact of Biases and Strategies to Combat Them

CAN BEHAVIOR-BASED INTERVIEWS REDUCE BIAS IN FELLOW APPLICANT EVALUATIONS?

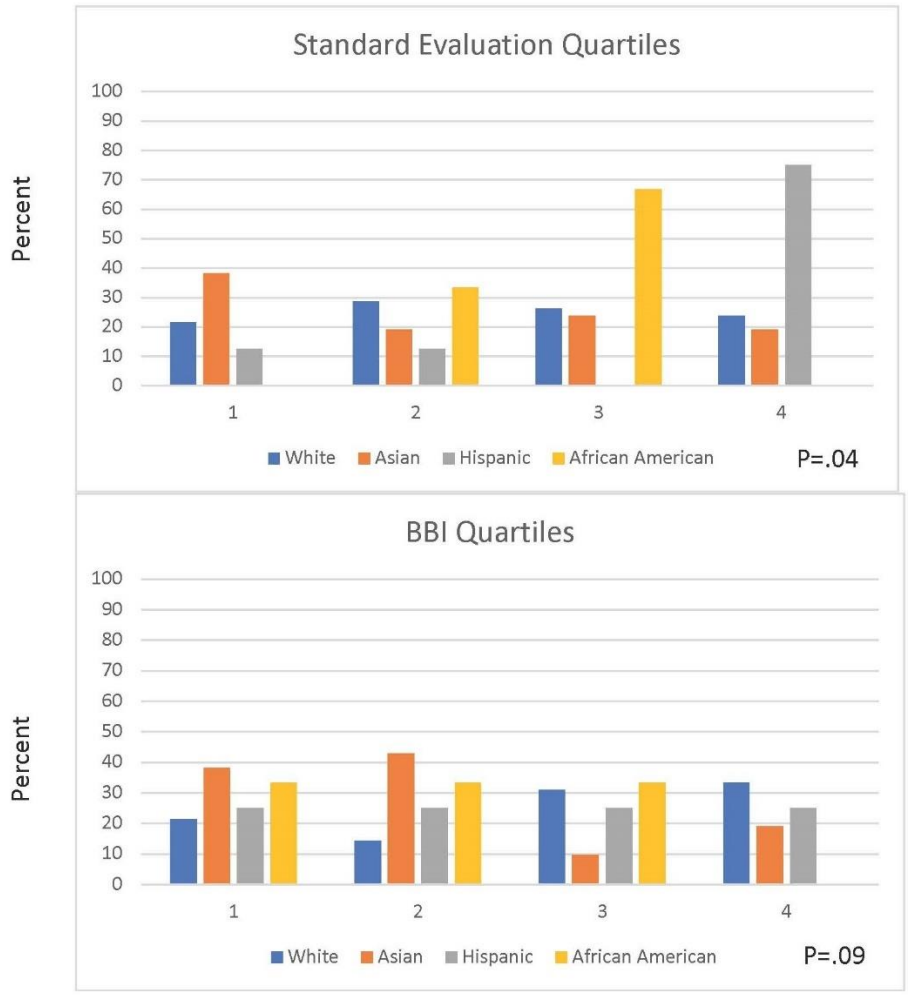
Melissa L. Langhan, MD, MHS, Michael Goldman, MD, Gunjan Tiyyagura, MD, MHS, Yale-New Haven Medical Center, New Haven, CT

Background: Fellowship selection committees use data from written applications and interviews to evaluate applicants and construct rank lists. Components of the application such as test scores and letters of recommendation may bias against applicants based on race or gender. Behavior-based interviews (BBIs) rely on structured questions to assess an applicants past experiences as a way to predict future behavior. BBIs assess core traits such as initiative, leadership, and integrity that may not emerge from typical sources. Objective: To assess differences in applicant evaluation scores using a standardized tool vs. a BBI specific tool by race and gender. Methods: BBI questions and scoring rubrics were implemented at one fellowship program over 2 seasons (2019 & 2020). Four faculty were trained in the use and evaluation of BBIs. Each BBI interviewer was assigned 4 questions. All other faculty (N=9) performed unstructured interviews. Applicants were interviewed by 6 faculty who used either BBI or unstructured interviews. All faculty scored applicants with a standard tool composed of 7 categories derived from the written application and interview. BBI faculty also scored applicants using a rubric specific to their questions. Applicants self-identified gender and race was abstracted from written documents. Average scores from each tool were calculated and used to rank applicants into quartiles. Results: 75 applicants were interviewed (Table 1). There were no significant differences in average score or quartile by gender for either tool. In contrast, there were significant differences in standard evaluation scores and quartiles by race (completed by faculty performing BBIs and unstructured interviews, p=.04), but not in the BBI scores (p=.09) (Figure 1). Conclusion: Incorporating BBIs can help reduce racial disparities in the evaluation of fellowship applicants. Despite gender differences previously noted in the literature, there were no significant differences in score by gender using either tool. Revision of evaluation tools should target areas which contribute to racial disparities in applicant assessment.

Table 1. Demographic data for applicants, N=75

Self-Identification Variable	N (%)
Gender	
Female	53 (71)
Male	22 (29)
Race	
White	42 (56)
Asian	21 (28)
Hispanic	8 (11)
African-American	3 (4)

Figure 1. Rank quartiles by self-identified race.



FAMILIARITY, ATTITUDES, AND BEHAVIORS REGARDING ANTIRACISM AMONG PEDIATRIC TRAINEES

Nicholas Szoko, MD, Braveen Ragunanthan, MD, MPH, Ana Radovic, MD, MSc, Orquidia Torres, MD, MS, UPMC Medical Education, Pittsburgh, PA

Background: Black, Latinx, and Native American communities have limited representation in medicine, and the health impact of racism is established. While pediatric organizations have called for antiracist education, few studies have examined familiarity, attitudes, and behaviors regarding antiracism among pediatric trainees. Objective: Prior to introducing an antiracist curriculum, we sought to characterize familiarity, attitudes, and behaviors regarding antiracism among pediatric residents. Design/Methods: Anonymous, cross-sectional surveys were administered to pediatric residents (n=81) at an academic medical center. We assessed reported familiarity with general antiracist concepts (6 items) and concepts related to specific topics: schools (5 items), healthcare (4 items), justice system (4 items), employment (4 items), and community (4 items). We adapted Pieterses (2016) Antiracism Behavior Inventory (21 items) to evaluate antiracist attitudes and behaviors, including individual advocacy (9 items), awareness of racism (7 items), and institutional advocacy (5 items). Fishers exact test/Kruskal-Wallis test were used to compare measures between White and non-White residents and across training years. Results: 79 respondents were included. Mean age was 28.5 years. 63 participants (80%) were female. Most respondents were White (72%). Most

residents were familiar with general antiracist concepts, but fewer reported familiarity with other domains. There were no significant differences in familiarity with antiracist concepts by race or training year. Non-White residents reported more institutional advocacy than White peers (p=0.02). Residents further in training had greater awareness of racism (p<0.01) and reported more institutional advocacy (p=0.049) than PGY-1 residents. No differences were noted in other domains. Conclusion: Many residents are unfamiliar with antiracist concepts important in pediatric care. We note small differences in antiracist attitudes and behaviors by race and training year. Offering an antiracist curriculum to pediatric residents may improve antiracism efforts in pediatric healthcare.

IMPACT OF RACE AND ETHNICITY ON PEDIATRIC RESIDENT CLINICAL PERFORMANCE EVALUATIONS

Elena C. Griego, MD, University of Washington, Sydnee Dismuke, Miranda Bradford, MS, Not Affiliated with Program/Institution listed above, Heather McPhillips, MD, MPH, University of Washington, Seattle, WA

Background: Multiple studies describe gender and racial bias in medical education, but data in pediatrics is lacking. An understanding of potential biases in resident evaluations is essential as they are used to assess resident progress. Methods: Faculty evaluations between July 2017 and June 2019 were collected and coded with respect to faculty and resident gender and resident self-reported ethnicity (underrepresented in medicine (URM) vs. white). Total word count and frequency of words within pre-defined categories were tabulated using the Linguistic Inquiry and Word Count program, a validated text analysis program. Word count, performance scores and dichotomized content variables were summarized using counts, percentages, and median with interquartile range (IQR) for subgroups of resident gender and URM status. Between-group comparisons were analyzed using Chi squared and Wilcoxon rank-sum tests by word category, such as affiliation, reward, communal, and agentic (Table 1). Results: A total of 3,706 evaluations of 165 residents from 297 faculty were included. Overall, evaluations were shorter for female vs. male residents (median word count 38 vs 44, p<0.01) and for non-URM vs. URM residents (39 vs. 44, p=0.04). While median performance scores were similar across resident gender and URM categories (median 4, IQR 4-5 for all), URM residents were less likely to receive a maximum score of 5 than non-URM residents (29% vs. 37%, p<0.01). URM residents were more likely to be described using words related to affiliation (72% vs. 68%, p=0.02) or reward (72% vs 65%, p=0.01). Male residents were more likely to be described using affiliation (72% vs 66%, p<0.01), reward (70% vs 65%, p=0.01) and communal (47% vs 39%, p<0.01) words. Female residents were more likely to be described using agentic words (21% vs 18%, p=0.04). Conclusion: While the impact of the described differences in evaluation data is uncertain, clear differences exist in the evaluations of pediatric residents by gender and URM status. Further study is needed to determine the impact of these differences and to develop strategies to eliminate differences within resident evaluations.

Table 1. Example Word Categories

Affiliation	Reward	Communal	Agentic
Partner	Achieve	Caring	Thorough
Relationship	Confident	Compassionate	Confident
Member	Perfect	Warm	Independent
Collaborate	Syccess	Sensitive	Dedicated

NOVEL CURRICULUM FOR RESIDENTS TO ADDRESS DISCRIMINATION AND MICROAGGRESSIONS IN THE WORKPLACE

Matt Guerrieri, MD, Nadia Hoekstra, MD, Alexis Ball, MD, Paula Dias Maia, MD, Michelle Corrado, MD, MBA, Brandi Freeman, MD, MS, Amy Sass, MD, MPH, University of Colorado, Aurora, CO

BACKGROUND: Issues of diversity and workplace discrimination are common in graduate medical education. Creating a diverse and inclusive workplace requires education that incorporates appreciation of colleagues' experiences of discrimination and skills development for addressing discrimination.
OBJECTIVE: This study aimed to develop, implement and evaluate a peer-led curriculum for pediatric residents that explored personal experiences with privilege and discrimination and developed skills to address microaggressions.
DESIGN/METHODS: Bandura's social cognitive theory conceptual framework was used to develop the curriculum. Learning goals included: 1) explore personal privileges and disadvantages, 2) reflect on life experiences of peers and patients, and 3) practice skills for addressing microaggressions in the workplace. Educational strategies are described in Table 1. The curriculum was implemented during a protected academic half-day. Learning goals were assessed by participant self-reflection, feedback from facilitators and peers during small group exercises and completion of pre/post training surveys. The surveys included open-ended reflection and 7-point Likert scale questions assessing residents' understanding of peer experiences of privilege and microaggressions and skills and intention to address microaggressions.
RESULTS: Of the 81 participating residents, 65 completed the pre-survey (80%), 56 completed the post-survey (69%), and 46 surveys were available for matched pair analysis. Of the 65 who completed the pre-survey, 60% reported experiencing discrimination in their lifetime and 46% reported experiencing discrimination in their work as residents. Additional results are summarized in Table 2. CONCLUSIONS: Nearly half of participants reported facing discrimination in their roles as residents, underscoring the critical need for this curriculum. This curriculum successfully improved residents' understanding of the discrimination faced by peers and patients, increased knowledge of microaggressions and improved skills and intention to address microaggressions in the workplace.

	Table 1. Curriculum Educational Strategies	**Format**
1	Electronic anonymous individualized coded pre-training survey	Individual
2	Communication of learning goals and ground rules	Large group
3	Interactive didactic teaching about 1) privilege, and 2) microaggressions and responding to microaggressions	Large group
4	Randomized, de-identified privilege exercise exploring residents' identities of race, gender, sexuality, ability, religion, socioeconomic status, health, and experiences of hardship	Large group
5	Peer-facilitated skills sessions incorporating role-play of de-identified, real-life cases of peers' experiences with microaggressions and practice using tool kit elements for calling in/out microaggressions as allies	Small group
6	Roleplay debrief	Large and small group
7	Appreciation exercise	Large group
8	Electronic anonymous individualized post-training survey and evaluation	Individual

		Before Training (N=46)	After Training (N=46)	Change (After - Before)	P value
Proportion of residents who agree with the statement:	I have a thorough understanding of the discrimination/ prejudice that my coworkers experience.	48%	83%	35%	<0.001*
	I have a thorough understanding of the discrimination/ prejudice that my patients experience	48%	74%	26%	0.001*
	I am confident that I can define the concept of "privilege"	91%	100%	9%	0.13
	I am confident that I can define the concept of "microaggressions"	83%	98%	15%	0.023*
	I am able to recognize microaggressions as they are happening	74%	100%	26%	0.001*
	I am able to identify strategies to respond to microaggressions	39%	100%	61%	<0.001*
	I have the skills to respond to microaggressions	35%	98%	63%	<0.001*
	I plan to take action when I encounter discriminatory actions such as microaggressions	80%	100%	20%	0.008*
	I would like to make personal changes to my behavior in an effort to create a more inclusive and supportive environment for patients and staff at the institutions where I work.	98%	100%	2%	1.0
	I believe that training in recognizing and responding to microaggressions is important.	96%	96%	0%	N/A

Table 2. Resident responses to survey items before and after completion of a novel curriculum to address privilege, discrimination, and microaggressions; *indicates statistical significance with alpha = 0.05

RESIDENT EXPERIENCES AND ATTITUDES TOWARDS IMPLICIT BIASES AND MICROAGGRESSIONS

Kristen Solomon, MD, Preethi Rajan, MD, Brianna Glover, MD, Roshan George, MD, Dona Buchter, MD, Nancy DeSousa, PhD, MPH, Emory University, Atlanta, GA

Background: Implicit bias training (IBT) should be a critical part of residency curriculum as programs work to recruit and retain a diverse workforce. Its importance is magnified by the ACGMEs commitment to diversity, equity and inclusion (DEI) as well as the recent social unrest in the U.S. Objectives: To evaluate resident attitudes towards implicit biases and microaggressions pre- and post-implementation of focused trainings among 82 Emory pediatrics residents at the PGY-1, PGY-2, and PGY-3 levels. Methods: As part of a pilot longitudinal DEI curriculum, all residents attended two 2-hour workshops, the first on IBT and the second on microaggressions and tools for bystander intervention, which included cases tailored to pediatrics residents experiences. Prior to the first session, residents took pre-selected Harvard Implicit Association Tests and completed a pre-survey which assessed baseline attitudes towards implicit bias. A post-survey was completed after each session. Results: Thirty-six of the 82 residents completed pre- and post- surveys for the IBT session in which 75% felt very or somewhat comfortable with concepts surrounding IBT beforehand which increased to 97% post-session. Forty-six of the 82 residents completed pre- and post- surveys for the microaggression and bystander response session revealing that 72% personally experienced a microaggression, 83% witnessed a microaggression towards a medical team member, and 89% witnessed a microaggression towards a patient at some point in their medical training. Prior to the session, only 9% felt extremely or very well prepared to address witnessed microaggressions which increased to 52% afterwards. Conclusion: The majority of residents have personally experienced microaggressions during their medical training either directly or indirectly, which they felt ill prepared to address, highlighting the need to prioritize DEI curriculum efforts. Our data suggest that these workshops improved understanding of implicit biases, microaggressions and increased comfort with addressing biases in the healthcare setting.

Friday March 26, 2:30 - 4:00PM Eastern

Top of Mind Session 5: Curriculum Innovations in Pediatric GME

CASE-BASED IMMIGRANT & REFUGEE HEALTH ETHICS TRAINING: A PATHWAY TO IMPROVE CARE & ADVOCACY

Cara Harasaki, MD, Abha Athale, DO, Nationwide Children's Hospital/Ohio State University, Columbus, OH, Carmen Cobb, MD, University of California (San Francisco), San Francisco, CA, Ashley Fernandes, MD, Andrew Philip, MD, Jason Benedict, MS, Stephanie Lauden, MD, Nationwide Children's Hospital/Ohio State University, Columbus, OH

Background: Healthcare providers (HP) routinely encounter immigrant and refugee (IR) patients in practice. These populations bring unique cultural beliefs that may influence medical decisions and communication with HPs. We hypothesized that exposing HPs to case-based scenarios and providing them with a theoretical framework to analyze ethical scenarios specific to these populations would improve their ability to treat and communicate with these populations. Objective: Develop, implement and evaluate a case-based IR health ethics curriculum. Methods: Content experts developed and presented a virtual IR health ethics curriculum. This included an introduction to ethical principles, the Four Box Method for evaluating ethical scenarios, and small group case discussions. This curriculum was developed on behalf of the Midwest Consortium of Global Child Health Educators as part of I-PACK (Immigrant Partnership and Advocacy Curricular Kit), available online at sugarprep.org. It was presented at 3 multi-institutional virtual sessions in 2020. We collected anonymous pre and post session surveys. Descriptive statistics were completed and data were analyzed. Results: Participants (n=24) completed both pre and post-session surveys. Demographic information is presented in Table 1. From pre to post-session, participants reported increased knowledge (high understanding) of both the Four Box Method (4.2 vs 54%) and challenges in ethical decisions specific to IR health (4.2 vs 37.5%). Participants reported increased comfort in identifying IR cultural drivers that influence decisions (11 vs 45.8% with high comfort). All (100%) reported acquisition of new skills/knowledge, and 92% (n=22) felt confident applying this to their practice. Discussion: We developed, presented and evaluated a novel, interactive, virtual curriculum to address the need for dedicated training regarding analysis of ethical questions specific to IR populations. Participants reported increases in knowledge and confidence in addressing ethical dilemmas encountered in practice with IR populations, and this curriculum is easily administered virtually.

Table 1. Demographic Information

	Yes %, n=24	No %, n=24
Healthcare Provider	83%	16.7%
Encounter immigrant or refugee families weekly or more	62.5%	37.5%
Had more than 20% patients as immigrants or refugees	45.8%	54.2%
Is an immigrant	12.5%	87.5%
Is a refugee	0	100%

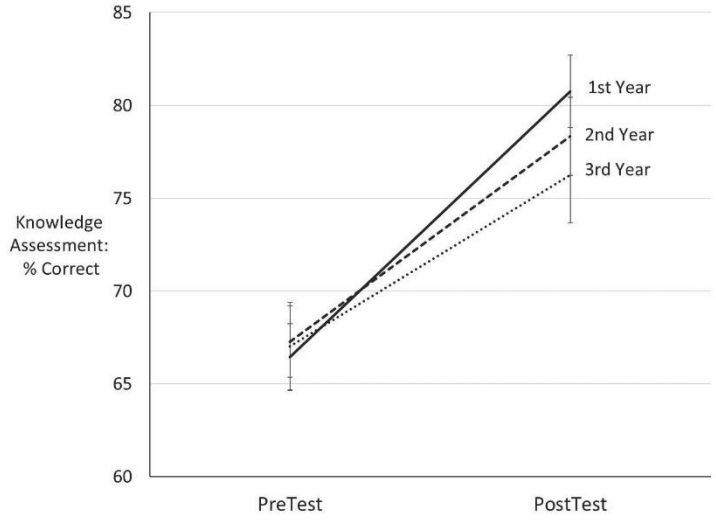
EVALUATION OF A COURSE FOR NEONATAL FELLOWS ON PROVIDING PSYCHOSOCIAL SUPPORT TO NICU FAMILIES

Melissa Scala, MD, Virginia A. Marchman, PhD, Stanford University, LaTrice Dowtin, PhD, Not Affiliated with Program/Institution listed above, Palo Alto, CA, Soudabeh Givrad, MD, Not Affiliated with Program/Institution listed above, New York, NY, Tuan Nguyen, Not Affiliated with Program/Institution listed

above, Alexa Thomson, Courtney Gao, BS, Stanford University, Palo Alto, CA, Keira Sorrells, Not Affiliated with Program/Institution listed above, Jackson, MS, Sue Hall, MD, Not Affiliated with Program/Institution listed above, Ventura, CA

Background and Objective: Parents of Neonatal Intensive Care Unit (NICU) infants experience elevated rates of emotional distress. In July 2019, the Accreditation Council for Graduate Medical Education required all training programs provide mental health education but no standardized program exists. In this study we aimed to evaluate the impact of an online course on fellow knowledge and perceived self-efficacy in supporting the psychosocial wellbeing of NICU families. Methods: Participants were neonatology fellows in 1st-3rd year of training (n=77; 63F, 12 M) enrolled in 15 fellowship programs (1st yr: 41.3%; 2nd yr: 35.1%; 3rd yr: 23.4%). Fellows completed an online course on mental health issues in NICU families. Pre- and post-course assessments measured content knowledge and self-efficacy. Information about prior mental health training and personal NICU experiences were also obtained. Results: As shown in Figure 1, pre-course knowledge did not differ by year of training (1st Yr: 66.4%; 2nd yr: 67%; 3rd yr: 67%). Knowledge scores improved between pre- and post-course assessments by 11%, on average (d=1.2) (66.8% vs. 78.5%), regardless of year of training. Prior mental health training and personal NICU experiences did not moderate these effects. In addition, fellows increased their feelings of comfort in dealing with mental health issues in the NICU (d=1.2) again, regardless of training year, prior training or experiences. Those fellows who gained more knowledge during the training were more likely to have higher efficacy scores at post-test. Conclusions: Knowledge and comfort in dealing with mental health issues in the NICU were positively impacted by participation in an online course. Current fellowship training provides inadequate education on these topics as pre-course knowledge assessments did not change with year of fellow training. Self-efficacy was related to knowledge, suggesting that training not only impacted fellowsknowledge base but also their feelings when engaging with patients in the NICU.

Figure 1. Mean scores (% correct) across four domains of knowledge at pre-test and after receiving online training. Effects showed no group differences at pre-test, as well as significant increases in effectiveness of training for fellows, regardless of fellowship year.



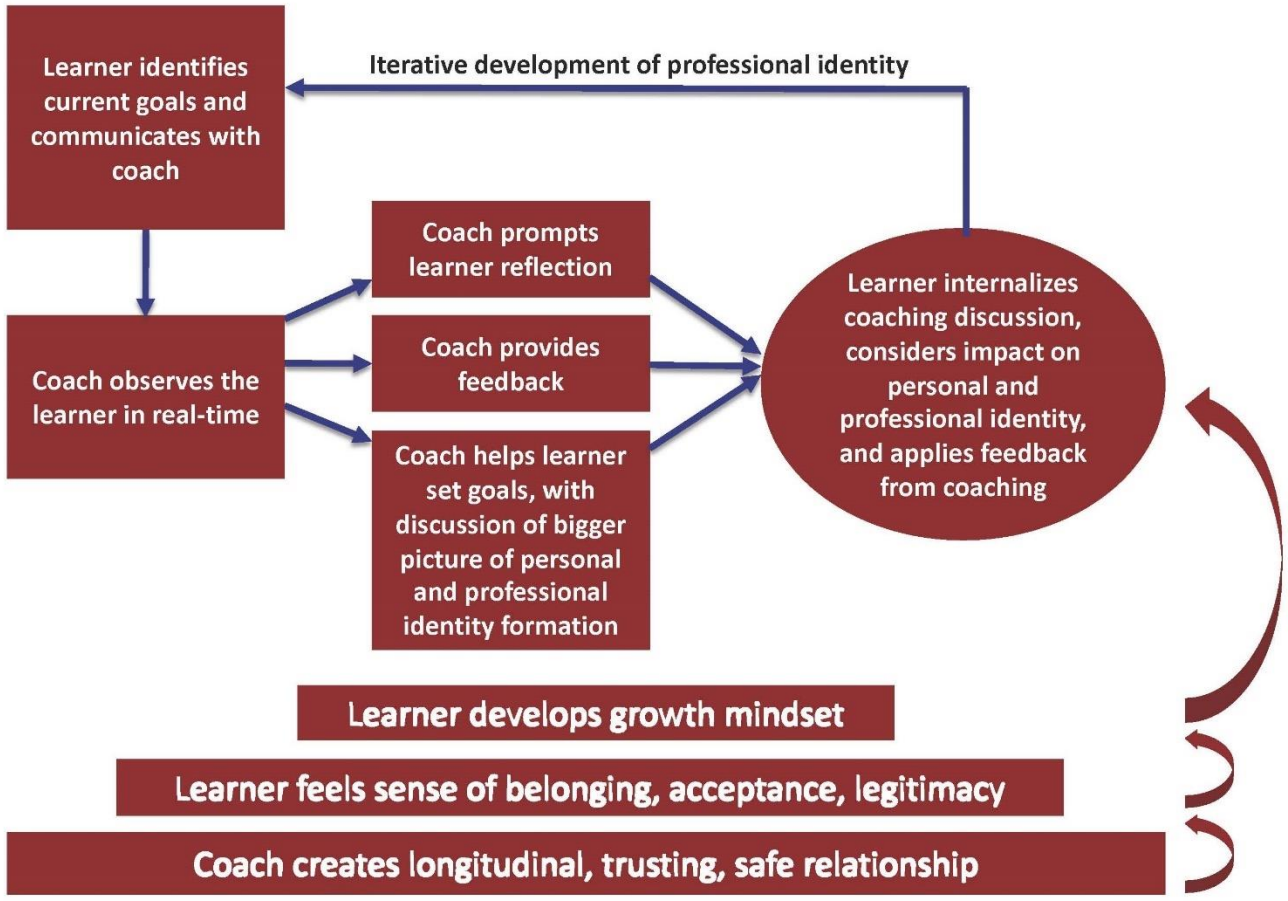
IMPACT OF COACHING ON PEDIATRIC RESIDENTS PROFESSIONAL IDENTITY FORMATION: A MULTI-INSTITUTION STUDY

Kim Hoang, MD, Stanford University, San Mateo, CA, Mollie G. Grow, MD, MPH, Sahar Rooholamini, MD, MPH, Heather McPhillips, MD, University of Washington, Seattle, WA, Sarah Kate Selling, PhD, Caroline Rassbach, MD, MAEd, Rebecca Blankenburg, MD, MPH, Stanford University, Palo Alto, CA

Background: Coaching has been used in business, sports, and the performing arts to help individuals achieve their personal best. This paradigm has also emerged in medical education as a framework for trainees professional development. However, there is a lack of literature on how coaching impacts residents professional identity. The purpose of this study was to explore how participation in a longitudinal coaching

program impacted the professional identity of residency graduates. Method: From July to Nov 2020, we conducted an IRB-approved qualitative study with semi-structured individual interviews of residency graduates from 2 pediatric programs who participated in a longitudinal coaching program. Questions were developed based on Cruess professional identity formation model. Interviews were virtual, audio-recorded and transcribed verbatim. Data were analyzed using modified grounded theory, with themes identified through constant comparative approach. A member check was done to verify themes. Result: 34 graduates were interviewed (21 at one site, 13 at the other). Four themes were identified: 1) Effective coaching is founded on a longitudinal, trusting, safe relationship across multiple clinical encounters that includes reflection, individualized formative feedback that emphasizes strengths, and goal setting. 2) Coaches create sense of belonging, acceptance, and legitimacy in residency and provide emotional support. 3) Coaches promote personal and professional identity formation by fostering growth mindset, self-reflection, clinical skill development, career exploration, work-life integration, and life-long learning. 4) An exemplar coach is a skilled clinician and role model who is approachable and invested in the resident (Figure 1). Graduates identified strategies for learners, coaches, and coaching programs to foster effective coaching relationships. Conclusion: Residency coaches have the potential to influence a residents professional identity during and after their training. Specific strategies exist to foster effective coaching relationships to promote professional identity formation.

Figure 1: Conceptual framework of coaching impact on learners' professional identity formation.



Adapted from: Rassbach C, Blankenburg R. The Stanford Pediatric Residency Coaching Program: Outcomes after one year. Acad Med, 2018.

IMPROVING RESIDENT EDUCATION IN THE PICU THROUGH THE IMPLEMENTATION OF A STANDARDIZED CURRICULUM

Hillary B. Liken, MD, LeeAnne Flygt, MD, MA, Margaret Kihlstrom, MD, University of North Carolina Hospitals, Chapel Hill, NC

Background Trainees at our institution have traditionally found the Pediatric Intensive Care Unit (PICU) to be a challenging rotation, with patient acuity and workload that often makes regular didactic teaching difficult. Aim Statement Our goal was to improve the educational experience in the PICU for our residents by increasing the frequency of structured lectures from a baseline of less than half the days to at least half the days of the week. Interventions In collaboration with PICU faculty and fellows, we developed and implemented a brief daily teaching curriculum based on content specifications for pediatric boards. The curriculum is comprised of a series of prompts and associated teaching points. Prompts include visual aids, schematics, interactive quizzes, and board-style questions. Through process mapping and workflow redesign, we created a 15-minute block in the weekday schedule to allow for a brief dedicated teaching session given by the PICU fellow or attending prior to morning rounds. Measures Pre-intervention survey responses were collected from June through July 2019, surveying all residents who had rotated through the PICU in the prior two years. The survey assessed resident satisfaction with overall educational experience, satisfaction with didactic teaching experience, and resident-reported frequency of teaching sessions. Following implementation of the curriculum in August 2019, the same survey has been administered to residents after each PICU rotation block. Results Our initial survey had 32 responses (57% response rate) and since implementation of our curriculum we have had 50 responses (75% response rate). From our pre-intervention group, 15% reported receiving didactic teaching half or more days per week, as compared with 94% of residents after implementation of the curriculum. Resident satisfaction scores have exceeded the baseline mean in 16 of 17 blocks since implementation of the curriculum (Figure 1). The mean resident satisfaction with overall educational experience and with didactic teaching experience improved from 3.4 to 4.3 and from 2.4 to 4.4, respectively (1 = extremely dissatisfied to 5 = extremely satisfied). Conclusions and Next Steps With the implementation of this curriculum, there has been a resident-reported increase in the frequency of didactic teaching sessions as well as an improvement in resident satisfaction with both the overall educational experience and the didactic teaching experience in the PICU.

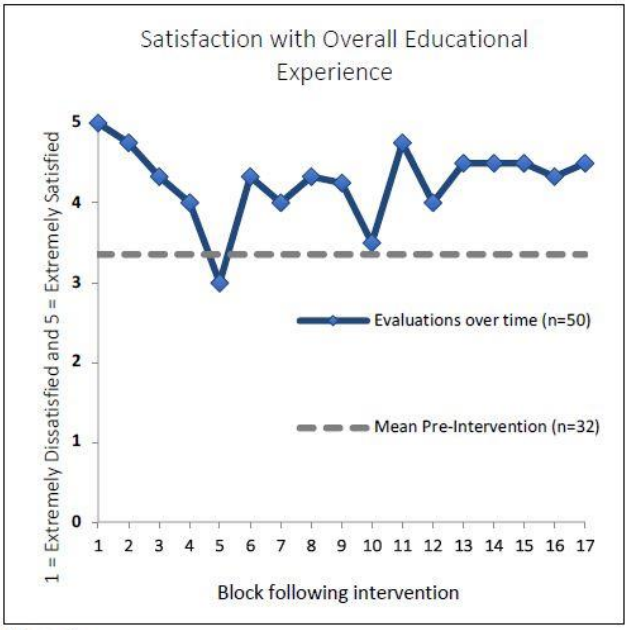


Figure 1

NOVEL VIRTUAL TEACHING ELECTIVE: AN APPROACH FOR PARENTING LEAVE

Leila E. Stallworth, MD, Lisa E. Leggio, MD, Medical College of Georgia, Augusta, GA

Background: Pediatric residents with new babies at home desire more time with their infants without affecting their salary or time away from training. A parenting elective has been implemented at other programs with good results. Now that virtual didactics are common, we sought to develop a teaching elective for a pediatric resident with a newborn. Objectives: To develop and implement a teaching elective curriculum for our resident which 1. Allowed the resident to teach virtually and spend more time with their infant and 2. Resulted in an effective curriculum for MS3s gaining experience with telemedicine using

standardized patients. Methods: Curriculum objectives were to demonstrate curriculum development, teaching, feedback and evaluation. Content was selected based on cases the resident could implement using herself and her children as patients. Faculty created SP1 as a model; the resident created SP2 and SP3 and didactic sessions for each case with feedback provided by faculty. Each case included objectives, case description, expectations, and a knowledge assessment. The resident played the mother in SP1 and SP2 and the patient (a teen) in SP3. The resident taught during debriefings. Thirty students met virtually in groups of three for a weekly one hour SP encounter. One student was the historian and documented findings in a practice Step 2CS note. All discussed diagnosis and management during debriefing. Each week concluded with a one-hour didactic session. Outcomes to Date: Feedback from the resident was positive. The resident met the objectives and felt teaching skills improved. The resident was able to spend an additional four weeks at home with her newborn while completing this rotation. Feedback from the students was also positive. Seventy-three percent (SP1) and 85% (SP2) of students said it was helpful gathering history from a pediatric patient or parent; 68% (SP1) and 85% (SP2) found feedback from the resident helpful. On a 5-point scale (5 being best), SP1 earned a mean score of 4.36 and SP2 a score of 4.41. Problems included poor video quality, difficulty logging in, limitations of telemedicine, and challenge of pediatric patients. Benefits include clinical experience for students, feedback on notes to prepare for Step 2CS, and ‘near peer’ feedback and teaching from a resident. Conclusion: A virtual teaching elective for new parents is an effective way for a resident to get more time at home with their child and is an effective way to teach medical students pediatric telemedicine with standardized patients.