

Grants awarded by the Spectrum Health Academy of Professional Educators

2021 – 2022

Quality Improvement Didactic Curriculum for Neurology and Neurosurgery Residents

Rushna Ali, MD and Michelle DeJesus, MD

Abstract: The Accreditation Council for Graduate Medical Education (ACGME) has recognized the importance of quality improvement (QI) training and requires that accredited residencies in all specialties demonstrate that residents are "integrated and actively participate in interdisciplinary clinical quality improvement and patient safety activities." However, there is a lack of formalized training that allows residents to do so. We hypothesized that a QI-focused curriculum integrating learner-centered didactics, small group discussions and faculty mentorship will lead to increased resident confidence with identifying QI opportunities, improved attitudes towards improvement, patient care and safety, and increased scholarly output related to quality improvement.

Factors Shaping Professional Identity Formation and Career Choice in Pediatric Residents

Ai Yamasaki, MD

Abstract: The decision to practice primary care or to pursue fellowship is a defining step in any physician's career. Previous studies have acknowledged that the factors shaping this decision are difficult to quantify because there are many influences involved, including location, educational debt, job opportunities, work life balance, and family considerations. Overall trends in the past decade show interest decreasing in primary care and increasing in subspecialty practice. This is in the context of rising debt and the recently approved pediatric hospital medicine fellowship. Furthermore, it has been shown that the professional identity formation (PIF) that begins in medical school continues throughout residency. Faculty mentorship, clinical experiences, and reflection are cited to be major players in PIF. However, few studies have explored the relationship between the process of PIF and career choice.

To elucidate this relationship, individual interviews of PGY2 and PGY3 pediatric residents at Helen DeVos Children's Hospital will be conducted. Participants will be asked predetermined questions about PIF and career choice, the answers to which will be analyzed by the study investigators.

The aim of this study is to determine the most important factors that influence pediatric residents in professional identity formation and how this relates to career choice. Based on these results, recruitment strategies, mentorship, and curricula in graduate medical education can be improved to better support exploration of career options in residency.

By guiding future pediatricians to their ideal positions, residency programs can optimize physician career satisfaction, and ultimately, patient care outcomes.

Development of Empathy Utilizing Reflective Writing and a Longitudinal Relationships with Caregivers of Children with Medical Complexity in a Pediatric Residency

Kira Sieplinga, MD

Abstract: Children with Medical Complexity (CMC) comprise a very small portion of the pediatric population yet utilize up to 1/3 of all healthcare dollars. It is well established that pediatric residents do not feel comfortable with care for CMC upon graduation and list lack of training experiences (amongst others) as a training barrier. In order to overcome this barrier, it is important to study the effectiveness of curricula designed to improve education about CMC during pediatric residency training.

We seek to implement a longitudinal curriculum that pairs a PGY1 pediatric resident with a caregiver of a CMC. The resident will initiate monthly conversations with the caregiver that explore different elements of the social capital theory with respect to the experience of caregivers of CMC. In addition to this conversation, the PGY1s will write reflection pieces about these conversations using guided prompts. We hypothesize that a longitudinal relationship paired with guided reflective writing will impact empathy, attitude and comfort and we will seek to quantitatively measure this change. In addition, we seek to understand how reflective writing and the longitudinal relationship impacts resident empathy towards CMC and we seek to qualitatively measure this change through writing analysis.

Micromanagement During Clinical Supervision: Scope of Problem and Its Impact

Bhawana Arora, MD

Abstract: Introduction: Micromanagement is defined as a supervisory style of "hovering" and directly commanding all the details. Business literature reveals a debate about this topic, however in PubMed, we were only able to identify six publications. We think it is appropriate to develop an instrument to explore micromanagement, because (a) the medical education field is very different than the business field and therefor micromanagement might look very different, and (b) we have not found existing instruments in Medical Education that measure prevalence and impact of micromanagement.

Methods: For the instrument development we use eight steps as described by Wetzel (2012): Determining what is to be measured, generating an item pool, Determining the format for measuring (scale), Expert reviewing of initial question pool, Considering inclusion of validation items, Administering items to a development sample, Evaluating the items, and Optimizing scale length.

Outcomes: Based on expert reviews we have adjusted our item-pool. The current draft of the questionnaire consists of questions (n=9) related to the existence of micromanagement, the possible impact (n=10), and demographics (n=10). Think aloud protocols of residents (n=6) should give information about the reliability of the instrument. Once the questionnaire is administered to our development sample, its validity can be explored, and scale length optimized.

Discussion: The validated questionnaire should be able to be used by other institutions. Although the questionnaire will 'just' focus on perceptions, this is important because micromanagement is in the eye of the beholder. Understanding perceptions is crucial because they are the drivers of behavior.

2020-2021

Identifying and responding to microaggressions in the clinical workplace: an educational workshop for pediatrics residents

Catherine Ezzio, MD and Kira Sieplinga, MD

Abstract: There is increasing evidence pointing towards implicit bias negatively impacting patient care and medical trainee learning experience, but no published literature on the “behavior” level of the Kirkpatrick framework following curriculum on responding to microaggressions in a clinical setting. A local needs assessment amongst pediatric residents at Spectrum Health revealed that trainees lack training in responding to microaggressions. We plan to implement a modified curriculum on microaggressions to the pediatrics residents at Spectrum Health and assess for improvement in behavior (demonstrated qualitatively by learner implementation of the Observe, What did you mean, Think, Feel, Desire(OWTFD) microaggression response framework during an Observed Clinical Skills Examination (OSCE) microaggressions scenario). We plan to use a mixed-methods analysis to demonstrate that this curriculum leads to improved trainee performance in responding to microaggressions in the clinical workplace. We anticipate this training, in conjunction with existing efforts in antiracism, implicit bias, and cultural competence, will build trainee skills in leadership and advocacy, and contribute to improved healthcare team communication and reduced incidence and impact of microaggressions at Spectrum Health.

To create and evaluate the feasibility of a Pediatric Hematology and Oncology all-virtual distance-learning elective

Chi Braunreiter, MD

Abstract: When selecting clinical electives, medical students may be limited by what is available at their home institution or time and space constraints of the offering institution. These limitations create educational gaps for some medical students. While there has been an increased use of telemedicine, tele-education or distance-learning is limited. The goal of this proposal is to create, implement and evaluate the feasibility of an all-virtual distance-learning Pediatric Hematology and Oncology elective for third- and fourth-year medical students who have limited access to this elective at their local or regional clinical sites. The results of this elective can be used to assist in the planning of other specialty-related all-virtual distance-learning offerings to medical students or physicians.