

faculty, with particular interest in continued education and expanding topics of discussion. 88% of residents attended the first didactic session (including 100% of the intern class). Resident feedback has been positive, with 100% indicating that they “strongly agreed” that they gained knowledge from the session and it would make them more effective in their clinical practice. Further study of the program including pre- and post-didactics knowledge-based surveys is ongoing.

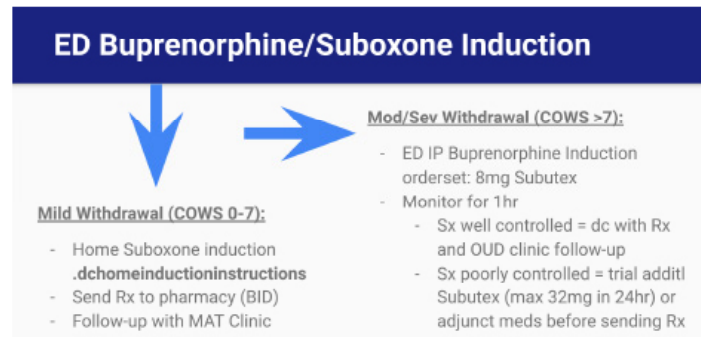


Image 1. Example slide from lecture on opioid use disorder management including ED induction of buprenorphine.



Image 2. Overview of addiction medicine curriculum.

9 Simulated Cranial Ultrasound for Longitudinal Learning: An Interactive Session for Emergency Medicine Residents

Richa Gupta, Thomas Sanchez, Jaron Kurian, Hannah Park, KeriAnne Brady, Richard Shin

Introduction: Head trauma is a common presentation in the pediatric emergency department. While scoring tools have reduced the need for CT imaging, diagnostic challenges persist when scalp hematomas obscure physical assessment. Recent studies indicate variable sensitivity but high specificity for point-of-care ultrasound (POCUS) in diagnosing skull fractures, making it a useful adjunct. Emergency medicine residents need to recognize the sonographic characteristics of skull fractures and develop proficiency in acquiring accurate images, but due to

variability in clinical exposure, may lack confidence in performing POCUS for this indication.

Objectives: Demonstrate accurate POCUS technique to identify pediatric skull fractures using a simulated model, increasing procedural confidence and diagnostic accuracy. Enhance routine use of POCUS as an adjunct to clinical assessment for pediatric head trauma.

Curricular Design: We integrated a small-group session and hands-on skills workshop by using a customized simulated task trainer with two ultrasound-compatible skull models—one with simulated fractures and another intact with highlighted pediatric suture lines—to enable comparative and realistic learning. During a 30-minute rotation, residents received instruction from a pediatric faculty member on POCUS indications, feasibility, and limitations for pediatric skull fractures. Learners then participated in a skills workshop, using the models to gain hands-on experience in image acquisition and pathology identification.

Impact: A post-session survey of 14 residents using a five point Likert scale showed that all respondents (100%) found the session educational. 86% reported increased confidence in identifying cortical irregularities in skull POCUS. Only 36% of respondents reported prior experience with pediatric skull POCUS, but 93% expressed an intent to implement it as a diagnostic tool post-session. Although previous studies have demonstrated the efficacy of POCUS in identifying skull fractures, educational methods for training clinicians in pediatric skull POCUS have not been systematically evaluated. With this project, we aim to establish an annual session to reinforce resident confidence and increase clinical utilization of POCUS for pediatric head trauma.

10 Mentorship as a Catalyst for Academic Writing in Emergency Medicine

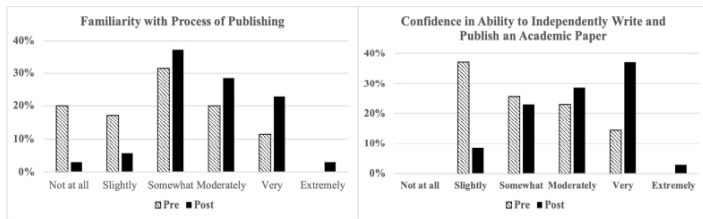
Eileen Chu, Laura Bontempo, J. David Gatz, Thomas Windsor, Zachary Dezman

Introduction: Academic writing is an important professional development skill, yet emergency medicine (EM) residents rank their competency in this area poorly. The goal of this educational advancement was to explore the impact of an academic writing mentorship program on EM residents and faculty.

Methods: 43 mentorship program participants from a single academic EM department were surveyed regarding their academic productivity and their interest, confidence, difficulty, familiarity, and assessment of the importance of academic writing. Participants also rated the quality of their mentorship and suggested improvements to the program. Data was analyzed using a Wilcoxon signed-rank test.

Results: There was an 81.4% survey response rate (18 residents, 17 faculty). Respondents reported significantly increased interest and confidence in academic writing, and increased familiarity with the peer-reviewed publishing process after participation. Respondents reported significantly decreased perceived difficulty of academic writing after mentorship program participation.

Conclusion: Participation in an academic writing mentorship program positively impacts both EM resident and faculty perceptions of academic writing and decreases the perceived difficulty of academic writing.



11 LGBTQ+ Health in Emergency Medicine Residency Curricula: A Needs Assessment

Elaine Hsiang, Joel Moll

Introduction: The quality of and access to care by LGBTQ+ patients is often compromised by physician knowledge deficits, bias, and inadequate training in LGBTQ+ health. EM physicians must be prepared to care for LGBTQ+ patients, but there is a lack of standardization of training in LGBTQ+ health across EM residencies.

Objectives: To assess current practices and perform a needs assessment of LGBTQ+ health teaching across a sample of EM residencies. This information can guide future efforts in standardizing content and improve delivery of LGBTQ+ health topics during EM residency training.

Methods: Residents from five geographically diverse EM residencies in the United States were invited to complete an online Qualtrics survey between April and June 2024. The survey contained questions regarding the amount and scope of LGBTQ+ health exposure in residency as well as delivery preferences to improve LGBTQ+ health teaching within residency curricula.

Results: 100 residents across the five programs participated in the survey (37% response rate). Participants reported a median of 2-5 hours of LGBTQ+ health teaching during residency, with 5.4% reporting zero hours. Most residents reported exposure to basic considerations (e.g. pronouns) and LGBTQ+ health disparities. The greatest content gaps were in pediatric considerations, legal considerations, and taking an organ inventory. Overall, participants were more comfortable performing clinical care for sexual minority patients than gender minority patients

(Figures 1 and 2). Suggestions for improving LGBTQ+ health education emphasized the necessity of incorporating LGBTQ+ health into the curriculum and including LGBTQ+ community members and patients into curricular design and delivery.

Conclusions: These findings identify potential content gaps in education being delivered, and suggest that for LGBTQ+ health education to be more effective in emergency medicine residency programs, it should be comprehensive, community-engaged, and practice-oriented.

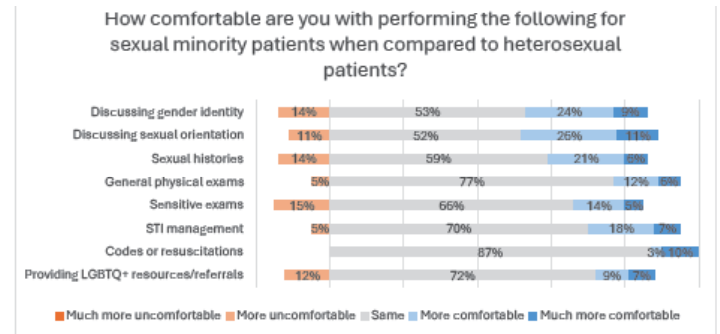


Figure 1. Respondent comfort in caring for sexual minority patients.

12 Use of Layered Gelatin/Tapioca Abdominal Wall Model to Practice Trans Abdominal Plane Block Regional Anesthesia

Matthew Hysell, Spring Lutzen

Introduction: Ultrasound-guided regional anesthesia has expanded considerably in EM. A possible new block in EM is the Trans Abdominal Plane block. This block deposits local anesthetic between the internal oblique and transversus abdominis muscle of the flank to achieve peritoneal anesthesia. We designed a layered model of the 3 muscles making up the abdominal wall to allow practice of injecting at specific levels Educational Objectives: To give residents the opportunity to practice visualizing multiple layers and injecting at a specific level

Curricular Design: Model was created using commercially available unflavored gelatine packets from the grocery store. We doubled the concentration of gelatine to create a more robust model. We mixed previously soaked tapioca into the liquid gelatine to texture to the ultrasound images. Tapioca sinks when added to hot gelatine. Layers must be allowed to cool to set up prior to adding new layers. The linear probe of most ultrasound machines only penetrates about 4cm so care must be taken with the thickness of each layer to not exceed the depth ultrasound can penetrate. However, the glass bottom to the gelatine caused significant reverberation artifact with shallow models; squares had to be