

3 Erector Spinae Plane Block: Regional Anesthesia Education for the EM Resident

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Background: Ultrasound-guided regional anesthesia (USGRA) enables physicians to provide analgesia without the side effects of opioids, improves patient satisfaction and outcomes, and is important for the ED provider. We utilize a single-day workshop to teach the Erector Spinae Plane Block (ESPB) to residents and attendings.

Educational Objectives: The objectives of this study were to create, implement and assess a cadaver model-based, single-day workshop for teaching USGRA to both Emergency Medicine residents and attending physicians. We also investigate if the required number of practice repetitions affects competence achieved at the end of the workshop. Survey data was collected to assess confidence in USGRA, number of USGRA blocks performed, and perceived barriers to performing USGRA in the ED

Curricular Design: A single-day workshop was designed to teach the ESPB. This involved a 15-minute lecture-style didactic with essential knowledge regarding the ESPB; including all theoretical information for performance of ESPB, photos and video, indications, anesthetic choice and safe dosing, complications, and ED location of USGRA supplies. Practice with gel ultrasound models introduced in-plane needle guidance and procedural basics. Participants then practiced with a soft-embalmed cadaver and were randomized to perform 3 or 6 attempts on the cadaver. One scored attempt was evaluated on a standardized rubric. Survey data were obtained before and after the workshop. Participants retested three months later and data was again collected. Final survey data will be collected six months after the workshop.

Impact/Effectiveness: This model provides a framework for concise, detailed education and practice with minimal effect on existing curriculum. Performance data showed some skill decay over time, but also an increase in confidence and likelihood to perform the procedure in post-session surveys. Barriers included efficiency and lack of faculty comfort with ESPB.

4 Drivers of Engagement/Burnout Workshop: A Fun, Engaging Way to Generate Performance Improvement Projects

Amber Billet

Introduction: Planning and completing a performance improvement project (PIP) is an important skill for Emergency Medicine (EM) residents to learn. It is also an ACGME requirement. We present an engaging method to generate PIP ideas.

Educational Objectives:

1. Recognize key drivers of engagement/burnout.
2. Participate in an immersive method to generate potential future PIPs.

Curricular Design:

1. A group of 26 EM residents and 6 EM attendings were introduced to the 7 drivers of engagement/burnout (Fig 1). The group chose the workload/job demand driver.
2. Gravity issues (ones that cannot be solved within the ED) were discussed and put in a “parking lot”. These were excluded when generating ideas but were given to ED leadership.
3. Each person conceived two ideas related to improving workload/job demand and wrote them on two index cards.
4. Index cards were shuffled and passed around amongst participants. Each participant took 2 cards at random.
5. Participants paired up to discuss the ideas for 5 minutes. Using a 5-point Likert scale (Fig 2), each participant rated the idea and recorded the score on the back of the card.
6. Steps 4 & 5 were repeated x4.
7. Results were collated by adding the 5 ratings on each index card (min. 5; max. 25). A list was compiled ranking the scored ideas from highest to lowest.
8. Participants were asked to sign up to help develop solutions for the top 10 ideas.
9. The full list of ideas was provided to residency and ED departmental leadership.

Impact/Effectiveness: Participants collectively identified key drivers of burnout/engagement as related to workload/job demand and generated a ranked list of PIP ideas. A PIP was executed based on one of the key ideas (decreasing non-physician tasks) and was successfully implemented within 12 weeks. When residents have a sense of ownership in work unit changes, they recognize the importance of staying involved to promote positive change. If it’s about us, don’t do it without us.

- **Workload/job demand**
- **Efficiency and resources**
- **Meaning in work**
- **Control/flexibility**
- **Organization values/culture**
- **Social support & community at work**
- **Work-life integration**

Figure 1. Seven drivers of engagement/burnout.