

responsive to communication skills training. We surveyed ED staff perception of need and efficacy before and after an intervention using an established conflict resolution methodology. **Methods:** ED physicians, nurses and support staff were surveyed at two regional hospitals using the Maslach Burnout Inventory (MBI) and a communications questionnaire to establish the perceived need for communication skill training. Participants from one center were provided with a communications intervention (Crucial Conversations®, VitalSmarts®), and a refresher course 6-15 months later. The survey was then repeated at both sites and course participant feedback was elicited. **Results:** MBI results were high (mean EE = 25.25 (high > 25), 95% CI = 22.5-28; DP = 11.6 (high > 8), 95% CI = 10.1-13.2; PA = 35.85 (low < 34), 95% CI = 34.3-37.4). Initially 82% of intervention and 77% of control site participants responded that "attending an educational session about ways to communicate better would help the participants at work". Post intervention group responses to "The program will be helpful to me in communicating more effectively in my work environment" were: 75% "strongly agree" and 25% "agree". No rating below "agree" was assigned by any of the participants. Participants preferred facilitated small group simulations and advocated for earlier career implementation. **Conclusion:** There was a perceived need for and impact from communication skills training for ED staff with high measured burnout. Training may be best implemented in small group simulated encounters and in health professional education curriculum or as part of work orientation.

**Keywords:** burnout, communication training, emergency department

#### P066

##### Ultrasound localization to resuscitate in arrest (ULTRA)

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**Introduction:** There is increasing evidence supporting ultrasonography for the determination of optimal chest compression location during cardiac arrest. Radiological studies have demonstrated that in up to 1/3 of patients the aortic root or outflow tract is being compressed during standard CPR. Out-of-hospital-cardiac-arrests (OHCA) could benefit from cardiac localization, undertaken with scaled-down ultrasound equipment by which the largest fluid filled structure in the chest (the heart) is identified to guide optimal compression location. We intend to evaluate 1) where the left ventricle is in supine patients, 2) the accuracy and precision as well as 3) the feasibility and reliability of cardiac localization with a scaled down ultrasound device (bladder scanners). **Methods:** We are recruiting men and women over the age of 40. The scanning protocol involves using a bladder scanner on a 15-point grid over the subject's left chest and parasternal, midclavicular, and anterior axillary intercostal spaces 3-7. Detected volumes will be recorded, with the presumption that the intercostal space with the largest measured volume is centered over the heart. Echocardiography will then be used to confirm the bladder scanner accuracy and to better describe the patient's internal chest anatomy. Having assessed procedural feasibility on 3 pilot subjects, we are now recruiting 100 participants, with planned interim analysis at 50 participants for sample size reassessment. Maximal volume location frequencies from the echocardiograms will be described and assessed for variation utilizing the goodness-of-fit test. The proportion of agreement across the two modalities regarding the maximal

volume location will also be examined. **Results:** Amongst the 3 volunteers (pilot study), the scanner identified fluid in 4-8 of 15 intercostal spaces. In each of the three pilot study patients, the maximal volume identified by the bladder scanner was found to be at the parasternal location of the 6th intercostal space. This was also the location of the mid left ventricular diameter on echocardiography. **Conclusion:** Our literature review and pilot study data support the premise that lay persons and emergency medical personnel may improve compressions (and thus outcomes) during OHCA by using a scaled-down ultrasound to identify the location of optimal compression. We are currently enrolling patients in our study.

**Keywords:** pre-hospital, resuscitation, ultrasound

#### P067

##### The number and types of procedural skill acquired by family medicine/emergency medicine (CCFP-EM) residents at different teaching sites

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**Introduction:** During the one-year CCFP-EM program, residents rotate through different teaching sites. The purpose of this project is to investigate differences in procedural skills acquisition between these sites, which will help identify the effectiveness of each setting for teaching procedural skills amongst EM trainees. **Methods:** Over a two year period, residents enrolled in a CCFP-EM residency training program were asked to log their procedures and the sites where they were performed. The cumulative data was analyzed to show the number and types of procedures performed at each site. **Results:** A total of 477 procedures were logged over two years, with 198 procedures performed at urban tertiary emergency departments (EDs), 116 at community EDs, 87 at intensive care units (ICUs), 37 at urgent care centre, 24 in clinics, and 15 at other settings. Overall, 48 point of care ultrasounds, 75 vascular access procedures, 99 reduction/casting, 48 lumbar punctures, 29 procedural sedations, 125 minor surgical procedures, and 32 other procedures were performed. The majority of procedures were performed at the tertiary care urban ED, followed closely by community ED setting. The only exception was vascular access, which was performed most commonly in ICU settings. **Conclusion:** Our urban tertiary care ED setting provided the most learning opportunity for procedural skill acquisition, suggesting that having maximized time allocated in this setting is essential for EM learners to acquire procedural skills. One exception is that EM learners gain more vascular access training in ICUs.

**Keywords:** procedural skills, residency training, teaching sites

#### P068

##### Significance of asymptomatic oxygen desaturation in elderly ED patients: A pilot study

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**Introduction:** Pulse oximetry is a standard component of Emergency Department (ED) patient monitoring. Pulse oximetry measures peripheral capillary oxygen saturation (SpO<sub>2</sub>) levels and can be used to monitor cardiorespiratory conditions. The normal SpO<sub>2</sub> level for adults is approximately 96%. Oxygen saturations of <92% are considered problematic and levels <90% may indicate cardiorespiratory disease. However, low oxygen saturations are often seen in elderly patients with comorbidities. This research investigated the