investigators. Responses were analyzed using a simple thematic analysis to identify relevant themes and subthemes. **Results:** 34 rural clinicians responded to the online survey. There was general agreement that POCUS is valuable in rural acute care, training is difficult to access and should be standardized, and that QA and research are desired but impractical in the current environment. 11 rural clinicians attended the focus groups. Analysis of focus groups yielded seven distinct themes/needs: infrastructure needs, peer networks, common standards, both local and regional training opportunities, academic support, access to resources, and culture change. Seventeen sub-themes were identified and noted as having either a positive or negative and direct or indirect effect on the above themes. Broadly speaking, participants supported a distributed "spoke-hub" model where training, research and QA occurs within distributed, regional hubs with support from academic sites. **Conclusion:** The adoption of POCUS for emergency care in rural Saskatchewan faces significant opportunities and obstacles. There is interest on the part of rural clinicians to overcome these challenges to improve patient care.
Keywords: ultrasound, emergency, rural

P094

Meeting patient expectations in the emergency department: preliminary findings from the preparing emergency patients and providers study

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Introduction: Effective communication to develop a shared understanding of patient expectations is critical in establishing a positive medical encounter in the emergency department (ED). However, there is limited research examining patient/caregiver expectations in the ED, and their impact on the beliefs, attitudes and behaviours during and after an ED visit. The objective of this study is to examine patient/caregiver expectations and satisfaction with care in the ED using a patient expectation questionnaire and a follow up survey. **Methods:** As a part of a larger 3-phase study on patient/caregiver expectations in adult and pediatric EDs, a 7-item, paper-based questionnaire was distributed to all patients and/or caregivers who presented to one of four EDs in Nova Scotia with a Canadian Triage and Acuity Scale (CTAS) score of 2 to 5. A follow-up survey was distributed to all willing participants via email to determine their satisfaction with care received in ED. Descriptive statistics were used to analyze responses. **Results:** Phase 1 was conducted from January to September 2016. In total, 24,788 expectation questionnaires were distributed to ED patients/caregivers, 11,571 were collected (47% response rate), and 509 patients were contacted for a follow-up survey. Preliminary analysis of 4,533 questionnaires shows the majority of patients (67.1%) made the decision by themselves to present to the ED, while others were advised by a family/friend (22%). Respondents were most worried about an injury (17.8%) followed by illness (15.6%) and expected to talk to a physician (69.9%) and receive an x-ray (39.3%). The majority of physicians (53.3%) reported the expectation tool helped in caring for the patient and 87.5% felt they met patient expectations. There were 147 patient/caregiver responses to a follow-up survey (29% response rate) and 87.1% of responders reported that ED clinicians met their expectations. **Conclusion:** Patient/caregivers have a variety of concerns, questions, and expectations when presenting to the ED. Obtaining expectations early in the patient encounter may provide opportunities for improved communication between clinicians and patients while enhancing satisfaction with care received. Further analysis is needed to determine the impact of the expectation questionnaire on productivity in the ED.
Keywords: patient satisfaction, emergency department, communication

P095

Wellness, sleep and exercise in emergency medicine residents: an observational study

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Introduction: Burnout is well documented in residents and emergency physicians. Wellness initiatives are becoming increasingly prevalent, but there is a lack of data supporting their efficacy. In some populations, a relationship between sleep, exercise and wellness has been documented, but this relationship has not been established in emergency medicine (EM) residents or physicians. We aim to determine whether exercise and sleep quality and quantity as measured by a Fitbit are associated with greater perceived wellness in EM residents. **Methods:** Fifteen EM residents from two training sites wore a Fitbit during a 4-week EM rotation. The Fitbit recorded data on sleep quantity (minutes sleeping)/quality (sleep disruptions) and exercise quantity (daily step count)/quality (daily active minutes performing activity of 3-6 and >6 metabolic equivalents). Participants completed an end-of-rotation Perceived Wellness Survey (PWS) which provided information on six domains of personal wellness (psychological, emotional, social, physical, spiritual and intellectual). Associations between PWS scores and the Fitbit markers were evaluated using a Mann-Whitney-U statistical analysis. **Results:** Preliminary results indicate that residents who scored $\geq 50^{th}$ percentile for sleep quantity had significantly higher PWS scores than those who scored $\leq 50^{th}$ percentile (median PWS 17.0 vs 13.0 respectively, p = 0.04). There was no significant correlation between PWS scores, sleep interruptions, daily step count and average daily active minutes. Postgraduate Year PGY1 and PGY2-5 report median PWS scores of 13.9 and 17.2 respectively. **Conclusion:** To our knowledge, this is the first study to objectively measure the quality and quantity of sleep as well as exercise habits of EM residents using a Fitbit device. Our data indicates a significant relationship between better sleep quantity and higher wellness scores in this population. We aim to enroll 30 residents in order to obtain a more robust data set. A larger sample size will increase statistical power and allow us to more extensively evaluate the use of exercise and sleep monitoring devices in the efficacy assessment of wellness initiatives.
Keywords: wellness, sleep, exercise

P096

A peer-reviewed instructional video is as effective as a standard recorded didactic lecture in medical trainees performing chest tube insertion: a randomized control trial

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Introduction: Online medical education resources are becoming an increasingly used modality and many studies have demonstrated their efficacy in procedural instruction. This study sought to determine whether a standardized online procedural video is as effective as a standard recorded didactic teaching session for chest tube insertion. **Methods:** A randomized control trial was conducted. Participants were taught how to insert a chest tube with either a recorded didactic teaching session, or a New England Journal of Medicine (NEJM) video. Participants filled out a questionnaire before and after performing the procedure on a cadaver, which was filmed and assessed by two blinded evaluators using a standardized tool. Thirty 4th year medical students

from two graduating classes at the Schulich School of Medicine & Dentistry in London, ON were screened for eligibility. Two students did not complete the study, and were excluded. There were 13 students in the NEJM group, and 15 students in the ATLS group. **Results:** The NEJM group's average score was 45.2% ($\pm$9.6) on the pre-questionnaire, 67.7% ($\pm$12.9) for the procedure, and 60.1% ($\pm$7.7) on the post-questionnaire. The didactic group's average score was 42.8% ($\pm$10.9) on the pre-questionnaire, 73.7% ($\pm$9.9) for the procedure, and 46.5% ($\pm$7.5) on the post-questionnaire. There was no difference between the groups on the pre-questionnaire (Δ +2.4%; 95% CI: −5.2, 10.0), or the procedure (Δ −6.0%; 95% CI: −14.6, 2.7). The NEJM group had better scores on the post-questionnaire (Δ +11.15%; 95% CI: 3.7, 18.6). **Conclusion:** The NEJM video was as effective as video-recorded training for teaching the knowledge and technical skills essential for chest tube insertion. Participants expressed high satisfaction with this modality. It may prove to be a helpful adjunct to standard instruction on the topic.
Keywords: chest tube, medical education, clinical medicine videos

P097

High-risk clinical features for acute aortic syndrome

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Introduction: Acute aortic syndrome (AAS) is a rare clinical syndrome with a high mortality encompassing acute aortic dissection, intramural hematoma and penetrating atherosclerotic ulcer. The objective of our study was to assess the diagnostic accuracy of high risk historical, examination and basic investigative features for AAS, in confirmed cases of AAS and a low risk control group in order to address the spectrum bias in previous diagnostic accuracy studies. **Methods:** We performed a historical matched case-control study: participants were adults >18 years old presenting to two tertiary care emergency departments (ED) or one regional cardiac referral center. Cases: new ED or in-hospital diagnosis of non-traumatic AAS confirmed by computed tomography or echocardiography. Controls: triage diagnosis of truncal pain (<14 days) and an absence of a clear diagnosis on basic investigation. Cases and controls were matched in a 4:1 ratio by sex and age. A sample size of 165 cases and 660 controls was calculated based on 80% power and confidence interval of 95% to detect an odds ratio of greater than 2. **Results:** Data were collected from 2002-2014 yielding 194 cases of AAS and 776 controls (mean age of 65(SD 14.1) and 66.7% male). Of the 194 cases of AAS, 32 (16.5%) were missed on initial assessment. Chest pain unspecified (20.7%), abdominal pain unspecified (9.9%) and acute coronary syndrome (8.7%) were the top diagnoses in the control population. Absence of acute onset pain (Sensitivity 95.9% negative likelihood ratio (LR-) 0.07(0.03-0.14)), and a negative D-dimer (Sensitivity 96.7%, LR- 0.05(0.01-0.18)) can help rule out AAS. Presence of tearing/ripping pain (Specificity 99.7%, LR + 42.1 (9.9-177.5), a history of aortic aneurysm (Specificity 97.8%, LR + 6.35(3.54-11.42)), hypotension (Specificity 98.7%, LR + 17.2 (8.8-33.6)), pulse deficit (Specificity 99.3, LR + 31.1(11.2-86.6)), neurological deficits (Specificity 96.9%, LR + 5.26(2.9-9.3)), and a new murmur (Specificity 97.8%, LR + 9.4(5.5-16.2)) can help rule in the diagnosis of AAS. **Conclusion:** Patients with one or more high-risk feature should be considered high risk, whereas patients with no high risk and multiple low risk features are at low risk for AAS. Further research should focus on a combination of these factors to guide who warrants further investigation thus reducing miss rate, morbidity and mortality.
Keywords: acute aortic syndrome

P098

Addiction medicine training in Canadian emergency medicine residency programs: a needs assessment survey

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Introduction: Emergency department visits related to substance use are becoming more serious and increasingly costly in Canada. Emergency physicians must be able to effectively screen, manage, refer, and advocate for these complex patients. This study sought to describe the current state of addiction medicine training in Canadian emergency medicine (EM) residency programs and to assess the need for a formal curriculum. **Methods:** All Royal College and College of Family Physicians EM Program Directors (PDs) were asked to participate in a ten-question needs assessment survey on addiction medicine training for residents. Questions were developed through consensus after reviewing the relevant literature and conducting a formal pilot survey with staff physicians experienced in survey methodology. Responses were collected securely using the Research Electronic Data Capture (REDCap) database. **Results:** 19 out of 31 (62%) eligible PDs completed the survey. The importance of addiction medicine training received a median score of 69.5 (IQR = 74.0) on a scale of 1-100. Most programs devoted two hours or less per year of formalized teaching on individual topics (such as opioids, alcohol, harm reduction) over the past two academic years. The two most common teaching modalities used were didactic lectures (15/19, 78.9%) and case-based tutorials (12/19, 63.2%). Case-based tutorials were identified as the most effective teaching method (12/19, 63.2%). Topics highlighted as most important to include in a curriculum were: screening for substance use disorders and referral for further treatment (14/19, 73.7%), social determinants of health (14/19, 73.7%), alcohol, opioid, and stimulant intoxication and/or withdrawal (14/19, 73.7% each), and management of patients on opioid agonist therapy (14/19, 73.7%). The most commonly perceived barriers to implementing such a curriculum were insufficient curriculum time (10/19, 52.6%) and lack of qualified teaching staff (7/19, 36.8%). **Conclusion:** This needs assessment provides an understanding of the current state of addiction medicine training for EM residents in Canada. A case-based addiction medicine workshop is currently being developed to address identified curriculum gaps. Integrating this curriculum longitudinally into a time-constrained academic schedule is an important next step.
Keywords: addiction medicine, resident curriculum, medical education

P099

Age related rates of abnormal CT findings in otherwise low risk minor head injury patients over 65

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Introduction: The Canadian CT Head Rules (CCTHR) is the gold standard clinical decision rule for minor head injuries (MHIs) & has been shown to have 100% sensitivity in identifying patients that would have an abnormal CT scan. Within the CCTHR age 65 + is considered to be an independent risk factor for abnormal head CT. However, a previously published Italian study indicated that the rate of pathological findings in otherwise low risk MHI patients under the age of 79 was less than 1% & significantly lower than those over the age of 80, which brings to question whether the traditional age cut off of 65 as a factor in the CCTHR is too conservative when considering the appropriateness for imaging. Therefore this study aimed to quantify the extent to which