

biennial accredited CME program which combines high quality Emergency Medicine focused education with organized group physical and social activities in European locales. **Methods:** We undertook a participant observation-based ethnographic study of the EMU Europe program in Provence, France in 2015. Participant interviews and in-depth observation methods were used to understand (1) the impact of shared group activities on learning and (2) the ethos that is created during this type of program. **Results:** We describe three phenomena from the data that we feel are highly influential in the success of the program and impact on learning. The first is “social engagement and a sense of community”. Involvement in group physical and social activities supports more interactive learning and people affiliate with this as a group that they enjoy and feel good learning with. The second is “a stimulating escape”. This is the opportunity for high quality education and stimulating travel to be provided in an efficient package. The third is “the ‘flat’ faculty-learner relationships”. This is created through accessibility and innovative teaching and is a key component of the quality of the education. **Conclusion:** While each trip in and of itself might be unique, there appears to be some common elements - building a sense of community, providing a stimulating escape and choosing faculty with specific teaching styles - that contribute to the educational success of this model. We will discuss how this relates to medical education theory and how it is generalizable to other groups considering this type of program. To our knowledge this is the first empirical research in this area and improves our understanding of how to leverage this approach for more effective continuing medical education.

**Keywords:** continuing medical education (CME), ethnography, travel

#### P101

##### **Needs assessment study for the inter-professional procedural sedation course: methods of adult procedural sedation (MAPS)**

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**Introduction:** Procedural sedation and analgesia (PSA) is a common practice for non-anesthesiologists. While complication rates for PSA are low, many of them are preventable. Professional regulatory body requirements state that practitioners should have adequate knowledge and skills to safely administer PSA. However, no certification process currently exists to develop and maintain these competencies. A standardized PSA training course would help close the gap between the best evidence for safe administration of PSA and its implementation in everyday practice. Therefore, we conducted a needs assessment to guide the development of such a PSA training course. **Methods:** Using modified Dillman methodology, an electronic survey was sent to a convenience sample of 50 potential learners and two groups of stakeholders: 20 hospital administrators and 35 experts in PSA. Questions assessed practice demographics, experience as well as support and interest in the development and attendance of a PSA training course. Prior to distribution, the questionnaire was peer reviewed and pilot-tested for feasibility and comprehension. Responses were stratified based on clinical role. **Results:** 35 potential learners completed the needs assessment (70% response rate): 15 emergency physicians, 19 registered nurses and 1 nurse practitioner. 48% have been in practice for over 10 years and over 90% participate in PSA at least weekly. 38% received informal training in PSA while 16% obtained no training at all. 86% strongly supported the development of a PSA certification course and were in favour of an inter-professional format. 13 experts responded to the questionnaire within the departments of anesthesia, emergency medicine (EM) and respiratory therapy (37% response rate). 80% supported the need for a PSA training course. 6 hospital administrators

responded to the questionnaire within the departments of anesthesia, EM, gastroenterology and respirology (30% response rate). All agreed that standardization of PSA is an important part of patient safety and 80% stated certification in PSA should be a prerequisite for granting privileges to health care professionals to participate in PSA. 60% believed the course should be developed and supported by hospital funds. **Conclusion:** There is strong support from potential learners and stakeholders for the development of a formal PSA training course.

**Keywords:** procedural sedation and analgesia, emergency medicine, needs assessment

#### P102

##### **TeamSTEPPS: promoting a culture of safety**

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**Introduction / Innovation Concept:** Adverse events due to medical error are a significant source of preventable morbidity and mortality in Canada's emergency departments. Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) was introduced in 2006 as a strategy to minimize these errors. Although these strategies have been available and widely implemented in hospitals over the last decade, the optimal method of teaching these tools and strategies has not been elucidated. **Methods:** We endeavoured to introduce a twelve month longitudinal TeamSTEPPS program to physicians, nurses, and allied health care professionals in a busy tertiary care hospital via a multi-pronged approach consisting of group huddles, props in the department, and several social media strategies. Dedicated observers in the emergency department recorded the use of the strategies by staff members to identify improved and sustained use of TeamSTEPPS behaviours after they were introduced. **Curriculum, Tool, or Material:** The program that consists of five modules to improve patient safety outcomes: Team structure; Leadership; Situation Monitoring; Mutual support; and Communication. Each module consisted of educational tools including posters in the department explaining the concepts, twice weekly department huddles to discuss the importance of the monthly topic and promote team sharing with real life examples, as well as stimulating and generating discussions around the monthly theme on social media (Facebook, Twitter, and an on-line blog). For several modules, extra prompts, such as I PASS the BATON handover cards were also provided to act as reminder visual cues. The first two modules were rolled out with on-line music videos rewritten to promote the significance of the modules. A team performance observation tool was adopted from the TeamSTEPPS program, and behaviors were evaluated and recorded under the five domains. **Conclusion:** Although unable to detect a meaningful difference in our pre and post-implementation observations, we present a novel approach to educating a multi-disciplinary team about TeamSTEPPS in a busy emergency department, along with the challenges encountered in this unique area of research, and recommendations for further study to interested parties. The TeamSTEPPS program likely could offer as much to the emergency department as similar programs have to the aviation industry yet it requires extensive investigation within this health care venue.

**Keywords:** innovations in EM education, patient safety, communication

#### P103

##### **Emergency medicine as a career choice: what influences medical students throughout their schooling?**

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**Introduction:** Practicing emergency medicine (EM) involves rapid decision-making in an acute setting, broad knowledge and a strong ability to multi-task. Some medical students find these characteristics attractive, while others find them a deterrent. Previous studies have indicated the range of characteristics that interest undergraduate students. No studies have followed students to assess how attitudes towards EM careers evolve over their schooling. **Methods:** An open-ended survey of medical students' career interests was distributed at five data-collection points over the four years of undergraduate training from 1999-2006 at Memorial University. Guided by principles of grounded theory the qualitative data was coded to identify key themes and sentinel quotes. Semi-structured interviews with academic emergency physicians at Dalhousie University were then conducted to assess the relevance of these findings to postgraduate training (in progress). These transcripts were analyzed in the same manner as the longitudinal surveys. **Results:** 1281 surveys were completed by 540 students, with 758 comments about EM. The biggest drawbacks of EM included lack of patient follow-up and lack of experience in EM; the biggest benefits included variety of cases and patients, congruence with previous life experiences, and elective experiences. One major theme was the Certificant of the College of Family Physicians (CCFP) EM training, as it meant a shorter residency that was more transferrable to rural settings. Lifestyle was a prominent theme, seen as positive by some and negative by others. Emergency physicians commented on students' naivety, especially relating to media and the nature of the work early in their training. **Conclusion:** Medical students' opinions of EM tend to shift throughout their schooling, in particular, the perception of the work. Medical students' perceptions differ significantly from that of experienced emergency physicians, highlighting the need for a greater degree of mentoring. Perceptions of lifestyle in EM are highly variable amongst students, acting as both a benefit and a drawback. Medical schools may be able to improve clinical exposure and provide more informed career counselling with respect to emergency medicine. Residency program directors can consider these findings during recruitment and interviewing to determine whether students have a realistic view of the specialty and career trajectory.

**Keywords:** undergraduate medical education, career choices, qualitative

#### P104

##### Literature review of telemedicine for trauma patients in rural areas

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**Introduction:** Trauma is the leading cause of death among people under 40. With more than 7 million Canadians living over one hour's travel from a level 1 or 2 trauma center, access to quality trauma care in Canada is a major concern. We recently reported that more than 40% of rural EDs across Canada were more than 300 km from levels 1 and 2 trauma centers. Direct transportation to trauma centers is therefore unusual and most trauma cases are initially managed in rural EDs. Assistance from trauma centers via telemedicine could thus be valuable in optimizing initial stabilization and inter-facility transfers. **Objective:** Is telemedicine a potentially effective intervention for improving rural trauma care? **Methods:** We conducted a literature review to examine the potential impact (number of transfers, transfer times, length of hospital stays and mortality) of telemedicine on rural trauma care. Two reviewers

independently searched PubMed, Embase and Cochrane databases with key words / concept combinations: telemedicine, trauma and rural. Articles included in the final review had to address the question with specific methodologies. After duplicate removal, 312 articles were found relevant. After independent review of titles and abstracts, only 25 articles pertained to the specific question. Only three studies met inclusion criteria. **Results:** These studies reported 187 successful teleconsultations in the context of rural trauma care, 29 of which involved significant interventions (8 interventions potentially lifesaving). Some unnecessary inter-facility transfers were avoided. However, transfer times to trauma centers and length of hospital stays appeared slightly longer with telemedicine. **Conclusion:** The literature on the efficacy of telemedicine in trauma care is scarce, with only three studies addressing the question. Conclusions generally favor telemedicine, but additional research must should determine its impact and better understand the barriers/facilitators to the implementation of telemedicine for rural trauma care.

**Keywords:** rural emergency departments, telemedicine, literature review

#### P105

##### Patient outcome feedback in emergency medicine

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**Introduction:** Emergency medicine (EM) is characterized by one time patient encounters where the end diagnosis is often unknown. Seeking patient outcome feedback, (POF) which is defined as following a patient's clinical course once they leave your care, is crucial as it can highlight a discord between an intended versus actual result, thus spurring clinical change. This study seeks to determine whether EM staff and residents currently seek POF, the types of patients followed and the barriers faced. **Methods:** An online survey was administered to all EM staff and residents (CCFP-EM and FRCP) working at a tertiary academic hospital to determine their current practices and attitudes towards POF. **Results:** A total of 72 responses were received, of which 41 were residents and 31 were staff, for an overall response rate of 95%. If feedback was sought, the most commonly used tools were looking up imaging results (52%) and talking to EM colleagues (42%). The patients most frequently followed were those with a poor outcome during their ED admission, sick patients with unclear final diagnosis or unplanned returns within 48 hours (55%, 58%, 34% respectively). However, up to 30% of respondents never or rarely sought out POF even in these situations (16%, 19% and 30% respectively). Patients least commonly followed were those where the diagnosis was more certain. Respondents identified many barriers, primarily being time (83%), not being notified about bouncebacks (79%) and remembering which patients to follow (70%). Barriers were amplified for residents as they had a harder time accessing or automatically receiving POF. The most useful tools not currently available, would be being able to easily create electronic tracking lists, being automatically sent discrepant imaging reports and automatic notification of patients who return to the ED within 48hrs. Also, automatic follow up information on patients who experienced a negative outcome or on sick patients with unclear diagnosis is desired. **Conclusion:** POF is a useful and crucial practice for clinical care, but is currently not often performed. The most commonly used tools are those that are easiest to access, and POF was mainly performed on patients with either negative results or unclear diagnoses. Thus, identifying the types of patients deemed most relevant for receiving POF and addressing the major barriers faced by clinicians can help improve the frequency with which POF is sought, potentially improving patient care. **Keywords:** outcome feedback, treatment outcome, patient care