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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