training is routinely used to achieve excellence in competitive sports, martial arts, military operations, and music. Surgical cricothyrotomy is a rarely performed safety critical task. **Methods:** Two doctors and three nurses developed stepwise team microskills checklists from case review, simulations and published evidence. The checklist was tested, evaluated and developed during four days of simulation faculty team training. The final 30 item checklist was used to facilitate skills training for doctors, nurses, respiratory therapists and ACPs in one level 2, and two level 3 trauma centers from April 2017 to October 2017. Commonly available airway trainers were retrofitted with the 3-D printed larynx. The microskills checklist was used in four phases: 1. Group discussion of each microskill step; 2. Groups of three team members; operator, assistant and microskill facilitator (using the checklist) to enable the deliberate analysis of the teams current performance. Each subtask is performed with immediate peer and where necessary faculty feedback - changes are recorded; 3. Total task run through without interruption - changes are recorded; 4. Repetition and feedback using different team members, manikins, including time pressure. User satisfaction surveys were collected after the skills training session **Results:** Teams were composed of Registered Nurses (8), Physicians (9), and Respiratory Therapists (2). All of the teams experienced a change in practice. The median number of microskills changed for MDs 12/21, RNs 6/12. The commonest changes in practice were equipment preparation (all teams). All professions agreed strongly that the approach produces a positive change in practice (median score 5/5). **Conclusion:** Microskills checklists facilitate cricothyrotomy skill development in interprofessional teams in this provisional analysis.

Keywords: innovations in emergency medicine education, airway management, deliberate practice

P049

Changes in situational awareness of emergency teams in simulated trauma cases using an RSI checklist

J. P. French, MB, BSc, D. Maclean, K. David, BN, A. McCoy, BN, S. Benjamin, BN, J. Fraser, BN, T. Pishe, MD, P. Atkinson, MB, BCh, BAO, MA, Dalhousie University, Rothesay, NB

Introduction: Situational awareness (SA) is the team understanding patient stability, presenting illness and future clinical course. Losing SA has been shown to increase safety-critical events in multiple industries. SA can be measured by the previously validated Situational Awareness Global Assessment Tool (SAGAT). Checklists are used in many safety-critical industries to reduce errors of omission and commission. An RSI checklist was developed from case review and published evidence.The New Brunswick Trauma Program supports an inter-professional simulation-based medical education program **Methods:** Simulations were facilitated in three hospitals in New Brunswick from April 2017 to October 2017. Learner profiles were collected. The SAGAT tool was completed by a research nurse at the end of each scenario. SAGAT scores were non-normally distributed, so results were expressed as medians and interquartile ranges. Mann Whitney U tests were used to calculate statistical significance. To understand the effect of the of an RSI checklist a comparison was made between SAGAT scores at baseline in scenario 1, and the same first scenario completed after a washout period. A Poisson regression analysis will be used to account for the effect of confounding variables in further analyses. **Results:** The group was composed of Registered Nurses (8), Physicians (7), and Respiratory Therapists (2). Situational awareness increased significantly with the use of an RSI checklist after 1 day of 4 simulations. The washout period ranged between 5 weeks and 8 weeks. The baseline situational awareness of the whole group during scenario 1 was 9 +/−0.5 (median, IQR), and with the RSI checklist was 12 +/−1 (median, IQR). The difference was highly statistically significant, $p \leq 0.001$. This level of situational awareness using checklist is comparable to the SAGAT scores after 10 scenarios. **Conclusion:** In this provisional analysis, the use of an RSI checklist was associated with an increase in measured situational awareness. Higher levels of situational awareness are associated with greater patient safety. A Poisson regression model will be used to understand the confounding effects of user expertise and the likely interaction with simulation exposure.

Keywords: quality improvement and patient safety, airway management, checklist

P050

How aware is safe enough? Situational awareness is higher in safer teams doing simulated emergency airway cases

J. P. French, MB, BSc, D. Maclean, J. Fraser, BN, S. Benjamin, BN, P. Atkinson, MB, BCh, BAO, MA, Dalhousie University, Rothesay, NB

Introduction: Situational Awareness is the ability to identify, process, and comprehend the critical elements of information about the patient condition, stability, the operational environment and an appropriate clinical course. The Situational Awareness Global Assessment Tool (SAGAT) is a validated tool for measuring situational awareness. The SAGAT tool was measured during a series of standardized high fidelity advanced airway management simulations in multidisciplinary teams in New Brunswick Emergency Departments delivered by two simulation programs **Methods:** Thirty eight simulated emergency airway cases were performed in situ in Emergency Departments and in learning centers in Southern New Brunswick from September 2015 to October 2017. Eight standardized cases were used whose educational objectives were to develop the optimization of critically ill patients prior to induction, to deliver patient-centered anesthesia and to choose an appropriate airway strategy. Learner profiles collected. Cases were divided into two groups; those that contained critical errors and those that did not based on video assessment. Critical errors were defined as failure of 1) Oxygenation, 2) Shock correction, 3) Induction dose estimation, 4) Choice of airway management paradigm. The SAGAT has a maximum score of 13 and was assessed by research nurses after each case for all participants. SAGAT scores were non-normally distributed, so results were expressed as medians with interquartile ranges. Mann Whitney U tests were used to calculate statistical significance. **Results:** Results. Of the 38 cases, 14 contained one more critical errors. The median SAGAT score in the group that contained critical errors was 8 +/−2 (IQR). The median SAGAT Score in the group that contained no critical errors was 11 +/−2 (IQR). The median scores we significantly different with a p-value of 0.02. **Conclusion:** In this study in simulated emergency cases, higher SAGAT scores were associated with teams leaders that did not commit safety critical errors. This work is the initial analysis to develop standards for Simulated team performance in Emergency Department teams.

Keywords: innovations in emergency medicine education, simulation, human factors

P051

Management of subcutaneous abscesses in the emergency department

S. M. Friedman, MD, MPH, A. Al-Den, MB, ChB, D. Porplycia, MSc, Faculty of Medicine, University of Toronto, Toronto, ON

Introduction: We sought to characterize the management of uncomplicated subcutaneous abscesses (SA) by Canadian emergency physicians (EPs). **Methods:** Cross-sectional study of CAEP membership. Subjects were emailed an invitation to an online survey, and two biweekly reminders. Wilcoxon rank sum test was used for association with age, and Chi Square and Fischers exact test were used for binary variables. **Results:** Response rate was 21.2 % (392 Reponses/1850 surveyed). Duration of practice ranged from 30.2 % practising ≤ 5 years, to 25.7% practising ≥ 20 years. Teaching setting was described in 89.1% of responses. Irrigation with saline is performed by 57.1 % of EPs, tap water 2.1 %, or disinfectant 2.1% of EPs, with 39.1% not doing any irrigation. Approximately half (49.2%) typically do not pack or close wounds, while 40.6 % employ ribbon or gauze packing, and 1.6 % primary closure. Antibiotics are generally not prescribed by 16.8%. EPs prescribe antibiotics when suspecting surrounding cellulitis (84.2%), immunocompromised host (51.6%), MRSA (28.9%), or recurrence within 30 days (27.5 %). Cultures are taken almost always by 28.2%, half the time or less by 33.9%, never by 11.6%, and if MRSA is suspected by 33.9%. Follow-up instructions are with FP (56.7%), ED at 24 hours (5.91 %) or 48 hours (17.74 %), or not required (24.7%). Most EPs (90.9%) report having no standardized protocol for abscess management in their ED. EPs with fewer years in practice are more likely to make cruciate incisions ($p = 0.009$), to generally not irrigate incisions ($p = 0.02$), to culture if MRSA is suspected ($p = 0.02$), and to prescribe antibiotics when suspecting MRSA ($p = 0.02$) immune-compromised host ($p = 0.03$), and in case of spontaneous treatment failure or recurrence ($p = 0.0004$). EPs with more years in practice are more likely to pack with ribbon gauze ($p = 0.06$), and to almost always swab for C&S ($p = 0.04$) **Conclusion:** Practice variability and deviations from practice guidelines (i.e. IDSA, Choosing Wisely Canada) are noted. A knowledge translation exercise based on the guidelines for Canadian EPs would be useful.

Keywords: abscess, incision, methicillin-resistant staphylococcus aureus

P052

Utility of data captured by transition referral forms for program evaluation and research

L. A. Gaudet, MSc, L.D. Krebs, MPP, MSc, S. Couperthwaite, BSc, M. Kruhlak, BSc, N. Loewen, E. Zilkalns, K. Clarkson, B.H. Rowe, MD, MSc, Department of Emergency Medicine, University of Alberta, Edmonton, AB

Introduction: Increase in functional decline of older adults after discharge from the emergency department (ED) has been reported; however, evaluations of interventions to mitigate this problem are infrequent. Data collected in the ED on older adults may document functional status, yet their utility for research is unknown. This study aimed to assess the usability of data collected by ED Transition Coordinators (EDTC) during routine assessments for functional decline research. **Methods:** EDTCs assess all patients 75 years old presenting to the ED and complete a standardized Transitional Assessment Referral (TAR) form that documents patients independence and daily functioning. To measure the utility of these forms for research purposes, trained research staff evaluated the TARs completed in April 2017 by TCs in the University of Alberta Hospital ED by extracting data from the TARs into a purpose-built REDCap database. Researchers selected and assessed for completeness and clarity the following variables unique to the TARs: facility vs. non-facility living, goals of care and personal directive, fall history, falls in the past 90 days, independence in 14 activities of daily living (ADLs)/instrumental activities of daily living (IADLS), community services in place, and homecare referrals for discharged patients. The proportion of TARs with data for each variable and the proportion of forms with unambiguous responses in each section are reported. **Results:** Overall, 500 forms were analysed; patients were 41% male with a mean age of 82 (SD = 11.2). Homecare referrals, facility vs. non-facility living, and independence with 14 ADLs/IADLs were the most frequently documented variables (81%, 78%, and 79%, respectively); however for ADLs/IADLs, 59% of the 79% had one or more missing components. While fall history was reported in 301 forms (60%), only 107/301 (36%) reported the number of falls in the last 90 days. The referral to homecare variable was complete in 217/268 (81%) forms; however, 99% of files were missing data about goals of care, personal directives, and receipt of community services. **Conclusion:** Although some information on elderly patients is consistently reported, many of the social service/human factors associated with functional decline are not recorded. While data on the TARs may be useful for studying functional decline in the ED, exploring the barriers to form completion may improve adherence thereby increasing their research utility.

Keywords: transitions in care, elderly, secondary data usage

P053

Characteristics and outcomes of patients seen by transition coordinators in the emergency department

L. A. Gaudet, MSc, L.D. Krebs, MPP, MSc, S. Couperthwaite, BSc, M. Kruhlak, BSc, N. Loewen, E. Zilkalns, K. Clarkson, B.H. Rowe, MD, MSc, Department of Emergency Medicine, University of Alberta, Edmonton, AB

Introduction: Emergency Department (ED) Transition Coordinators (TC) have been introduced to many EDs. In Alberta, the EDTC role was designed to evaluate the home needs of senior patients (75 years of age) to enable safe return home after an ED visit, thereby mitigating admissions and return ED visits. The effectiveness of this role at achieving its objectives has received limited evaluation. **Methods:** TCs assess all ED patients 75 years old, and physicians request TC assessment for patients <75 years. The TC assessment includes completing a Transitional Assessment Referral (TAR) form that collects information on comorbidities, living arrangements, connections to community and homecare services, independence in activities of daily living (ADLs), and referrals, and disposition. Trained research staff extracted data from consecutive TARs for patients presenting during April 2017 into a REDCap database. The proportions of patients seen by TCs who were admitted, had an unplanned return to the ED within the study period, or received a new homecare referral were assessed. Categorical variables are reported as proportions; continuous variables are reported as mean and standard deviation (SD) or median and interquartile range (IQR), as appropriate. **Results:** In April 2017, there were 9849 visits to the ED; of these, TCs assessed 478 patients during 500 visits. The mean age was 82 (SD = 11.2) and 41% were male; 22 patients presented twice during April 2017. Patients had a median of 2 (IQR: 1, 5) co-morbidities and 40 (8%) patients reported falls in the past 90 days (median = 1; IQR: 1, 2). Overall, 144 (29%) patients lived in a care facility, while 204 (41%) lived at home; residence was unclear or not documented for 152 (30%). Patients reported being independent in a median of 9/14 (IQR: 3, 13) ADLs. An existing homecare connection or receipt of homecare services was documented for 185 patients (37%). Finally, 59 (12%) visits included a new or updated homecare referral, while 200 (33%) ED visits ended in admission. **Conclusion:** Elderly patients seen in the ED assessed by EDTCs are complex, and despite being well connected, they frequently need hospitalization. In a small proportion of cases,

https://doi.org/10.1017/cem.2018.249 Published online by Cambridge University Press