Emergency Department Information System (EDIS) database for ten EDs in the health region. Clinical and administrative data points were extracted and examined for each site. **Results**: We analyzed 100,813 ED geriatric patient visits during our study period, accounting for 18.7% of total ED visits to the Edmonton Zone. The five most common triage complaints at ED presentation were shortness of breath, abdominal pain, chest pain with cardiac features, general weakness, and back pain. CTAS scores 1-3 were assigned to 77.8% of geriatric presentations (T: 86.3%, UC: 77.4%, RC: 60.9%). 27.3% of geriatric patients had presented to an ED within the past 30 days (T: 30.0%, UC: 25.4%, RC: 27.7%). On average, 35.3% of older adult ED visits involved a consultation (T: 51.7%, UC 30.8%, RC 14.6%) and approximately 25% of geriatric patients were admitted to hospital during their ED visit (T: 42.8%, UC: 19.4%, RC: 7.1%). The average length of stay (LOS) in the ED (hh:mm) was 10:19 (T: 10:24, UC: 11:38, RC: 5:43). Overall, 2.4% of all geriatric patients left an ED without being seen after initial registration (T: 2.7%, UC: 2.2%, RC: 2.1%). **Conclusion**: Older adults represent a significant proportion of the ED visits in the Edmonton Zone. The triage acuity, LOS, re-presentation, consultation and admission rates varied based on the type of ED, which has implications for resource allocation within the health region. Our results can also direct future targeted initiatives and quality improvement projects to the various types of EDs in the Edmonton Zone, and facilitate planning of ED services for older adults in other health regions who have a similar geographic distribution of care sites.

Keywords: frailty, geriatrics, older adults

P119

Characteristics and outcomes of patients with neurologic complaints who leave the emergency department without being seen

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Introduction: Patients with neurologic chief complaints comprised 12.5% of total visits to the University of Alberta Emergency Department (ED) in 2017. Symptoms are often subjective, transient, or atypical, leading to diagnostic uncertainty. Serious diagnoses require timely intervention to mitigate morbidity and mortality, however the proportion of patients who leave the ED without being seen (LWBS) has increased over time. We sought to analyze the characteristics and outcomes of patients with neurologic complaints who LWBS to identify opportunities for improvement in quality and safety of patient care. **Methods**: Data was extracted from the Emergency Department Information System (EDIS) and National Ambulatory Care Reporting System database to select adult patients presenting to the University of Alberta Hospital in 2017 with neurologic complaints as defined by the Canadian Triage Acuity Scale (CTAS). Using standard descriptive statistics we examined demographic and clinical characteristics to compare LWBS patients to all others. **Results**: Of 8,726 total visits 7.54% patients LWBS. These patients tended to be younger on average (39 vs 55 years), with a larger proportion presenting at night (37.69%) and on Monday. The majority were triaged CTAS 3 (68.69%). Their mean length of stay was shorter than all other visits (3.70 vs 9.51 hours). Headache (22.74%), extremity weakness/symptoms of CVA (20.19%), head injury (14.32%), seizure (8.28%), and sensory loss/paresthesia (8.14%) comprised the top 5 neurologic complaints, and were disproportionately presented in LWBS patients; headache (31.76%), head injury (23.71%), sensory loss/paresthesia (12.01%), seizure (11.25%). Patients who LWBS also re-presented to the ED within 72 hours (21.43%), more often than those discharged by a physician (8.29%). **Conclusion**: Patients presenting with neurologic complaints who LWBS are younger, tend to arrive at night, with less acute presentations, however they more frequently return to the ED within 72 hours than those seen and discharged. Patients who LWBS may benefit from education, physician assessment or closer nurse reassessment at triage to increase the quality and safety of care in the ED, reduce return visits and ED utilization.

Keywords: neurology, triage, utilization

P120

Characteristics and outcomes of patients with neurologic complaints who have an unscheduled return visit to the emergency department within 72 hours

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Introduction: Patients with neurologic presenting complaints comprised 12.5% of total University of Alberta Emergency Department (ED) visits in 2017. This group of patients has high rates of EMS utilization, admission, and ED resources including diagnostic imaging and consult services. We sought to analyze the characteristics and outcomes of the patients with neurologic complaints who have an unscheduled return visit (URV) to the ED within 72 hours to identify opportunities for improvement in quality and safety of patient care. **Methods**: Data was extracted from the Emergency Department Information System (EDIS) and National Ambulatory Care System databases to select adult patients presenting to the University of Alberta hospital in 2017 with neurologic complaints as defined by the Canadian Triage and Acuity Scale (CTAS). We additionally selected for return visits to Edmonton Zone EDs within 72 hours. Using standard descriptive statistics, we examined demographic and clinical characteristics of patients with 72-hour URV. **Results**: Of 8,770 total visits, 674 (7.69%) had a 72-hour URV to an Edmonton zone ED. The URV rate was 9.0% in patients seen by a physician and discharged with approval and 23.4-33.3% in patients who left against medical advice (LAMA), prior to completion of treatment (LPCT), or without being seen by a physician (LWBS). The mean age of URV patients was 45.6 years, 56.5% were male, with a mean ED length of stay of 7.37 hours. The top 5 diagnoses for URV patients were headache, migraine, alcohol related disorders, concussion, and transient ischemic attack. 14.7% of URV patients were admitted, 13.5% LWBS, 1.6% LAMA, 1.6% LPCT, and 66.1% were discharged. **Conclusion**: The majority of neurologic complaint patients with URV within 72 hours are those who LAMA, LPTC, or LWBS at index visit. The admission rate for URV patients (14.7%) is lower than for the index ED visit (55%), however these patients have high LWBS rates. Identifying strategies to limit the LWBS rate for these patients would reduce return visits and improve the quality and safety of patient care.

Keywords: neurology, unscheduled return

P121

Prehospital ultrasound use among Canadian aeromedical service providers – a cross-sectional survey

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Introduction: Evidence suggests that prehospital point of care ultrasound (POCUS) may improve outcomes. It serves as an aid in physical examination, triage, diagnosis, and patient disposition. The rate of adoption of POCUS among aeromedical services (AMS) throughout Canada is unknown. The objective of this study was to describe current POCUS use among Canadian AMS providers. **Methods**: This is a cross-sectional observational study. A survey was emailed to directors of government-funded AMS bases in Canada. Data was analyzed using descriptive statistics. **Results**: The response rate was 88.2% (15/17 AMS directors) and accounted for 42 out of 46 individual bases. POCUS is used by AMS in British Columbia, Alberta, Saskatchewan, and Manitoba. New Brunswick, Nova Scotia, Prince Edward Island, and Yukon are planning to introduce POCUS within the next year. Ontario, Quebec, and Newfoundland are not utilizing POCUS and are not planning to introduce it. BC is the only province currently using POCUS on fixed-wing aircraft. POCUS is used in <25% of missions, most frequently at sending hospital and in flight. Most useful applications were assessment for pneumothorax, free abdominal fluid, and cardiac standstill. Most common barrier to POCUS use was cost of training and maintenance of competence. **Conclusion**: Prehospital POCUS is available in Western Canada with one third of the Canadian population having access to AMS utilizing ultrasound. The Maritimes and the Yukon Territory will further extend POCUS use on fixed-wing aircraft. While there are barriers to POCUS use, those bases that have adopted POCUS consider it valuable.

Keywords: point of care ultrasound, prehospital, ultrasound

P122

Narrative assessment of emergency medicine learners: What should we keep as we move to competency-based assessment?

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Introduction: For many years, Emergency Medicine (EM) educators have used narrative comments to assess their learners on each shift, either in isolation or combined with some type of Likert scale ranking. Competency based medical education (CBME), soon to be fully implemented throughout Canadian EM educational programs, encourages this type of frequent low-stakes narrative assessment. It is important to understand what information is currently garnered from existing narrative assessments in order to successfully and smoothly transition to the CBME system. The purpose of this study was to explore how one Canadian undergraduate EM program's narrative assessment comments mapped to two competency frameworks: one traditional CanMEDS-based and one competency-based, built on entrustable professional activities (EPAs). **Methods**: A qualitative and quantitative content analysis of 1925 retrospective, narrative assessments was conducted for the 2015/2016 and 2016/2017 academic years. The unprompted comments were mapped to the Royal College CanMEDS framework and the Association of Faculties of Medicine of Canada EPA Framework. Using an iterative coding process as per accepted qualitative methodologies, additional codes were generated to classify comments and identify themes that were not captured by either framework. **Results**: 93% and 85% of the unprompted narrative assessments contained comments that mapped to at least one CanMEDS role or EPA competency, respectively. The most common CanMEDS role commented upon was Medical Expert (86%), followed by Communicator, Collaborator and Scholar (all at 23%). The most common EPA competency mentioned related to history and physical findings (62%) followed by management plan (33%), and differential diagnosis (33%). However, 75% of narrative comments contained within the assessments, included ideas that did not fall into either framework but were repeated with frequency to suggest importance. The experiential characteristics of working with a learner were commented upon by 22% of preceptors. Other unmapped themes included contextual information, generalities and platitudes, and directed feedback for next steps to improve. **Conclusion**: While much of the currently captured data can be mapped to established frameworks, important information for both learner and assessor may be lost by limiting comments to the competencies described within a particular framework, suggesting caution when transitioning to a CBME assessment program.

Keywords: competency based medical education, medical student, narrative assessments

P123

Retrospective review of transfusions for anemia ordered in the emergency department and concordance with guidelines

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Introduction: Iron Deficiency Anemia (IDA) is a common presentation to the emergency department (ED) and is often treated with red blood cell transfusions. Choosing Wisely and the American Association of Blood Banks released guidelines in 2016 outlining under what circumstances transfusions should be given for patients with IDA. Few well-powered studies have looked at the impact of these guidelines on transfusions in EDs. The goal of this study was to examine the number of RBC transfusions that were given in EDs in Calgary, Alberta from 2014-2018 and what proportion of these were potentially avoidable (PA). **Methods**: We analyzed 8651 IDA patient encounters from 2014–2018 at four centers in the Calgary Zone. A transfusion was considered PA if the patient's hemoglobin (hgb) was ≥70 g/L AND if the patient was hemodynamically stable. We performed descriptive statistics to assess the number of transfusions and the number of avoidable transfusions. We used chi-squared tests to determine if there were significant differences between site, time-period, hemoglobin level. **Results**: In total, 990 (11.4%) of the encounters received transfusions; 711 (71.8%) were indicated while 279 (28.1%) were PA. Out of the transfusions that were indicated, 230 (32.3%) were given to patients with a hgb <70 g/L and 481 (67.7%) were given to patients with a hgb >70 g/L but who were hemodynamically unstable. Out of the transfusions that were PA, the highest number were given to those in the 71-80 g/L hgb group (142) and the lowest number were given to those in the 110-130 g/L hgb group (9), a difference that was statistically significant ($p < 0.001$). The PA transfusion rates from 2014 to 2018 were 30.8%, 25.6%, 34.5%, 23.6%, 20.7% respectively, which was a statistically significant difference ($p = 0.004$). **Conclusion**: Our data suggest that the number of PA transfusions at the hospitals in the Calgary zone is comparable to the rates reported in the existing literature. In addition, the rate of PA transfusions has decreased since the release of the guidelines. A limitation of the present study was that it did not look at the number of units of red blood cells transfused and since many patients receive more than one unit, it is possible that the number of PA transfusions was underestimated. Nevertheless, we intend to use our results to create a safer and more cost-effective approach to managing IDA.

Keywords: Transfusions for Anemia

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