

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, LPCT, 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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