

difficult peer review decisions. In addition, the intern learned about CJEM values and norms by participating in monthly videoconference meetings and quarterly editorial board meetings. To enhance an academic career, the intern was assigned two writing projects under the guidance of senior editors for publication in CJEM, and completed an online critical appraisal course. **Conclusion:** The inaugural editorial intern gained experience as an editor and produced scholarly work. We feel the internship met its first two goals, and CJEM has committed to continue the internship annually. The ultimate determination of whether the internship achieved its third goal will only be known after longitudinal tracking of participants career involvement in academic publishing and editing.

Keywords: innovations in emergency medicine education, knowledge translation, medical writing

LO13

Eye care in the emergency department: what proportion of patients presenting to the emergency department with isolated eye related complaints could alternatively be seen by an optometrist?

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Introduction: Approximately 2-3 percent of emergency department (ED) visits are due to eye-related complaints, adding to the ED workload. Many of these could be seen instead by an optometrist who specializes in the examination, diagnosis and treatment of eye-related disorders. We sought to determine the proportion of ED patients with isolated eye-related complaints that could be managed by an optometrist. **Methods:** We performed an administrative database study and descriptive analysis of all patients presenting to Calgary EDs with eye-related complaints during a one-year period. We determined optometry eligibility by reviewing discharge diagnoses and assessing whether that condition was within the Alberta Association of Optometry (AAO) defined scope of practice. Patients were considered ineligible if their condition was related to bites, stings, thermal burns, assault, MVA or operative complications; if they required hospitalization or referral to a non-eye specialist (e.g. neurology); if they had associated headache, dizziness, syncope, hypertension, neurologic abnormality (e.g. diplopia); if they had facial cellulitis, orbital infections, adverse drug effects, or if they underwent observation in the ED because of concerns about a cardiac or neurological condition. **Results:** In 2015, 7686 patients were seen in Calgary's 5 EDs with eye related complaints. Of these, 76.2% were optometry-eligible and 75% of optometry-eligible patients arrived during day or evening hours (0800-2100). The most common presenting complaints were visual disturbance (24.8%), redness (22.1%), and pain or photophobia (16.4%). Optometry-eligible patients waited an average of 110 min and had an ED LOS of 149 min. **Conclusion:** Approximately 3 in every 4 patients seen in the ED for eye related complaints could alternatively be seen by an optometrist. Further research is required to establish the feasibility of diversion to an optometrist from the ED for eye-related complaints.

Keywords: quality improvement and patient safety, eye care, emergency department

LO14

In emergency department, do serum biomarkers are useful to screen independent frail seniors exposed to functional or mobility impairments after a minor injury?

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Introduction: Frailty is a geriatric syndrome conferring a high risk of declining functional capacities. Some serum biomarkers were associated with frailty, but no study has investigated this possible association among community-dwelling seniors with minor injuries in the emergency department (ED). The aim was to determine if ED serum biomarker assay combined with frailty status improve the prediction of 3-months functional or mobility impairments in this population, beyond frailty status alone. **Methods:** This prospective sub-study of the CETI cohort includes 190 participants (age 65 years, ED consultation within 2 weeks of a minor injury, independent in daily activities 4 weeks prior to injury, and discharged home from EDs). Biomarkers were obtained from blood samples at baseline (ED visit). Normal vs. at risk physiological states were defined according to clinical threshold values. Also, the patients were screened for frailty at baseline) while their functional (OARS scale) and mobility characteristics were assessed at the ED visit and 3 months later. Patients were classified as robust or pre-frail/frail according of the CHSA-CFS and SOF scales. Simple generalized linear models with a binomial distribution and a log link function were used to explore the differences in functional and mobility outcomes at three months across sub-groups (RR). **Results:** When compared to robust ones, ED pre-frail/frail patients were less functional in their instrumental activities of day living ($p=0.004$), slower walkers ($p=0.02$), more frequent users of walking aids ($p=0.03$), more fearful of falling ($p=0.006$), went outside their home less often weekly ($p=0.004$) and had higher abnormal creatinine levels ($p=0.02$). We observed an overall 3-month functional decline in around 10% of patients combined with worsened mobility characteristics. We found that vitamin D [RR: 0.51 (0.07-3.9)], glucose (RR: 0.27 [(0.03-2.16)]) and creatinine (RR: [1.10 [(0.40-2.97)]) modulate the prediction of 3-months mobility impairments. However, ED frailty status with CHSA-CFS and SOF scales clearly remained the stronger predictor of mobility impairments [vitamin DRR: 2.93 (1.12-7.65); glucoseRR: 2.36 (0.85-6.55); creatinine: RR2.06 (1.21-3.53)]. **Conclusion:** Since they do not improve the prediction of 3-months functional or mobility impairments associated with frailty status, ED biomarker assays are not useful in adequately screening for frailty among independent seniors with minor injuries.

Keywords: emergency department, geriatrics, frailty

LO15

Treatment of asymptomatic bacteriuria in elderly patients with delirium: a systematic review

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Introduction: It is typical to look for UTI in delirious elderly patients, despite a high prevalence of asymptomatic bacteriuria (ASB) in this population. A common presentation of infection is delirium, which often has a non-specific and multifactorial etiology. Therefore, when bacteriuria is present with delirium in the absence of urinary symptoms, physicians prescribe antibiotics for the suspected UTI-induced delirium. We set to determine whether antibiotic treatment in the elderly presenting with delirium in the presence of ASB resulted in resolution of delirium. **Methods:** Literature searches were performed in MEDLINE, EMBASE, CINAHL and Cochrane Library. Abstracts were independently reviewed by two authors for decision to include for full-text review. Inclusion criteria included female gender, >65 years of age, presenting in an acute care setting with delirium and ASB. The primary outcome was resolution of delirium. The secondary outcomes were mortality, frequency of side effects from antibiotics, length of hospital stay and readmission for delirium. **Results:** 930 abstracts published from 1946-2017 were screened, and 42 were included for full text