

assessment to inform the structure and content of a GHEM Certificate Program. Phase 1 consisted of 9 interviews with Program Directors (PDs), Assistant PDs, and past fellows from existing GH fellowships in Canada and USA to understand program structure, curriculum, fieldwork and funding. In Phase 2 we interviewed 4 PDs and fellows from UofT fellowship programs to understand local administrative structures. In Phase 3 we collected feedback from 5 UofT residents and 7 faculty with experience in global health to assess interest in a local GHEM Program. All interview data was reviewed and best practices and lessons learned from key stakeholders were summarized into a proposed outline for a 6-month GHEM Certificate Program. **Curriculum, Tool, or Material:** The Program will comprise of 1) 3 months of preparatory work in Toronto followed by 2) 3 months of fieldwork in Addis Ababa, Ethiopia. Fieldwork will coincide with activities under the Toronto-Addis Ababa Academic Collaboration in Emergency Medicine (TAAAC-EM). The GHEM trainee's work will support TAAAC-EM activities. Preparatory months will include training in specific competencies (POCUS, teaching, tropical medicine, QI) and meetings between the trainee and a UofT mentor to design an academic project. During fieldwork, the trainee will do EM teaching (75% of time) and complete their academic project (25% of time). A UofT supervisor will accompany, orient and supervise the trainee for their first 2 weeks in Addis. Throughout fieldwork, the trainee will be required to debrief with their UofT mentor weekly for academic and clinical mentoring. One AAU faculty member will be identified as a local supervisor and will participate in all evaluations of the trainee during fieldwork. **Conclusion:** This Program will launch with a call for applications in July 2021, expecting the first trainee to complete the Program in 2022-23. We anticipate that this Program will increase the number of Canadian EM trainees committed to global health projects and partnerships throughout their career. **Keywords:** global health, innovations in EM education, postgraduate education

P024

A retrospective chart review of the length of stay of patients presenting to the emergency department with a drug overdose

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Introduction: Patients who present to the Emergency Department (ED) with a drug overdose often require long periods of monitoring. After their initial assessment and stabilization, they spend a significant amount of time in a high cost acute care bed in the ED for monitoring until they are medically cleared for psychiatric care or to be discharged. The shift length at this ED is a maximum of 8 hours; meaning any patients staying over 8 hours must be handed over between physicians, increasing the chance of medical errors. The objective of this study is to examine the total ED length of stay (LOS) of this patient group after physician initial assessment (PIA) to determine if there is there justification for the creation of a toxicology observation or short-stay unit for these patients. **Methods:** A single-centre, blinded retrospective chart review was conducted examining all adult patients presenting to the ED at an urban academic tertiary care centre with a drug overdose in 2018. Variables examined include: Disposition (home, admitted to acute care setting, admitted to non-acute care setting), time from PIA to disposition and total length of stay from PIA to discharge home or admission to hospital. The primary outcome is total length of stay in the ED after PIA. **Results:** A total of 1006 patients presenting with an overdose were included. A

total of 388 patients were admitted with 44% (172) having an ED LOS greater than 8 hours and 36% (138) staying 8 hours after PIA. The median [IQR] LOS in the ED for all patients was 343 minutes [191-565] while the median [IQR] time to PIA was 37 minutes [15-97]. The majority of these patients (54%) were discharged with no consulting services involved, 23% received a consult to psychiatry, 22% were consulted to internal medicine and 5% of patients were consulted to Critical Care Medicine. **Conclusion:** This demonstrates patients presenting to the ED with an overdose are seen in the ED by a physician quickly, however many stay in the department over 5 hours from their initial assessment in a monitored setting. While a majority of these patients are able to go home, 44% of admitted patients wait greater than 8 hours in the ED on monitors. The creation of a toxicology observation unit would be helpful for this population to increase patient safety and ease ED bed congestion.

Keywords: length of stay, overdose, toxicology

P025

Checking the pulse in the 21st century: inter-observer reliability of carotid pulse detection by point-of-care ultrasound

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Introduction: Detection of a pulse is crucial to decision-making in the care of patients who are in cardiac arrest, however, the current standard of manual pulse palpation is unreliable. An emerging alternative is the use of point-of-care ultrasound (POCUS) for direct assessment of the carotid pulse. The primary objective of this study is to determine the inter-observer reliability for healthcare provider interpretation of the carotid pulse by POCUS in patients who are peri-arrest or in cardiac arrest. **Methods:** We conducted a web-based survey of healthcare providers. Participants were shown a tutorial demonstrating POCUS detection of the carotid pulse and then asked to interpret 15 carotid pulse ultrasound clips from patients who were peri-arrest or in cardiac arrest. The primary outcome was inter-observer reliability for carotid pulse assessment. Secondary outcomes included inter-observer reliability stratified by healthcare provider role and POCUS experience, mean tutorial duration, mean pulse assessment duration, rate of pulse assessments < 10 seconds, and change in participant confidence before and after the study. Inter-observer reliability was determined by Krippendorff's α . Change in participant confidence was determined by Wilcoxon signed-rank test. **Results:** 68 participants completed our study, with a response rate of 75% (68/91). There was near perfect inter-observer reliability for pulse assessment amongst all study participants ($\alpha=0.874$, 95% CI 0.869, 0.879). Senior residents ($n=24$) and POCUS experts ($n=6$) demonstrated the highest rates of inter-observer reliability, $\alpha=0.902$ (95% CI 0.888, 0.914) and $\alpha=0.925$ (95% CI 0.869, 0.972), respectively. All sub-groups had α greater than 0.8. Mean tutorial duration was 31 seconds (SD = 17.5) with maximum duration of 55 seconds. Mean pulse assessment duration was 7.7 seconds (SD = 5.2) with 76% of assessments completed within 10 seconds. Participant confidence before and after the study significantly increased from a median of 2 to a median of 4 on a 5-point Likert-type scale ($z=6.3$, $p<.001$). **Conclusion:** Interpretation of the carotid pulse by POCUS showed near perfect inter-observer reliability for patients who were peri-arrest or in cardiac arrest. Participants required minimal training and indicated improved POCUS pulse assessment confidence after the study. Further work must be done to determine the impact of POCUS pulse assessment on the resuscitation of patients in cardiac arrest.

Keywords: cardiac arrest, pulse check, ultrasound

P027

Development of a physician assistant lead stroke protocol to provide timely and equitable access to hyperacute stroke care in a telestroke community hospital

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Background: The Brant Community Healthcare System (BCHS) has consistently been well above the recommended 30 minute benchmark for door-to-needle (DTN) for eligible acute stroke patients. As a large community hospital with no neurologists, and like many other hospitals internationally, we rely on telestroke support for every stroke case. This is a time-consuming process that requires a multitude of phone calls, and pulls physicians from other acutely ill patients. We sought to develop a system that would streamline our approach and care for hyperacute stroke patients by targeting improvements in DTN. **Aim Statement:** We will decrease the door-to-needle (DTN) time for stroke patients arriving at the BCHS Emergency Department (ED) who are eligible for tissue plasminogen activator (tPA) by 25% from a median of 87 minutes to 50 minutes by March 31, 2018 and maintain that standard. **Measures & Design:** Outcome Measures: Door-to-needle time for acute stroke patients receiving tPA Process Measures: Door-to-triage time, Door-to-CT time, Door-to-CTA time; INR collection-to-verification time, telestroke callback time Balancing Measures: Number of stroke protocol patients per month Model Design: We simultaneously designed and implemented a robust program to train physician assistants in hyperacute stroke care. **Evaluation/Results:** Through vast stakeholder engagement and implementing a multitude of change ideas, by March of 2018 we had achieved an average DTN of 53 minutes. Our door-to-triage time went from an average of 7 minutes to 3 minutes. Our door-to-CT time decreased from 17 minutes to 7 minutes and our time between CT and CTA from an average of 13 minutes to 3 minutes. One and a half years later, our average DTN is maintained at 55 minutes and physician assistants continue to effectively lead and liaise with telestroke neurologists and stroke patients. **Discussion/Impact:** Prior to this program, acute stroke care was a very contentious topic at our local community hospital. Creating a program that streamlined the care and standardized the work has proven successful, and not only allowed for improved DTN times but also freed up physicians to better simultaneously care for other acutely ill patients.

Keywords: door-to-needle time, quality improvement and patient safety, stroke

P028

Antibiotic prescribing and use of corticosteroids for the emergency department management of acute pharyngitis

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Introduction: Acute pharyngitis is a common emergency department (ED) presentation. The Centor (Modified/McIsaac) score uses five criteria (age, tonsillar exudates, swollen tender anterior cervical nodes, absence of a cough, and history of fever) to predict Group A Streptococcus (GAS) infection. The recommendation is patients with a Centor score of 0-1 should not undergo testing and should

not be given antibiotics, patients with a score of 2-3 may warrant throat cultures, and for patients with a score ≥ 4 , empiric antibiotics may be appropriate. Associated pain is often first managed with acetaminophen or non-steroidal anti-inflammatory drugs, however recent evidence suggests a short course of low-to-moderate dose corticosteroids as adjunctive therapy may reduce inflammation and provide pain relief. The objective of this study was to describe the ED management of acute pharyngitis for adult patients presenting to an academic ED over a two-year study period. **Methods:** This was a retrospective chart review of all adult (> 17 years) patients presenting to Mount Sinai Hospital ED with a discharge diagnosis of acute pharyngitis (ICD-10 code J02.9) from January 1st 2016 to December 31st 2018. Trained research personnel reviewed medical records and extracted data using a computerized, data abstraction form. **Results:** Of the 638 patients included in the study, 286 (44.8%) had a Centor score of 0-1, 328 (51.4%) had a score of 2-3, and 24 (3.8%) had a score of ≥ 4 . Of those with a Centor score of 0-1, 83 (29.0%) had a throat culture, 88 (30.8%) were prescribed antibiotics, 15 (5.2%) were positive for GAS and 74 (25.9%) were given corticosteroids in the ED or at discharge. Of those with a Centor score of 2-3, 156 (47.6%) had a throat culture, 220 (67.1%) were prescribed antibiotics, 44 (13.4%) were positive for GAS, and 145 (44.2%) were given corticosteroids. Of those with a Centor score ≥ 4 , 14 (58.3%) had a throat culture, 18 (75.0%) were prescribed antibiotics, 7 (29.2%) were positive for GAS and 12 (50.0%) were given corticosteroids. **Conclusion:** As predicted, a higher Centor score was associated with higher risk of GAS infection, increased antibiotic prescribing and use of corticosteroids. Many patients with low Centor scores were prescribed antibiotics and also had throat cultures. Further work is required to understand clinical decision making for the management of acute pharyngitis.

Keywords: antibiotic, corticosteroids, pharyngitis

P029

Requesting prescriptions in the emergency department: the patient, the request and the response

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Introduction: Patients presenting to the Emergency Department (ED) for the sole purpose of requesting prescriptions are problematic. Problematic for the patient, who may have a long wait to be seen and may leave dissatisfied. Problematic for the ED physician, who is in the business of episodic not comprehensive care and is diligently trying to avoid the misappropriation of medications. The primary objective of this study was to determine the characteristics of patients who present to the ED or Urgent Care Centre (UCC) requesting a prescription, the nature of these requests and the resulting action by the attending physician. The secondary objective was to determine the proportion of medication requests and responses that have potential street value. With this knowledge we may be better positioned to serve these patients and support physician decision-making. **Methods:** This was a single-centre, retrospective electronic chart review looking at all adult patients with a presenting complaint of medication request who attended a two-site tertiary ED or an Urgent Care Centre (UCC) in London, Ontario between April 1, 2014 and June 30, 2017. Data was tested for normality and analyzed using descriptive statistics. **Results:** A total of 1923 cases met the inclusion criteria. Cases were removed ($n = 421$) if it was unclear which prescription was requested or if a non-medication prescription or injection was requested. The patient median (IQR) age was 44 (32-54) with 58% being male and