equipment, environment layout, workflow, system processes, effective team training, and ultimately patient safety.
Keywords: simulation, trauma, patient safety

Posters Presentations

P001

Concussion patients in the emergency department: assessing a new triaging tool for follow-up and prompt long term management

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Introduction: Concussion is a common emergency department (ED) presentation. Most patients improve with expectant management. A subset with risk factors for post-concussion syndrome (PCS) may require closer outpatient follow-up. A novel emergency department (ED)/head injury clinic (HIC) triaging system has been created to allow concussed patients rapid access to educational information and specialized consultant services. This system has been well received by patients and physicians alike; however, objective measures are needed to determine if this system ultimately decreases excessive healthcare utilization (HCU) and improves symptom management of PCS. **Methods:** Single centered prospective observational study. Control population of 42 mTBI patients referred to the HIC through the Ontario Acquired Brain Injury (ABI) Network within 3-12 months of injury. These patients have received little concussion education or treatment and will be compared to 50 concussion patients seen in the ED and HIC. Rivermead scores, a validated likert scale of PCS symptoms (1-4, maximum score of 64) and HCU (patient reported number of healthcare visits post injury) will be collected on their initial clinic visit and subsequent follow up phone interview. **Results:** Control ABI network patients were 50% male, mean age 40 yrs (18-90, ± 16.3) while 83% (35/42) reported >1 subsequent visit to ED or family physician and 39% (16/42) visited neurologist. Mean Rivermead Score was 32.6 (7-58, ± 12). **Conclusion:** A significant proportion of control patients utilized multiple healthcare resources and were still symptomatic 3-6 months following injury. Data collection is currently ongoing to determine if rapid outpatient follow-up and education decreases HCU and PCS symptoms.
Keywords: concussion, triaging tool, Rivermead

P002

Ten patients, one ventilator: how to best allocate critical care resources during mass disaster

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Introduction: Any large-scale disaster may place a hospital system in a precarious position. Planning is fundamental to facilitate an equitable process for allocating scarce critical care resources, yet there is a paucity of literature guiding protocol development, and few Canadian hospitals have done this planning. We performed a scoping review of the available literature, and used this data to develop a hospital-wide policy to guide critical care resource allocation as part of the hospital emergency management planning process. **Methods:** A primary search of MEDLINE (1946-2015), EMBASE (1980-2015), Disaster Lit (2002-2010) and Pubmed focusing on *a priori* criteria was completed. A secondary search of the grey literature served to increase sensitivity and rigor. Two independent reviewers manually reviewed the citations, and selected eligible abstracts for full-text. Qualitative thematic analysis was undertaken of the selected articles. The results then informed the development of a hospital-wide policy and protocol to guide critical care resource allocation. **Results:** The search identified 832 citations; 134 papers were reviewed and 11 selected for qualitative analysis. All included papers were expert opinion and reviews. All suggested that an ethical framework be used; eight discussed this in detail. Ten recommended allocating a triage team to implement the protocol. Nine papers recommended specific resource allocation protocols with inclusion/exclusion criteria, physiologic scores, and reassessment at varying time intervals (12-120 hours). **Conclusion:** Effective planning, prior to a disaster, is critical to saving as many lives as possible. Based on our scoping review, we have developed a hospital-wide protocol that incorporates ethical principles and clear inclusion and exclusion criteria, to help avoid inequity and promote transparent decision-making. Next steps include a public consultation process and review, prior to implementation testing and educational roll-out.
Keywords: critical care, mass disaster, policy development

P003

Do all clavicle fractures in children need to be managed by orthopaedic surgeons?

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Introduction: Although many uncomplicated pediatric fractures do not require routine long-term follow-up with an orthopedic surgeon, practitioners with limited experience dealing with pediatrics fractures will often defer to a strategy of frequent clinical and radiographic follow-up. Development of an evidence-based clinical care pathway can help unnecessary radiation exposure to this patient population and reduce costs to patient families and the healthcare system. **Methods:** A retrospective analysis including patients who presented to the Hospital for Sick Children (SickKids) for management of clavicle fractures was performed**. Results:** Three hundred and forty patients (227 males, 113 females) with an average age of 8.1 (range 0.1-17.8) were included in the study. The mean number of clinic visits including initial consultation in the emergency department was 2.1 (±1.3). The mean number of radiology department appointments was 1.8 (± 1.3) where patients received a mean number of 4.2 (±3.0) radiographs. Complications were minimal; 2 refractures in our series and no known cases of non-union. All patients achieved clinical and radiographic union and returned to sport after fracture healing. **Conclusion:** Our series suggests that the decision to treat operatively is made at the initial assessment. If no surgical indications were present at the initial assessment by the primary-care physician, then routine clinical or radiographic follow up is unnecessary. Our paediatric clavicle fracture pathway will reduce patient radiation exposure and reduce costs incurred by the healthcare system and patients' families without jeopardizing patient outcomes.
Keywords: clavicle fracture, clinical pathway, management

P004

What happens to cognitive load during trauma skill training using computer based video instructions?

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Introduction: In the clinical settings, emergency physicians are faced with situations that require multitasking such as interacting with other team members, documentation and utilization of computer resources whiles ensuring competency on a particular trauma skill. The purpose of

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