moderate correlation between physicians predicted and actual practice with respect to viral testing (r = 0.67), but minimal correlation for CXR (0.05), steroids (r = 0.17) or Ventolin (r = 0.33) ordering. **Conclusion:** The finding that physicians have a limited ability to accurately predict their own performance emphasizes the importance of providing physicians with feedback. However, our results suggest that the consent process may be a potential barrier to effective A &F.

Keywords: bronchiolitis, audit and feedback

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Organ and tissue donation from poisoned patients in the emergency department: a Canadian perspective

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Introduction: Screening for organ and tissue donation is an essential skill for emergency physicians. In 2015, 4564 individuals were on a waiting list for organ transplant and 242 died while waiting. As Canadas donation rates are less than half that of other comparable countries, it is crucial to ensure we are identifying all potential donors. Patients deceased from poisoning are a source that may not be considered for referral as often as those who die from other causes. This study aims to identify if patients dying from poisoning represent an under-referred group and determine what physician characteristics influence referral decisions. **Methods:** In this cross-sectional unidirectional survey study, physician members of the Canadian Association of Emergency Physicians were invited to participate. Participants were presented with 20 organ donation scenarios that included poisoned and non-poisoned deaths, as well as one ideal scenario for organ or tissue donation used for comparison. Participants were unaware of the objective to explore donation in the context of poisoning deaths. Following the organ donation scenarios, a range of follow-up questions and demographics were included to explore factors influencing the decision to refer or not refer for organ or tissue donation. Results were reported descriptively and associations between physician characteristics and decisions to refer were assessed using odds ratios and 95% confidence intervals. **Results:** 208/2058 (10.1%) physicians participated. 25% did not refer in scenarios involving a drug overdose (n = 71). Specific poisonings commonly triggering the decision to not refer included palliative care medications (n = 34, 18%), acetaminophen (n = 42, 22%), chemical exposure (n = 48, 27%) and organophosphates (n = 87, 48%). Factors associated with an increased likelihood to refer potential donors following overdose included previous organ and tissue donation training (OR = 2.6), having referred in the past (OR = 4.3), available donation support (OR = 3.9), greater than 10 years of service (OR = 2.1), large urban center (OR = 3.8), holding emergency medicine certification (OR = 3.6), male gender (OR = 2.2, CI), and having indicated a desire to be a donor on government identification (OR = 5.8). **Conclusion:** Scenarios involving drug overdoses were associated with under-referral for organ and tissue donation. As poisoning is not a contraindication for referral, this represents a potential source of donors. By examining characteristics that put clinicians at risk for under-referral of organ or tissue donors, becoming aware of potential biases, improving transplant knowledge bases, and implementing support and training programs for the organ and tissue donation processes, we have the opportunity to improve these rates and reduce morbidity and mortality for Canadians requiring organ or tissue donation.

Keywords: organ donation, poisoning, tissue donation

P147

Clinical characteristics and system factors of elderly treated for agitation in the emergency department: a data driven approach

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Introduction: Aligning health systems appropriately to the needs of the elderly is an urgent global priority, according to the WHO. In Canada, ED length of stay has risen 16% for elderly patients in the last year. Agitation requiring chemical restraint is a common, high-risk problem for elderly in the ED. Improving outcomes in this heterogeneous population remain difficult due to inability to effectively identify and evaluate delirium, frailty, multi-morbidity, and incompatibility with the ED system. A data-driven approach to complex health problems is a recognized emerging tool for healthcare innovation. New opportunities for targeted quality improvement in the ED will be uncovered by identifying the clinical characteristics of elderly patients with agitation, and the system process factors that influence their outcomes. **Methods:** We studied 400 patients in a case-control study at two tertiary-care EDs over five years. Patients were randomly selected if age was greater than 75 years. 200 cases of patients who received an intravenous dose of haloperidol, midazolam and/or lorazepam were selected as a surrogate data marker for having agitation. Controls were randomly matched by age and ED diagnosis. Standardized clinical, systems and process variables were collected. We conducted a univariate analysis. **Results:** Elderly given intravenous medications for agitation had increased mortality (OR 3.8 CI: 1.6-10.7, $p < 0.001$) and ED length of stay (27 vs. 15 hours, $p < 0.001$). No statistical significance was found in clinical characteristics, CTAS scores, PRISMA7 frailty scores nor sentinel or return visits. There was no statistical difference in median hospital length of stay (8 vs. 6 days, $p < 0.70$). No differences were found in median time from ED physician seeing a patient to first consultant request (73 vs. 83 mins, $p = 0.75$). The largest time intervals contributing to ED length of stay were from first consultant request to hospital request (15 vs. 12 hours, $p = 0.056$) and hospitalization delay (13 vs. 7 hours, $p = 0.45$). **Conclusion:** Identification of high-risk elderly patients for targeted intervention through a data-driven approach is feasible and informative. Traditional clinical characteristics remain unhelpful in identifying and evaluating outcomes in elderly with agitation. We have identified a process factor that is clinically relevant and pragmatic to evaluate in our ED system. Future research focused on optimizing systems process factors to improve quality of elderly care should be prioritized.

Keywords: elderly, agitation, data driven

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What do surgeons expect of the emergency department in the diagnosis and management of pediatric appendicitis?

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Introduction: The optimal diagnostic strategy for children presenting to the Emergency Department (ED) with suspected appendicitis (SA), the most common non-traumatic surgical emergency in children, remains unclear. This study aims to identify which investigations and management priorities are preferred by Canadian surgeons prior to consultation from the ED. **Methods:** An internet survey was extended to practicing surgeons who are members of the Canadian Association of Pediatric

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