to additional training. Our study emphasizes that our physicians have the skill set to identify and provide care for sepsis using their clinical judgment in cases that may not require protocolized based care.
Keywords: early goal directed therapy (EGDT), sepsis, resuscitation

P067
Missed opportunities for prehospital management of anaphylactic reactions
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Introduction: Emergency medical services (EMS) have the opportunity to treat allergic reactions anaphylactic reactions rapidly. However, the rate of recognition and treatment is unknown. **Methods:** This was a retrospective cohort study conducted at two urban emergency departments from 2007 to 2012 including adult patients with allergy and anaphylaxis, both of which were predefined by explicit criteria. The patients of interest were those attended by EMS and transported to hospital. The primary outcome was the proportion of patients who met anaphylaxis criteria in the prehospital setting, but who did not have epinephrine administered. The secondary outcome was the proportion of patients who did not meet anaphylaxis criteria, yet had epinephrine administered. **Results:** Of 2819 overall patients, 491 (17.4%) arrived by EMS. The median age was 38 (IQR 27 to 49) and 60.9% were female. For the 151 (30.8%) patients with anaphylaxis, 55 received ephinephrine, (36.4%, 95% CI 27.4 to 47.4%). For the 340 (69.2%) patients without anaphylaxis, 28 received ephinephrine (8.2%, 95% CI 5.5 to 11.9%). **Conclusion:** For patients with anaphylaxis and allergic reactions who are managed by EMS, there may be a mismatch between illness severity and treatment.
Keywords: anaphylaxis, epinephrine

P068
Developing a standardized knowledge dissemination tool for communicating the need for Choosing Wisely© in Alberta's emergency departments
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Introduction: Standardized tools for disseminating knowledge summaries of low value or unnecessary care (e.g., testing, procedures and treatments) are limited, but needed to equip clinicians for discussions with patients about care decisions. The objective of this study is to assess the acceptability of a tool developed by our emergency department (ED) team to communicate the evidence supporting the Choosing Wisely Canada© (CWC) and other similar recommendations. **Methods:** A consensus process was used by team members to develop a tool that highlights three areas: Facts, Gaps, and Acts. The Facts portion highlights the current state of knowledge and illustrates the strength of the evidence supporting guideline recommendations. The Gaps section identifies variation in current clinical practice. The Acts section includes larger CWC goals, as well as specific next steps for a demonstration project. Each section contains one key message for clinicians, ensuring the tool is easy to use. **Results:** A test case has been developed for avoiding chest radiographs in patients with an exacerbation of documented asthma. The Facts section reviewed current guidelines for asthma care. The Gaps section collated evidence from a systematic review and primary research. The Acts section recapitulates the CWC recommendations. In order to assess acceptability feedback cycle will be completed using surveys of 50 patients and 50 clinicians. **Conclusion:** While generating the Facts, Gaps, and Acts tool for a CWC recommendation represents a translational activity, evidence of effectiveness is needed prior to widespread implementation. We report the rational and development of a novel tool to engage clinicians and patients in conversations about unnecessary care in the ED.
Keywords: knowledge dissemination, Choosing Wisely

P069
Gestalt assessment of online educational resources is unreliable and inconsistent
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Introduction: The use of free open access medicine, particularly open educational resources (OERs), by medical educators and learners continues to increase. As OERs, especially blogs and podcasts, rise in popularity, their ease of dissemination raises concerns about their quality. While critical appraisal of primary research and journal articles is formally taught, no training exists for the assessment of OERs. Thus, the ability of educators and learners to effectively assess the quality of OERs using gestalt alone has been questioned. Our goal is to determine whether gestalt is sufficient for emergency medicine learners (EM) and physicians to consistently rate and reliably recommend OERs to their colleagues. We hypothesized that EM physicians and learners would differ substantively in their assessment of the same resources. **Methods:** Participants included 31 EM learners and 23 EM attending physicians from Canada and the U.S. A modified Dillman technique was used to administer 4 survey blocks of 10 blog posts per subject between April and August, 2015. Participants were asked whether they would recommend each OER to 1) a learner or 2) an attending physician. The ratings reliability was assessed using single measures intraclass correlations and their correlations amongst the groups were assessed using Spearman's *rho*. Family-wise adjustments were made for multiple comparisons using the Bonferroni technique. **Results:** Learners demonstrated poor reliability when recommending resources for other learners (ICC = 0.21, 95% CI 0.13-0.39) and attending physicians (ICC = 0.16, 95% CI = 0.09-0.30). Similarly, attendings had poor reliability when recommending resources for learners (ICC = 0.27, 95% CI 0.18-0.41) and other attendings (ICC = 0.22, 95% CI 0.14-0.35). Learners and attendings demonstrated moderate consistency between them when recommending resources for learners ($r_s = 0.494$, $p < .01$) and attendings ($r_s = 0.491$, $p < .01$). **Conclusion:** Using a gestalt-based rating system is neither reliable nor consistent when recommending OERs to learners and attending physicians. Learners' gestalt ratings for recommending resources for other learners and attendings were especially unreliable. Our findings suggests the need for structured rating systems to rate OERs.
Keywords: critical appraisal, e-learning, free open access medicine (FOAM)

P070
Improving handovers in the emergency department: implementation of a standardized team approach
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Introduction: Handovers in the ED are a high risk area for breakdown in team communication, discontinuity of patients' clinical course, and potential medical errors. This is especially true for morning handovers at our center, when one single overnight MD working with limited resources hands over the entire ED to an oncoming day team of MDs and allied health professionals. We describe a quality improvement (QI)

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project to implement an inter-professional team approach during handovers. **Methods:** This prospective QI project took place at an academic tertiary care centre with >160,000 ED visits/yr. An expert working group identified key components of the ideal morning handover, and developed an intervention consisting of standardizing the "location", "participants", and "time" components of our handover processes. A research assistant directly observed all 8am handovers for 2 weeks pre- and 2 weeks post-intervention. Outcomes include participant attendance; # of beside RN issues proactively brought forward; frequency of new allied health consults and/or involvement triggered; # of physician interruptions; and time metrics. We report descriptive statistics. **Results:** During the study period a total of 308 individual patient handovers were observed [Pre:162, Post:146]. Average duration of total handover each morning decreased from 24.9min to 16.3min ($p = 0.051$). Frequency of attendance at handovers increased for various allied health professionals, including care facilitators [Pre:35.7%; Post:91.7%, $p = 0.005$], social workers [Pre:7.1%; Post:66.7%, $p = 0.003$], geriatrics EM (GEM) RNs [Pre:64.3%; Post:83.3%, $p = 0.391$], pharmacists [Pre:0.0%; Post:58.3%, $p = 0.001$], and physiotherapists [Pre:0.0%; Post:58.3%, $p = 0.001$]. Number of specific beside RN issues proactively brought forward increased [Pre:0; Post:4, $p = 0.049$], while the number of physician interruptions during handover decreased [Pre:20; Post:0, $p < 0.0001$]. Frequency of new allied health consults and/or involvement triggered as a result of handover participation increased from 6.8% to 13.7% ($p = 0.057$). **Conclusion:** Implementation of a standardized team approach to morning handovers in the ED led to significant improvements in inter-professional contributions to patient care plans and overall efficiency. Future planned phases will build on this QI initiative by standardizing specific content of ED handovers.

Keywords: handover, patient safety, quality improvement

P071

Emergency physician attitudes and perceived barriers to take-home naloxone programs in Canadian emergency departments

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Introduction: Unintentional overdose is the leading cause of injurious death among Americans aged 25-64 years. A similar epidemic is underway in Canada. Community-based opioid overdose education and naloxone distribution (OOEND) programs distribute take-home naloxone kits to people at risk of overdose in several cities across Canada. Due to the high rate of drug-related visits, recurrent opioid prescribing, and routine encounters with opioid overdose, Emergency Departments (ED) may represent an under-utilized setting to deliver naloxone to people at risk of opioid overdose or likely to witness overdose. The goal of this study was to identify Canadian emergency physician attitudes and perceived barriers to the implementation of take-home naloxone programs. **Methods:** This was an anonymous web-based survey of physician and trainee members of the Canadian Association of Emergency Physicians. Survey questions were developed by the research team and piloted for face validity and clarity. Two reminder emails were sent to non-responders at 2-week intervals, per the modified Dillman method. Respondent demographics were collected and Likert scales used to assess attitudes and barriers to the prescription of naloxone from the ED. **Results:** A total of 347/1658 CAEP members responded (20.9%). Of the respondents, 62.1% were male and residents made up 15.6%. The majority (48.2%) worked in Ontario and 55.7% worked in an urban tertiary centre. Overall attitudes to OOEND were strongly positive: 86.6% of respondents identified a willingness to prescribe naloxone from the ED. Perceived barriers included allied health support for patient education (56.4%), access to follow-up (40.3%), and inadequate time in the clinical encounter (37.7%). In addition to people at risk of overdose, 78% of respondents identified that friends and family members may benefit from OOEND programs. **Conclusion:** Canadian emergency physicians are willing to prescribe take-home naloxone to at-risk patients, but better systems and tools are required to facilitate opioid overdose education and naloxone distribution implementation. This data will inform the development of these programs, with emphasis on allied health support, training and education.

Keywords: addiction medicine, opioids, naloxone

P072

Using the Bergman-Paris Question to detect ED seniors' cognitive impairment and functional status

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Introduction: Mild Cognitive Impairment (MCI) remains frequently undiagnosed and Emergency Department (ED) guidelines suggest screening for CI. The Bergman-Paris Question (BPQ) which is currently used in memory clinics, is a one-question screening test administered to the patient's relative; a negative answer suggests presence of CI. We sought to validate if the BPQ would be associated with MCI and functional status in ED elders. **Methods:** A planned sub-study of the prospective MIDI-INDEED study on ED-induced delirium, which included patients from 4 Canadian EDs was realized. Inclusion criteria were: patients ≥65 y.o., with and ED stay ≥8 hours, admitted to the hospital, non-delirious at the end of the first 8 hours and independent or semi-independent. Eligible patients were assessed in ED and at 60 days after ED visit using validated screening tests: the Telephone Interview for Cognitive Status-modified (TICS-m) for CI and the Older Americans Resources and Services scale (OARS) for functional status. The BPQ was asked at any time depending on the availability of a relative. Patients with a TICS-m score <31 are considered to have MCI. Data from patients with incident delirium, and those with documented dementia was individually analyzed. Univariate and multivariate analyses were used to ascertain outcomes. **Results:** 167 patients had a BPQ response, 126 (75.5%) were negative, and 41 positive (24.5%). For MCI, 40 (32.8%) patients of the negative group have a TICS-m below 31 comparatively to 6 (14.3%) for the positive group ($p = 0.2$). The BPQ was significantly associated with functional status. The mean OARS scores were 25.1 (3.9) in the negative group and 27.1 (1.3) in the positive group. This difference was maintained at 60 days. The number of delirium in the negative group was 24 (18%) vs 2 (5%) in the positive group ($p = 0.04$). **Conclusion:** BPQ could provide detection of MCI but further validation in a larger population is needed. BPQ was interestingly associated with ED-induced delirium and dementia. Detection of functional status and frailty shows good results. More research is needed to evaluate the usefulness of the BPQ "single" question for geriatric screening by ED professionals.

Keywords: mild cognitive impairment, delirium, emergency department

P073

Feasibility of emergency department targeted ultrasound for rib fracture diagnosis in minor thoracic injury