amiodarone to non-traumatic OHCA patients was associated with better neurological recovery, especially in those who received fewer electrical defibrillations.
Keywords: cardiac arrest, out-of-hospital, amiodarone

P070

Mixed effectiveness of emergency department diversion strategies: a systematic review

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Introduction: Diverting patients away from the emergency department (ED) has been proposed as a solution for reducing ED overcrowding. The objective of this systematic review is to examine the effectiveness of diversion strategies designed to either direct patients seeking care at an ED to an alternative source of care. **Methods:** Seven electronic databases and grey literature were searched. Randomized/controlled clinical trials and cohort studies assessing the effectiveness of pre-hospital and ED-based diversion interventions with a comparator were eligible for inclusion. Two reviewers independently screened the studies for relevance, inclusion, and risk of bias. Intervention effects are reported as proportions (%) or relative risks (RR) with 95% confidence intervals (CI). Methodological and clinical heterogeneity prohibited pooling of study data. **Results:** From 7,306 citations, ten studies were included. Seven studies evaluated a pre-hospital diversion strategy and three studies evaluated an ED-based diversion strategy. The impact of diversion on subsequent health services was mixed. One study of paramedic practitioners reported increased ED attendance within 7 days (11.9% vs. 9.5%; $p = 0.049$) but no differences in return visits for similar conditions (75.2% vs. 72.1%; $p = 0.64$). The use of paramedic practitioners was associated with an increased risk of subsequent contact with health care services (RR = 1.21, 95% CI 1.06, 1.38), while the use of deferred care was associated with no increase in risk of subsequently seeking physician care (RR = 1.09, 95% CI 0.23, 5.26). While two studies reported that diverted patients were at significantly reduced risk for hospitalization, two other studies reported no significant differences between diverted or standard care patients. **Conclusion:** The evidence regarding the impact of pre-hospital and ED-based diversion on ED utilization and subsequent health care utilization is mixed. Additional high-quality comparative effectiveness studies of diversion strategies are required prior to widespread implementation.
Keywords: emergency department, diversion, pre-hospital

P071

Choosing Wisely in the emergency department: exploring the reach, support and potential for the Choosing Wisely Canada® campaign among emergency physicians

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Introduction: Choosing Wisely Canada® (CWC) launched in April 2012. Since then, the Emergency Medicine (EM) top-10 list of tests, treatments and procedures to avoid has been released and initiatives are on-going. This study explored CWC awareness and support among emergency physicians. **Methods:** A 60-question online survey was distributed to Canadian Association of Emergency Physicians (CAEP) members with valid e-mails. The survey collected information on demographics, awareness/support for CWC as well as physicians' perceived barriers and facilitators to implementation. Descriptive statistics were performed in SPSS (Version 24). **Results:** Overall, 324 surveys were completed (response rate: 18%). Respondents were more often male (64%) and practiced at academic/tertiary care hospitals (56%) with mixed patient populations (74%) with annual ED volumes of >50,000 (70%). Respondents were familiar with campaigns to improve care (90%). Among these respondents, 98% were specifically familiar with CWC and 73% felt these campaigns assisted them in providing high-quality care. Respondents felt that the top-5 EM recommendations were supported by high quality evidence, specifically the first 4 recommendations (>90% each). The most frequently reported barriers to implementation were: patients' expectations/requests (33%), the possibility of missing severe condition(s) (20%), and requirements of ED consultations (12%). Potential facilitators were identified as: strong evidence-base for recommendations (37%), medico-legal protection for clinicians who adhere to guidelines (13%), and support from institutional leadership (11%). **Conclusion:** CWC is well-known and supported by emergency physicians. Despite the low response rate, exploring the barriers and facilitators identified here could enhance CWC's uptake in Canadian emergency departments.
Keywords: emergency department, Choosing Wisely Canada, implementation

P072

Exploring definitions of "unnecessary care" in emergency medicine: a qualitative analysis of physician survey responses

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Introduction: Recently, campaigns placing considerable emphasis on improving emergency department (ED) care by reducing unnecessary tests, treatments, and/or procedures have been initiated. This study explored how Canadian emergency physicians (EPs) conceptualize unnecessary care in the ED. **Methods:** An online 60-question survey was distributed to EP-members of the Canadian Association of Emergency Physicians (CAEP) with valid emails. The survey explored respondents awareness/support for initiatives to improve ED care (i.e., reduce unnecessary tests, treatments and/or procedures) and asked respondents to define "unnecessary care" in the ED. Thematic qualitative analysis was performed on these responses to identify key themes and sub-themes and explore variation among EPs definitions of unnecessary care. **Results:** A total of 324 surveys were completed (response rate: 18%); 300 provided free-text definitions of unnecessary care. Most commonly, unnecessary ED care was defined as: 1) performing tests, treatments, procedures, and/or consults that were not indicated or potentially harmful ($n = 169$) and/or 2) care that should have been provided within a non-emergent context for a non-urgent patient ($n = 143$). Emergency physicians highlighted the role of system-level factors and system failures that result in ED presentations as definitions of unnecessary care ($n = 69$). They also noted a distinction between providing necessary care for a non-urgent patient and performing inappropriate/non-evidenced based care. Finally, a tension emerged in their description of frustration with patient expectations ($n = 17$) and/or non-ED referrals ($n = 24$) for specific tests, treatments, and/or procedures. These frustrations were juxtaposed by participants who asserted that "in a patient-centred care environment, no care is unnecessary" (Participant 50; $n = 12$). **Conclusion:** Variation in the definition of unnecessary ED care is evident among EPs and illustrates that EPs' conceptualization of unnecessary care is more nuanced than current

campaigns addressing ED care improvements represent. This may contribute to a perceived lack of uptake or support for these initiatives. Further exploring EPs perceptions of these campaigns has the potential to improve EP engagement and influence the language utilized by these programs.

Keywords: emergency department, unnecessary care, qualitative

P073

Single and dual vs. standard triple agent regimens for HIV post-exposure prophylaxis in the sexual assault victim population

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Introduction: Although Tenofovir/Emtricitabine was approved in 2012 as a single-agent regimen for pre-exposure prophylaxis, there have been no studies to our knowledge that demonstrate the efficacy of single and dual agent regimens in post-exposure prophylaxis. Our goal was to compare outcomes of post-exposure prophylaxis with single and dual agent regimens versus triple therapy in victims of sexual assault. **Methods:** This was a before and after cohort study of patients seen by the Sexual Assault and Partner Abuse Care Program (SAPACP) at the Ottawa Hospital. We reviewed charts of patients seen by the SAPACP from Jan. 1-Dec. 31 2013, when triple therapy was usual care, and Jan. 1-Dec. 31 2015, after the introduction of alternative regimens. Patients who were deemed high risk or who did not get initial treatment at the SAPACP were excluded. Our primary outcome was the number of patients who completed the entire 28-day post-exposure prophylaxis regimen. Secondary objectives were to assess HIV seroconversion rates and patient reported side effects. **Results:** Six hundred-thirty charts were reviewed, and 429 were included in the study. Baseline characteristics were similar between the two years. We found no significant difference in completion rates of HIV post-exposure prophylaxis between the two cohorts (50.5% vs. 51.6%). However, we did note a decrease in reported side effects in the 2015 cohort (72.2% vs. 17.6%, $p < 0.0001$). In our secondary analysis, we compared all patients in all years who received triple therapy ($N = 128$) versus those who received alternative single or dual agent regimens ($N = 47$). We found that the alternative regimen group had a higher completion rate (66.0% vs. 42.2%; $p = 0.03$), and a dramatic decrease in rate of reported side effects (19.1% vs. 53.9%; $p < 0.0001$). Specifically, we saw decreased reported rates of nausea (12.8% vs. 36.7 %), constipation (0% vs. 7.9%), diarrhea (2.1% vs. 21.1%), mood changes (0% vs. 10.9%), headache (2.1% vs. 16.4%), and fatigue (6.4% vs. 26.6%). There were no HIV seroconversions in either group. **Conclusion:** Our results suggest that single and dual agent HIV post-exposure prophylaxis regimens are better tolerated by patients and associated with higher rates of completion than triple therapy, and should be considered as stand-alone therapy in the sexual assault victim population.

Keywords: human immunodeficiency virus, post-exposure prophylaxis, assault

P074

Clinician gestalt in the evaluation of pulmonary embolism risk factors: the CEPERF study

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Introduction: Pulmonary Embolism (PE) is a difficult to diagnose presentation associated with significant morbidity and mortality. Despite development of risk stratification tools (RST), physician gestalt continues to play a large role in the diagnostic evaluation of PE. Implicit in this gestalt is the evaluation of PE risk factors (RF). It is unknown, however, if physicians are similar and accurate in their assessment of known PE RF. **Methods:** An online survey presented paired comparisons ($n = 55$) of 11 known PE RF to active Emergency Physicians ($n = 20$), Family Doctors ($n = 11$), and Residents (Family Medicine [$n = 20$]; Emergency Medicine [$n = 5$]). The Bradley-Terry Model converted the paired comparisons to rank order lists for the cohorts and these lists were compared. The perceived efficacy and use of RST and gestalt was also assessed across the cohorts. **Results:** The response rate was 72%. Emergency Physicians had the highest perception of gestalt as an effective method of risk stratification (7.4 ± 1.4 out of 10) while Family Medicine Residents had the lowest (5.1 ± 1.9). More than 95% of Emergency Physicians and Residents employed RST (PERC and Wells) compared to 46% of Family Physician respondents. Those who used RST utilized the tools in the majority of their clinical encounters (>75% of the time). There was good agreement between the cohorts in regards to their rank order lists (Tau-b $\geq$ 0.71). Age was identified as a RF which was consistently ranked lower than literature reported values amongst the cohorts. **Conclusion:** Physicians in various practice settings and levels of training rank PE risk factors similarly when forced to compare them. There are important RF, most notably age, which were identified in the current study that were consistently undervalued. This finding may highlight how RST are shaping perceptions of PE RF through their use and how age as a PE RF may warrant more attention in education and clinical assessments.

Keywords: pulmonary embolism, risk factors, gestalt

P075

Constructing entrustment: understanding clinical supervisor dynamics in the oral case presentation

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Introduction: The Oral Case Presentation (OCP) has been described as a unique form of inter-physician communication integral to the practice of medicine and represents the foundation of trainee-supervisor interactions. In recent years, entrustment has been identified as an essential element of trainee supervision and learning. Despite the growing body of knowledge concerning entrustment in medical education, the influence of trust on the educational dynamic surrounding the OCP remains unknown. The objectives of this study were to (1) describe the complex nature of the OCP from the perspective of the supervisor and (2) explore the central role the OCP plays in the dyadic relationship between supervisor and trainee during the delivery of patient care. **Methods:** Using a constructivist grounded theory approach, semi-structured interviews were conducted from 2015 to 2016 with a purposive sample of attending Emergency Medicine (EM) physicians from the University of Ottawa. Transcripts were reviewed independently by two investigators using line-by-line coding and constant comparative analysis. Emerging concepts were coded and key themes identified through consensus. Theoretical sampling occurred until thematic saturation was reached. **Results:** Twenty-one attending EM physicians participated in this study (71% male). The mean number of years in practice was 14. The mean percentage of shifts with a trainee assigned was 86%. Factors relating to entrustment were identified as the principal influences on both the content of the OCP and decisions relating to trainee supervision during the OCP process. These factors included the trainee level, the trainee-supervisor relationship, the context and the task. The OCP was also found to play several important roles as supervisors balanced the delivery of patient care and trainee education. These roles were related to communication, teaching and trainee assessment. **Conclusion:** The OCP

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