excluded. Key variables included rates of post-ROSC emergent angiography, survival to hospital discharge and survival to hospital discharge with favourable neurologic outcome (modified Rankin score 2). **Results:** During the study period, there were a total of 997 OHCA; 86 met exclusion criteria. Of the 911 remaining patients, 557 (61.1%) were transported to a local ED. Of those transported to the ED, 262 (47.0%) achieved sustained ROSC, defined as survival to ED discharge. Of those who achieved sustained ROSC, median age was 65 years (IQR = 21.75), 66.8% were male. ECG interpretation data was available on 214 patients, of whom 56 had definite STEMI, and 135 had definite absence of STEMI. 37/56 (66.1%) definite STEMI patients received coronary angiography within 24 hours of presentation, as per AHA guidelines. 58/262 (22.1%) post-ROSC patients overall received coronary angiography within 24 hours of presentation to the ED. Of those 58 patients who received emergent angiography, 38 (65.5%) underwent percutaneous coronary intervention (PCI). No patients received fibrinolysis. Of post-ROSC patients who received emergent coronary angiography, 40/58 (69.0%) survived to hospital discharge and 37/58 (63.8%) survived with good neurologic outcome. In comparison, 55/204 (27.0%) who did not receive emergent angiography survived to hospital discharge and 18.8% survived with good neurologic outcome. **Conclusion:** Only 22.1% of patients with OHCA, and only 66.1% with ECG-proven STEMI underwent emergent coronary angiography post-ROSC. Further investigation into causes for delay or the withholding of emergent angiography is necessary.
Keywords: cardiac arrest, angiography

P021

Outcomes of out of hospital cardiac arrest in London, Ontario

M. D. Clemente, MD, K. Woolfrey, MD, K. Van Aarsen, MSc, M. Columbus, PhD, Division of Emergency Medicine, Western University, London, ON

Introduction: Out of hospital cardiac arrest (OHCA) continues to carry a very high mortality rate, with approximately 10% surviving to hospital discharge. We sought to determine if outcomes from out of hospital cardiac arrest (OHCA) at our centre were consistent with recently published North American outcomes data from the Resuscitation Outcomes Consortium (ROC). **Methods:** We performed a retrospective analysis (Sept 2011 June 2015) of the Resuscitation Outcomes Consortium (ROC) database, which contains pre-hospital, in-hospital and outcomes data on adult, EMS-treated, non-traumatic OHCA. Patients under 18 years, with missing age data or with obvious non-cardiac causes of arrest were excluded. **Results:** During the study period, there were a total of 997 OHCA; 86 met exclusion criteria. Of the 911 remaining patients, 557 (61.1%) were transported to a local ED. 92 (35.1%) were receiving ongoing CPR at the time of their presentation to the ED. Of those transported to the ED, 262 (47.0%) achieved sustained ROSC, defined as survival to ED discharge. A total of 95 patients survived to hospital discharge (36.3% of patients who achieved sustained ROSC, 17.1% of those who were transported to the ED, and 10.4% of the all OHCA). Of those who survived to hospital discharge who had neurologic outcome data, 90.5% had a modified Rankin score of 2. Initial presenting rhythm with EMS was ventricular fibrillation or pulseless ventricular tachycardia in 233 patients. Of these, 212 (91.0%) were transported to the ED, 134 (57.5%) achieved sustained ROSC, and 71 (30.5%) survived to hospital discharge. 54/60 (90.0%) of those with a documented neurologic exam had a favourable neurologic outcome. Initial presenting rhythm with EMS was PEA or asystole in 636 patients. Of these, 320 (50.3%) were transported to the ED, 115 (18.1%) achieved sustained ROSC, and 17 (2.7%) survived to hospital discharge. 9/10 (90%) of those with a documented neurologic exam had a favourable neurologic outcome. 358 of the arrests were witnessed. Of these, 274 (76.5%) were transported to the ED, 150 (41.9%) achieved sustained ROSC, and 51 (15.9%) survived to hospital discharge. 47/53 (88.7%) of those with a documented neurologic exam had a favourable neurologic outcome. **Conclusion:** Outcomes from out of hospital cardiac arrest in London, Ontario are comparable to other sites across North America.
Keywords: cardiac arrest, survival outcomes

P022

The revised METRIQ score: an international, social-media based usability analysis of a quality evaluation instrument for medical education blogs

I. Colmers-Gray, MD, MSc, K. Krishnan, BSc, T. M. Chan, MD, MHPE, N. Trueger, MD, MPH, M. Paddock, DO MS, A. Grock, MD, F. Zaver, MD, B. Thoma, MD, MA, MSc, University of Alberta, Department of Emergency Medicine, Edmonton, AB

Introduction: Online medical education resources are widely used in emergency medicine (EM), but strategies to assess quality remain elusive. We previously derived the Medical Education Translational Resources: Impact and Quality (METRIQ) 8 instrument to evaluate quality in medical education blog posts. **Methods:** As part of a subsequent validation study (The METRIQ Blog Study), a mixed-methods usability analysis was performed to obtain user feedback on the quality assessment instrument in order to improve its clarity and reliability. Participants in the METRIQ Study were first asked to rate five blog posts using the METRIQ-8 Score. They then evaluated the METRIQ-8 instruments ease of use and likelihood of being recommended to others using a 7-point Likert scale and free text comments. Participants were also asked to flag and comment on items within the score that they felt were unclear. Global usability ratings were summarized using median scores or percent rated unclear. We used ANOVA to test associations between ease of use and demographic factors. A thematic analysis was performed on the comments. **Results:** 309 EM medical students, residents, and attendings completed the survey. Global ratings were generally very favorable (median 2 [IQR 2-3], with 7 being the lowest score) for ease of use and likelihood of recommendation, and did not vary by participants country of origin, frequency of blog use, or learner level. Participants stated that the score was structured, systematic, and straightforward. They found it useful for junior learners and for guiding blog creation. Four questions in the score (questions 2, 4, 5, and 7) were identified by 10% of subjects to be unclear. Thematic analysis of comments identified suggested four main themes for improving the score: adding clearer definitions with marking rubrics; shortening the 7-point scale; adding items evaluating blog post presentation and utility; and, rephrasing the wording of certain questions for clarity. **Conclusion:** A mixed methods usability analysis of the METRIQ-8 instrument for assessing blog quality was globally well received by EM medical students, residents, and attendings. Qualitative analyses revealed multiple areas to improve the instruments clarity and usability. The METRIQ score is a promising instrument for evaluating the quality of blogs; further development and testing is needed to improve its utility.
Keywords: blogs, score/tool, mixed methods study

P023

La valeur diagnostique du 'Score de détection de la dissection aortique' et du ratio neutrophiles sur lymphocytes pour le syndrome aortique aigu

A. Cournoyer, MD, V. Langlois-Carbonneau, MD, R. Daoust, MD, MSc, J. Chauny, MD, MSc, Université de Montréal, Hôpital du Sacré-Coeur de Montréal, Institut de Cardiologie de Montréal, Montréal, QC

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Introduction: Le syndrome aortique aigu (SAA) est une condition rare et généralement mortelle qui demeure difficile à diagnostiquer. Le Score de détection de la dissection aortique (DDA) et le ratio de neutrophiles sur lymphocytes (NL) ont été proposés comme des éléments pouvant contribuer à exclure le diagnostic du SAA. Lobjectif primaire de cette étude est de déterminer la valeur diagnostique (sensibilité et spécificité et rapport de vraisemblance négatif [RV-]) de ces deux éléments de façon indépendante et combinée chez les patients suspectés de SAA au département durgence. **Methods:** Les patients ayant subi une angiographie par tomodensitométrie (angioCT) à la recherche dune dissection aortique entre 2008 et 2014 à lurgence dun hôpital tertiaire montréalais ont été inclus dans cette étude de cohorte rétrospective. Le score DDA a été établi à partir des dossiers médicaux et le ratio NL calculé à partir de la première formule sanguine prélevée chez ces patients. Pour le score DDA, un score de 1 ou plus et de 2 ou plus ont été évalués comme seuils de positivité. Pour le ratio NL, une valeur de plus de 4,6 a été choisie comme seuil puisquil sagissait du ratio proposé afin de différencier les patients atteints dun SAA de ceux souffrant dun anévrysme chronique. Pour lévaluation de la combinaison des deux tests, afin de maximiser la sensibilité, un score DAA de 1 ou plus ou un ratio NL de plus de 4,6 serait considéré comme positif. Le test de référence pour tous les patients était langiographie par tomodensitométrie. À partir de cela, la sensibilité, la spécificité et le rapport de vraisemblance négatif de chacun de ces tests/combinaison de tests et leurs intervalles de confiance (IC) ont été calculés. **Results:** Un total de 198 patients (99 hommes et 99 femmes) dun âge moyen de 63 ans (±16) ont été inclus dans létude, parmi lesquels 26 (13%) souffraient dun SAA. Un score DDA de 1 ou plus avait une sensibilité de 84,6% (IC 95% 65,1-95,6), une spécificité de 65,7% (IC 95% 58,1-72,8) et un VR- de 0,23 (IC 95% 0,09-0,58). Un score DDA de 2 ou plus avait une sensibilité de 23,1% (IC 95% 9,0-43,7), une spécificité de 95,3% (IC 95% 91,0-98,0) et un VR- de 0,81 (IC 95% 0,65-1,00). La sensibilité dun ratio NL de plus de 4,6 était de 42,3% (IC 95% 23,4-63,1), la spécificité de 58,7% (IC 95% 51,0-66,3) et le VR- de 0,98 (0,69-1,40). La combinaison du score DDA et du ratio NL avait une sensibilité de 88,5% (IC 95% 69,9-97,6), une spécificité de 38,4% (IC 95% 30,9-46,0) et un VR- de 0,30 (IC 95% 0,10-0,89). **Conclusion:** Avoir un score de DDA inférieur à 1 diminue significativement les chances davoir un SAA, nélimine pas cette possibilité et ne devrait pas être utilisé, sauf chez les patients ayant une probabilité pré-test déjà très faible. Le ratio NL en utilisant un seuil de 4,6 na aucune utilité diagnostique pour le SAA.

Keywords: aortic dissection, diagnostic

P024

Sharing evidence, experiences and expertise: the value of networking to standardize emergency care for kids in Canada

L. K. Crockett, MSc, C. Leggett, MPH, J. Curran, PhD, L. Knisley, BN MA, J. Ripstein, MD, G. Brockman, BHSc, S. Scott, PhD, MN, BN, L. Hartling, BScPT MSc PhD, M. Jabbour, MD, MEd, D. Johnson, MD, T. Klassen, MD, MSc, George and Fay Yee Centre for Health Care Innovation, Winnipeg, MB

Introduction: TREKK is a national knowledge mobilization network of clinicians, researchers and parents aimed at improving emergency care for children by increasing collaborations between general and pediatric emergency departments (ED). This study aimed to determine patterns of knowledge sharing within the network and identify connections, barriers and opportunities to obtaining pediatric information and training. **Methods:** Social network analysis (SNA) uses network theory to understand patterns of interaction. Two SNAs were conducted in 2014 and 2015 using an online network survey distributed to 37 general EDs. Data was analyzed using UCI Net and Netdraw to identify connections, knowledge sharing and knowledge brokers within the network. Building on these results, we then conducted 22 semi-structured follow-up interviews (2016) with healthcare professionals (HCPs) at General EDs across Canada, purposefully sampled to include individuals from connected and disconnected sites, as identified in the SNA. Interviews were analyzed by 2 reviewers using content and thematic analysis. **Results:** SNA data was analyzed for 135 participants across the network. Results from 2014 showed that the network was divided along provincial lines, with most individuals connecting with colleagues within their own institution. Results from 2015 showed more inter-site interconnectivity and a reduction in isolated sites over time from 17 to 3. Interview participants included physicians (59%) and nurses (41%) from 18 general EDs in urban (68%) and rural/remote (32%) Canada. HCPs sought information both formally and informally, by using guidelines, talking to colleagues, and attending pediatric related training sessions. Network structure and processes were felt to increase connections, support practice change, and promote standards of care. Participants identified personal, organizational and system-level barriers to information and skill acquisition, including resources and personal costs, geography, dissemination, and time. Providing easy access to information at the point of care was promoted through enhancing content visibility and by embedding resources into local systems. There remains a need to share successful methods of local dissemination and implementation across the network, and to leverage local professional champions such as clinical nurse liaisons. **Conclusion:** This study highlights the power of a network to increase connections between HCPs working in general and pediatric EDs. Findings reinforce the critical role of ongoing network evaluation to improve the design and delivery of knowledge mobilization initiatives.

Keywords: knowledge sharing, pediatric emergency care, social network analysis

P025

Are we ready for a gunman in the emergency department? A qualitative study of staff perceptions of risk and readiness to respond

M. McGowan, MHK, K. Dainty, PhD, B. Seaton, S. Gray, MD, North York General Hospital, Toronto, ON

Introduction: Hospital-based gun violence is devastatingly traumatic for everyone present and recent events in Cobourg, Ontario underscore that an active shooter inside the emergency department (ED) is an imminent threat. In June 2016, the Ontario Hospital Association (OHA) added Code Silver to the list of standardized emergency preparedness colour codes and advised member hospitals to develop policies and train staff on how best to respond. Given that EDs are particularly susceptible to opportunistic breach by an active shooter, the impact of a Code Silver on ED functioning and staff members may be particularly acute. We hypothesized that there may not be a simple, one-size-fits-all-hospital-staff solution about how best to prepare EDs to respond to Code Silver. In order to inform and support future staff training initiatives related to Code Silver and other disaster situations in hospitals, we sought to investigate staff perspectives and behaviour related to personal safety at work and, in particular, an active shooter. **Methods:** We undertook a qualitative interview study of multi-disciplinary ED staff (MDs, RNs, clericals, allied health, administrators) at a single tertiary care centre in Toronto. The primary methods for data collection were in-depth qualitative interviews and focus groups. Participants were recruited using stakeholder and maximum variation sampling strategies. Data collection and analysis were concurrent and standard thematic analysis techniques

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