statistically significant and clinically meaningful reduction in the LOS when compared to cardioversion using chemical management. Similarities in the proportions of success, adverse events and health outcomes between the groups would support the use of electrical shock as the first approach for cardioversion in clinical practice.

Keywords: atrial fibrillation, cardioversion, randomized controlled trial

LO101

Predicting short-term risk of arrhythmia among patients with syncope: the Canadian Syncope Arrhythmia Risk Score

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Introduction: Suspicion of arrhythmias among syncope patients is the leading cause of emergency department (ED) referrals and hospitalization. However, the risk factors for short-term arrhythmias are not well defined. We sought to develop a risk prediction tool to identify syncope patients at risk for 30-day arrhythmia or death after ED disposition. **Methods:** This prospective cohort study involved 6 academic EDs that enrolled adult syncope patients. We collected standardized variables at index presentation from history, clinical examination, investigations including ECG, and patients' disposition. Adjudicated outcomes included death (due to arrhythmia or unknown cause), arrhythmia or procedural intervention to treat arrhythmias within 30-days after ED disposition. Multivariable logistic regression was used to derive the model; bootstrap sampling for internal validation and to estimate shrinkage and optimism. **Results:** 5,010 adult syncope patients (mean age 53.4 years, 54.8% females, and 9.5% hospitalized) were enrolled with 106 (3.6%) patients suffering arrhythmia or death within 30-days after ED disposition. Of 39 candidate predictors examined, eight were included in the final model: vasovagal predisposition, heart disease, any ED systolic blood pressure <90 or >180 mmHg, troponin (>99%ile), QRS duration >130msec, QTc interval >480msec and ED diagnosis of cardiac, or vasovagal syncope [Optimism corrected c-statistic: 0.91 (95%CI 0.87-0.93); Hosmer-Lemeshow p = 0.08]. The Canadian Syncope Arrhythmia Risk Score had a risk ranging from 0.2% for a score of -2 to 74.5% for a score of 8. Sensitivity for threshold score ≤ -1 was 100% (95% CI 96.5-100) and specificity for a score of ≥ 4 was 97.0% (95% CI 96.5-97.5). **Conclusion:** The Canadian Syncope Arrhythmia Risk Score can improve acute management of ED patients with syncope by better identification of those at higher-risk for short-term arrhythmia or death. Once validated, the tool can be used to guide disposition decision and can also aid in selection of patients for out-of-hospital cardiac monitoring if discharged home.

Keywords: syncope, arrhythmia, risk stratification

LO102

ALiEM AIR-Pro Series: identifying quality content from blogs and podcasts for the senior emergency medicine resident

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Introduction / Innovation Concept: In 2008, the Accreditation Council for Graduate Medical Education endorsed a change such that EM residency programs can decrease their synchronous conference experiences by up to 20% in exchange for asynchronous learning - Individualized Interactive Instruction (III). Identifying quality online resources that would also fulfill III's reporting criteria (program director monitoring, evaluation component, faculty oversight, program effectiveness) is challenging. Using crowdsourced expertise, the Approved Instructional Resources (AIR) series from Academic Life in Emergency Medicine (ALiEM) was created in 2014 to provide a credible method to identify quality educational blogs and podcasts. The identified resources, however, focused on basic content with limited utility for more senior residents. We thus created the AIR-Pro series in 2015, aimed to cover more advanced concepts. **Methods:** The AIR-Pro series is a continuously building curriculum covering a new subject area every 2 months. For each area, 6 EM Chief Residents identify 3-5 advanced clinical questions. Using FOAMsearch.net to search blogs and podcasts, relevant posts are scored by 8 reviewers from the AIR-Pro Board (faculty and chief residents at various institutions). The scoring instrument contains 5 measurement outcomes (7-point Likert scale): recency, accuracy, educational utility, evidence based, and references. The AIR-Pro Approved label is given to posts with a score of ≥28 (out of 35) points and these are featured in the blog posting. For scores of 26-27, an Honorable Mention label is given if Board members collectively felt that they were valuable. For each AIR-Pro subject area, a multiple choice quiz is written based on the featured posts. Educator dashboard access of the Google Drive quizzes is given to program directors for monitoring. If approved by their program director, EM residents receive official III credit upon completion of each quiz. **Curriculum, Tool, or Material:** As of Jan 1, 2016, there have been 2 modules published on ALiEM with 1,220 (Cardiovascular) and 1,059 (Trauma) pageviews worldwide. Although early in development, 21 different institutions are using the AIR-Pro Series with over 150 residents completed the cardiovascular and trauma quizzes. We anticipate more because the original AIR Series has over 73 programs using it for III credit. **Conclusion:** The AIR-Pro series is a novel, objective, crowdsourced approach towards identifying quality, educational, social media content for the advanced EM resident.

Keywords: innovations in EM education, social media, quality assessment

LO103

Trauma Resuscitation Using in-situ Simulation Team Training (TRUST): using risk-informed simulation for team performance and human factors evaluation

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Introduction / Innovation Concept: Trauma resuscitation requires a multidisciplinary team to perform at a high level within a dynamic, high-stakes environment. The unpredictable nature of trauma care increases the possibility for errors, often from underlying latent safety threats (LSTs). In-situ simulation (ISS) is a point-of-care training strategy that occurs within the patient care environment involving the actual healthcare team and provides a novel approach to team training and LST identification. Using ISS, critical events can be recreated providing an opportunity to explore and learn from past challenges. We developed and piloted a risk-informed, multidisciplinary ISS trauma training program to assess teamwork performance and identify LSTs within the trauma care environment. **Methods:** A comprehensive process was initiated to gain support from all stakeholders within the trauma program. Simulation cases were derived from a review of adverse events and unexpected deaths. Human factors experts aided with the integration of system- and process-related elements into the case design. ISS sessions involved all trauma team members. Debriefing after each session facilitated a team-based discussion and an opportunity