

low = 11.1hr; $p = 0.009$), but median hospital LOS was not different (high = 109.5hr, low = 112.4hr; $p = 0.44$). Median TTB was significantly longer during high AB (high = 8.0hr, low = 5.9hr; $p = 0.0004$). There was no difference in RTED visits (high = 12.4%, low = 10.6%; $p = 0.15$) or 30-day mortality (high = 8.4%, low = 9.2%; $p = 0.51$). **Conclusion:** In conclusion, consultation time is not affected by AB. However, boarding admitted patients in the ED impairs our ability to meet funding-associated performance metrics. Reducing boarding time should be an ED and hospital-wide priority, as it negatively impacts funding and delays patient care.

Keywords: access block, consultation, crowding

LO81

Interrater agreement and time it takes to assign a Canadian Triage and Acuity Scale score pre and post implementation of eCTAS

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Introduction: In addition to its clinical utility, the Canadian Triage and Acuity Scale (CTAS) has become an administrative metric used by governments to estimate patient care requirements, emergency department (ED) funding and workload models. The electronic Canadian Triage and Acuity Scale (eCTAS) initiative aims to improve patient safety and quality of care by establishing an electronic triage decision support tool that standardizes that application of national triage guidelines across Ontario. The objective of this study was to evaluate triage times and score agreement in ED settings where eCTAS has been implemented. **Methods:** This was a prospective, observational study conducted in 7 hospital EDs, selected to represent a mix of triage processes (electronic vs. manual), documentation practices (electronic vs. paper), hospital types (rural, community and teaching) and patient volumes (annual ED census ranged from 38,000 to 136,000). An expert CTAS auditor observed on-duty triage nurses in the ED and assigned independent CTAS in real time. Research assistants not involved in the triage process independently recorded triage time. Interrater agreement was estimated using unweighted and quadratic-weighted kappa statistics with 95% confidence intervals (CIs). **Results:** 1491 (752 pre-eCTAS, 739 post-implementation) individual patient CTAS assessments were audited over 42 (21 pre-eCTAS, 21 post-implementation) seven-hour triage shifts. Exact modal agreement was achieved for 567 (75.4%) patients pre-eCTAS, compared to 685 (92.7%) patients triaged with eCTAS. Using the auditor's CTAS score as the reference standard, eCTAS significantly reduced the number of patients over-triaged (12.0% vs. 5.1%; Δ 6.9, 95% CI: 4.0, 9.7) and under-triaged (12.6% vs. 2.2%; Δ 10.4, 95% CI: 7.9, 13.2). Interrater agreement was higher with eCTAS (unweighted kappa 0.89 vs 0.63; quadratic-weighted kappa 0.91 vs. 0.71). Research assistants captured triage time for 3808 patients pre-eCTAS and 3489 post implementation of eCTAS. Median triage time was 312 seconds pre-eCTAS and 347 seconds with eCTAS (Δ 35 seconds, 95% CI: 29, 40 seconds). **Conclusion:** A standardized, electronic approach to performing CTAS assessments improves both clinical decision making and administrative data accuracy without substantially increasing triage time.

Keywords: electronic Canadian Triage and Acuity Scale (eCTAS), interrater agreement, triage

LO82

Does triage assignment correlate with outcome for ed patients presenting with chest pain?

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Introduction: CTAS triage acuity and CEDIS complaint categories are used to prioritize patients for rapid treatment and ED resource allocation. Our objective was to evaluate CTAS and CEDIS validity for risk stratification of ED patients with chest pain using data from two Canadian cities. **Methods:** This administrative database study included patients seen over a five-year period with a triage complaint of chest pain. Our composite primary outcome included 7-day mortality, cardiac arrest, acute coronary syndrome (ACS) diagnosis (STEMI, NSTEMI, unstable angina{UA}), admission to a critical care unit, or hospitalization with CHF, pulmonary embolism, dysrhythmia, aortic pathology, neurologic or respiratory diagnosis. We dichotomized triage assignments to cardiac vs. noncardiac chest pain and high (CTAS 1,2) vs. low (3,4,5) triage acuity. For our secondary outcome we reported the components of the primary composite outcome. **Results:** We studied 111,824 patients. The most common overall diagnoses were chest pain NYD (53.8%), ACS (8.9%), musculoskeletal (7.4%), and acute respiratory (5.5%) or GI (5.1%) conditions. Of all patients studied, 85,888 (76.8%) were placed in the "cardiac features" group, and 93,257 (83.4%) fell into high acuity CTAS 1-2. Patients triaged into the "cardiac features" group were more likely to have a composite outcome event (16.6% v. 6.7%; $p < 0.001$), to be admitted (21.8% v. 9.0%), to require critical care (6.0% v. 0.7%), to receive an ACS diagnosis (11.3% v. 0.9%), and to die within 7 days (0.5% v. 0.2%). Patients in high acuity triage levels were also more likely to have a composite outcome event (15.8% v. 3.3%; $p < 0.001$), to be admitted (25.4% v. 14.3%), to require critical care (8.2% v. 1.2%), to receive an ACS diagnosis (10.5% v. 0.9%), and to die within 7 days (0.5% v. 0.2%). **Conclusion:** This study shows that triage assignment is strongly correlated with important patient outcomes and that both the chief complaint and acuity level are powerful risk predictors. These findings may differ at other sites and hospitals should assess and evaluate their data.

Keywords: chest pain, outcomes, triage

LO83

Quick Refresher Sessions (QRS): improving chest compression training for medical students

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Innovation Concept: High-quality cardiopulmonary resuscitation saves lives; however, current certification standards can leave providers poorly prepared to perform effective chest compressions (CCs). We designed a training program based on the emerging model of skill maintenance through frequent short practice sessions. The ideal frequency of training is currently unknown. Our goal was to provide medical students with access to efficient and effective CC training and to determine an optimal training interval. **Methods:** Thirty-six second-year medical students were randomized to three groups that trained at different frequencies: once every two months (q2m) ($n = 12$), once every four months (q4m) ($n = 13$), and control ($n = 11$). Study duration was eight months with the intervention groups, q2m and q4m, participating in five and three sessions respectively. The control group was assessed at study start and end, receiving no training in