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Predicting Admission at Triage: Comparison of the Sydney Triage to Admission Risk Tool (START) and the Glasgow Admission Prediction Score (GAPS)

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Background and Objective: Emergency departments (ED) play a critical role in acute care delivery and are at the interface of the community and the medical system. Some have capitalized on this role by implementing public health initiatives, such as human immunodeficiency virus (HIV) screening. Lab-based, fourth-generation testing detects acute HIV infection (AHI) when patients are highly infectious, may have symptoms, and often are unaware of exposure.

We describe newly diagnosed HIV from EDs across the U.S. with focus on the prevalence of AHI and the proportion of AHI among all newly diagnosed.

**Methods:** We collected data from six urban EDs in geographically distinct areas that have implemented HIV screening algorithms using fourth-generation testing capabilities. Data was aggregated to determine the total number of HIV tests performed, new HIV diagnoses and number of AHI. We defined AHI based on a reactive HIV Ag/Ab assay, negative HIV ½ antibody differentiation test, and detectable HIV-1 RNA.

**Results:** During the study period ending December 31, 2015, 159,102 HIV Ag/Ab tests were performed. In total, 2100 patients were identified with HIV; 605 (0.38%) were new HIV diagnoses, of which 98 (16.3%) were AHI. Total prevalence of AHI was 0.06%, and the percentage of newly diagnosed HIV that were AHI ranged from 13.1%-55.6% in the six EDs.

**Conclusion**: EDs are the central component of the acute care delivery system in the U.S. The percentage of AHI among ED patients is likely secondary to these patients seeking care for symptoms attributable to AHI and provides a valuable opportunity for early interventions.

# Predicting Admission at Triage: Comparison of the Sydney Triage to Admission Risk Tool (START) and the Glasgow Admission Prediction Score (GAPS)

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Introduction: Emergency departments (ED) are the units where patient flow is intense, fast, and accurate. In recent years because of increased ED intensity, patient management became more complicated, patient satisfaction decreased, and emergency service expenditures increased. Current triage systems can predict the urgency of patients' needs but cannot predict hospitalization requirements. In this study we evaluated two established clinical scores, the Glasgow Admission Prediction Score (GAPS) and the Sydney Triage to Admission Risk Tool (START), for hospitalization predictions and compared them for superiority in predicting hospitalization requirements.

Methods: In this prospective observational study, all patients admitted to the Akdeniz University Hospital Emergency Department adult triage area between June 1-8, 2018, were evaluated. We calculated GAPS and START scores of patients during triage, and then patients were checked for their final management in the ED if they were hospitalized or discharged. The ability of both scoring systems for predicting hospitalization were calculated. We analyzed these comparisons with area under the receiver operating characteristic curve (AUC) values.

**Results:** A total of 2117 patients were enrolled to the study and 236 (11.1%) were hospitalized. The AUC value of GAPS was 0.894 (95% confidence interval [CI], 0.881 to 0.907) and the AUC value of START was 0.819 (95% CI, 0.801 to 0.835). The prediction of admission was high for both scoring systems; however, GAPS was a significantly better predictor for admission than START (p<0.0001).

**Conclusion:** In predicting hospitalization during triage in ED evaluation, both GAPS and START could be used; however, GAPS is a better predictor for hospital admission than START.

### 11 Implementing a Social Media-Based Curriculum for Newly-Matched Interns

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Objective: Transitioning to emergency medicine (EM) internship from medical school can be difficult. While prior investigations have evaluated pre-graduation or early internship boot camps to ease the transition, there is no previously described curriculum for the time between Match Day and start of internship. To address this gap, we designed a curriculum to be administered using the social media platform Slack. With our Slack curriculum, newly-matched interns can refresh their clinical knowledge before internship with collaborative learning via clinical cases. Our objective was to test the hypothesis that the Slack curriculum would increase the self-reported comfort of newly-matched interns with several EM learning objectives.

**Design and Method**: This was a prospective, observational study at St. John's Riverside Hospital, Northwestern University, and Rutgers New Jersey Medical School EM residency programs. The population was newly-matched EM interns, with no exclusion criteria, and participation was voluntary. The curriculum is published at (https://jetem.org/socialmedia\_inn/). Subjects completed a