

center. Serum samples were obtained at time of enrollment and at 72 hours post enrollment for the primary outcome, change in IL-6. Patients also reported the severity of their influenza symptoms over 10 days. Linear mixed-effects models were used for the primary comparisons.

Results: We excluded 4214 patients and 528 declined participation. The most common exclusion was concomitant statin use. We enrolled 116 patients, 59 in the atorvastatin group and 57 in the placebo group. Groups were well-matched with regard to age, sex, race, comorbid conditions and baseline influenza symptom score (all $p > 0.05$). There was no difference in rates of discharge from the ED, ward or ICU admission between groups ($p=0.083$). There was no difference observed between groups in the change in IL-6 levels ($p=0.30$). However, there was a significant effect observed in IL-10 levels ($p=0.044$). There were significant differences in the overall influenza symptom score between groups ($p=0.049$) favoring faster resolution in the atorvastatin group. There were no significant differences in safety concerns identified between the groups

Conclusion: Atorvastatin administration in patients with acute influenza appears safe. We found attenuation of IL-10 levels in the atorvastatin group, but not in IL-6 levels. Patients receiving atorvastatin reported improvement in their clinical symptoms at a faster rate than those in the placebo group.

467 Gender Disparities in Short-Term In-Hospital Outcomes for Patients Admitted With Sepsis

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Background: Several studies have previously explored the gender-specific differences in patients presenting with sepsis. In particular, the female gender is associated with improved outcomes in sepsis patients. However, the impact of gender on short term in-hospital outcomes is still unclear. The aim of this study was to explore whether there are gender-specific differences in length of stay, total inpatient charges and in-hospital mortality in this population of patients presenting with sepsis.

Methods: This retrospective cohort study utilized data from the Nationwide Inpatient Sample (NIS) to identify adult patients (18+ years) from 2012-2015 who had been diagnosed with sepsis using the International classification of Diseases, Ninth Revision; Clinical modification (ICD-9) codes. Hospital length of stay (LOS), total inpatient charges, inpatient mortality, and average age at admission were assessed. Pearson's chi-squared test and independent t-test were used to analyze the data

Results: There were 1,125,068 encounters identified with a diagnosis of sepsis who met the inclusion criteria. ICD9 codes were also used to exclude patients with missing important clinical identifiers (age, gender, death, race). Of these patients 539,777 (48%) were male and 585,291 (52%) were female (mean age of 64.35 and 63.82, 95% CI .462 to .597: $p=0.000$ respectively). Higher mortality was observed in patients who were male vs. female (13.2% vs 11.9% $p=0.000$). Increased LOS was observed in patients who were male vs. female (8.98 vs 7.87 days, 95% CI 1.068 to 1.150: $p=0.000$). Increased total inpatient charges accumulated were observed in patients who were male vs. female (\$93,457 vs \$75,780, 95% CI 17,107 to 18,247: $p=0.000$).

Conclusion: The results of this study support the existence of gender specific differences in patients who are diagnosed with sepsis, as well as the documented protective effects of female gender. Men in our sample had a higher mortality, longer length of stay, and an increased amount of total inpatient charges accumulated. Further research is needed to address the factors that are contributing to the large discrepancy between men and women who are hospitalized for sepsis and the clinical implications of these differences.

468 Optimizing Field Termination of Resuscitation is Associated With Increased Out-of-Hospital Cardiac Arrest Survival

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Background: Emergency medical services (EMS) agencies with higher field termination of resuscitation (TOR) rates also tend to have higher survival rates from out of hospital cardiac arrest (OHCA). It is not known if individual EMS agencies can improve their survival rates through programs designed to optimize their TOR rate. The purpose of this analysis was to determine if an EMS agency's efforts to optimize its TOR rate was associated with an increased rate of OHCA survival with favorable neurologic outcome.

Methods: This was a before and after, single city, retrospective review of prospectively obtained quality assurance data gathered through the Cardiac Arrest Registry to Enhance Survival (CARES). Traumatic OHCA, pediatric OHCA and OHCA occurring after the arrival of first responders were excluded. Patient demographics, process measures and outcome measures were compared before and after an educational initiative designed to increase field TOR. The primary outcome measure was survival to hospital discharge with favorable neurologic status.

Results: 320 cases met the inclusion criteria and were included in the analysis. No difference in average age, gender, location, witnessed arrest, bystander CPR, initial shockable rhythm or presumed cardiac etiology was found between the time periods. The rate of field termination increased from 39.56% to 51.09% ($p = 0.064$). Among cases transported without return of spontaneous circulation (ROSC), the median on scene time increased from 22.47 minutes to 35.57 minutes. The rate of discharge with favorable neurologic status increased from 1.11% to 6.55% ($p = 0.047$). The relative risk of death or non-favorable neurologic outcome was 0.94 (95%CI: 0.91-0.98).

Conclusion: In this study, a single agency demonstrated an increase in survival with favorable neurologic outcomes coincident with optimizing field TOR rate and increasing the time spent performing resuscitation on scene. This study supports the concept that resuscitating patients on the scene, rather than rapid transport, is a better strategy for OHCA care.

469 Emergency Department Interception of a Prehospital Electrocardiogram Reduces False Activation Without Impacting Cardiology Reperfusion Times

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Background: Reduction of false-positive prehospital ST-Elevation Myocardial Infarction (PH-STEMI) activations by an additional Emergency Department (ED) electrocardiogram (EKG) screen is possible without delaying emergent intervention time. Current national guidelines recommend first medical contact (FMC) to coronary catheterization (CC) time under 90 minutes. False positive activation rates exist but no goal is agreed upon. We demonstrate ED Intercept of transmitted