Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Methods: A mobile-friendly survey was created using Qualtrics™ software and was sent to the 49 EM teaching faculty (not involved with the CCC) at a single site of a quaternary care academic emergency department (ED). Resident performance was graded as one of the following: Below Expected, Expected, High Performer, or N/A (not enough contact to evaluate). No definitions of the groups were provided, as we would like to gather qualitative language in future stages of this project. Since the percentage of “high performer” ratings assigned varied drastically by post-graduate year (PGY), the top quartile within each cohort were defined as high performers for this analysis. To validate our method of identifying top performers, we checked for associations between the percentage of “high performer” ratings and previously collected ACGME milestone data from CCC evaluation (mean score across all 23 milestones) using Pearson’s correlation. PGY classes were evaluated separately, so that a resident was only compared to their peer class.

Results: Twenty-nine of the 49 (59%) surveys were entirely completed. From the responses, we gathered the percentage of “high performer” ratings by PGY class, and the association between the percentage of “high performer” ratings and ACGME milestone ratings. We found weak-to-moderate positive correlations between the two sources of data: PGY1: +0.302; PGY2: +0.513; PGY3: +0.644; PGY4: +0.362. Conclusions: All PGY2-4 high performers and most PGY1 high performers had been subjectively identified as such by residency leadership in summative evaluation several months prior to this study’s inception. Further study of the identified high performer EM residents is ongoing, including work to further characterize high performers, and to decide what that means for educators. We suspect that high performers likely receive fewer actionable constructive feedback points, and instead receive more generic praise and “great job.” We wonder, therefore, if we may be failing our high performers in this way: by missing opportunities for improvement via constructive feedback, specific coaching, and directed practice by the trainee. The overarching goal is that EM educators will be able to appropriately coach this group of superlative physicians and help move medicine forward.

Methods: Cohort study of patients evaluated at 9 EDs within an integrated health system between March 13 and May 20, 2020 with clinical suspicion for Covid-19. We excluded patients who neither had testing for SARS-CoV-2 nor were designated with isolation precautions for Covid-19. We identified and collected data through a central dashboard that was established within the EHR. We defined confirmed Covid-19 cases as those with a positive PCR for SARS-CoV-2 infection. All patients had a minimum follow-up period of 14 days. The primary outcome was a return visit over the first 14 days. The analysis consisted of descriptive statistics and a multivariable proportional hazards model that was limited to patients discharged home on their index visit to assess the association between confirmed Covid-19 and bounceback.

Results: There were 13,367 ED patients with clinical suspicion of Covid-19, of whom 7289 (54.5%) were female, 5225 (39.1%) black, non-Hispanic, and the mean age was 55.7 ±19.9 years. There were 12859 (96.2%) patients tested with PCR for SARS-CoV-2, 508 (3.8%) isolated for Covid-19 but never tested, and 3760 (28.1%) with confirmed Covid-19. The number of patients hospitalized was 7724 (57.8%). Return visits among those that were not hospitalized occurred 436 (7.7%) times within 14 days from the initial encounter and 546 (9.7%) times within 30 days. The median time to a return visit was 7 [IQR 3, 17] days. Of patients with a return visit in 14-days, median time to a return visit was 7 [IQR 3, 17] days. Of patients with a return visit in 14-days,
207 (46.1%) were hospitalized on their second visit. Patients who were discharged home that had confirmed Covid-19 had a return rate of 20.0% vs. 3.7% among patients without confirmed Covid-19 (see Figure 1). In multivariable analysis, factors not associated with the primary outcome were race, pulse oximetry, and sex. Factors significantly associated with 14-day returns were age >60 years (HR 1.34, 95% CI 1.03 - 1.67), each 1-point increase in the Charlson comorbidity index (HR 1.13, 95% CI 1.03 - 1.17), and confirmed Covid-19 (HR 5.25, 95% CI 4.29 - 6.42).

Conclusions: Admission rates were high in patients with suspected Covid-19, and return rates over 14 days were 7.7%. Patients with confirmed Covid-19 had a 5-fold greater hazard of a 14-day return compared to those without confirmed Covid-19.

Figure 1. Probability over time of having no ED bounceback

281 Epidemiological Analysis of E-Scooter Injuries among Patients Presenting to the Emergency Department

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Study Objectives: E-Scooters are an emerging part of the urban transportation landscape that intersect with both pedestrian and automotive traffic. Injury patterns are important for numerous reasons including informing scooter design, transportation infrastructure and safety regulations. We sought to characterize the patient demographics and injury patterns associated with e-scooter use that result in an emergency department (ED) visit.

Methods: This retrospective chart review was conducted between March 2017 and June 2019 in a single, urban academic ED with 80,000 annual visits. Inclusion criteria included all patients presenting to ED with an e-scooter related injury. Automated keyword search method was utilized to identify charts with the word “scooter” and variant. Charts identified in the keyword search were reviewed by trained researchers to abstract key data into a RedCap database using a standard data abstraction form, including patient-centered epidemiologic data, injuries sustained, treatment rendered, and circumstances surrounding the injury. Ten percent of charts were randomly selected for abstraction by a second blinded researcher to assess inter-observer variability. This study was deemed exempt by our institutional review board.

Results: 235 patients were identified that sustained an injury involving an e-scooter, ranging in age from 7 to 89, with a median age of 31 (IQR 24-47) and a 53% male predominance. 64% of injured patients were from the District of Columbia, Maryland, and Virginia while 36% were from outside the region. 82% of patients reported an injury as a result from a fall from the device and only 1.7% reported wearing a helmet during the event. The most common area of physical exam finding occurred in the upper extremity which accounted for 36.2% of all injuries with abrasions (52.3%) and fractures (39.1%) representing the most common type of injury. X-ray and CT scans were performed on 69% and 34.5% of patients respectively. Specialists, most commonly orthopedic and trauma surgeons, were consulted on 28% of cases. 9.4% of patients required hospital admission.

Conclusion: Analysis of injuries related to e-Scooters in our urban ED reveals a high percentage of head injuries and fractures. Further epidemiologic information regarding the circumstances of the injuries including geographic and rider factors would provide a more robust understanding of the events and inform effective policy development.

282 A Comparison of In-Hospital Cardiac Arrests between a United States and United Kingdom Hospital System

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Study Objectives: Resuscitation attempts are deemed a medical decision in the United Kingdom (UK), whereas in the United States that decision most often lies between the patient and family of the patient. Physicians in the National Health System (NHS) in the UK are able to make decisions that may contrast with the patient’s written wishes if their assessment reveals that resuscitation will likely be futile and legal frameworks are in place to protect this decision. This research study aims to examine the cardiopulmonary resuscitation attempts per in-patient population between these two hospital systems and describe resuscitation outcomes.

Methods: This was a retrospective analysis of all in-hospital patients who underwent cardiac arrest at NHS Forth Valley Royal Hospital (United Kingdom) and University of Virginia Hospital (United States) between January 2014 and September 2015. CPR incidence was recorded, along with the outcome of the resuscitation attempt. A two-sample test for equality of proportions was performed to assess for statistical significance. Institutional Review Board approval was obtained to utilize the dataset for this research.

Results: The data analysis revealed that for the NHS Forth Valley Hospital, there was an overall 45.1% immediate survival rate of patients who underwent a resuscitation attempt in contrast to a 32.5% survival rate at UVA Hospital. The differences between these two values was statistically significant (χ² = 12.93, P < 0.001, CI 8.21-27.6). The incidence rate of resuscitation attempts per cardiac arrests in the NHS Forth Valley Hospital was 94.5%, and 99.9% for the UVA hospital (χ² = 35.2, P < 0.001, CI 16.5-28.3).

Conclusion: The incidence rate of resuscitation attempts between the two hospitals was statistically significant, with the UVA hospital undergoing a greater number of attempts but with a lower immediate survival rate. Differences between the legal frameworks, health insurance systems, and interpretations of bioethical principles may explain differences in frequency of resuscitation attempts and subsequent survival rates.

283 Using Google Trends to Determine Perceived Viral Exposure during the Early Phase of the COVID-19 Pandemic in the United States

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Study Objectives: Public interest in diseases during outbreaks has been previously studied by examining internet activity via Google Trends (Google, Mountain View, California), a tool that measures the popularity of internet searches longitudinally and geographically. Recently, Google Trends has been used as a surveillance and retrospective epidemiological tool to study the impact of COVID-19 in China, Taiwan, France, and Iran. However, studies that focus on the United States are significantly lacking. Using Google Trends, our aim in this study was to assess the extent of the public’s perceived exposure to COVID-19 as it relates to disease prevalence during the early phase of the pandemic in the United States.

Methods: We utilized Google Trends to determine the search activity for: “Do I have coronavirus,” “How to get tested for coronavirus,” “What is coronavirus,” “Signs and symptoms of coronavirus” and “How is coronavirus spread.” We collected four weeks of Search Volume Index (SVI) data between February 17th and March 16th, 2020. The mean SVIs for the 5 states with the highest and lowest number of COVID-19 confirmed cases (as of March 16, 2020) were calculated for each query. To obtain the number of confirmed COVID-19 cases in the United States, we referred to...