

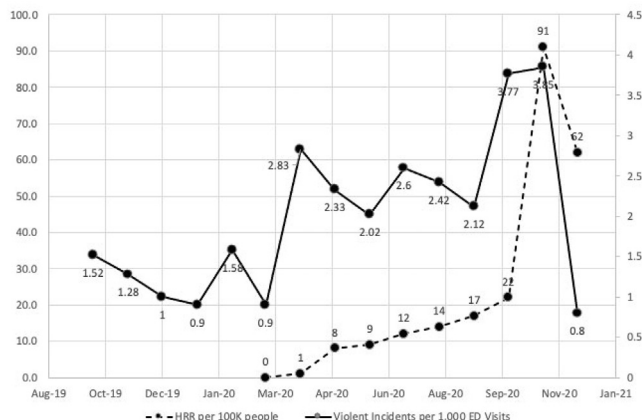


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reported/perceived violence may be attributable to staff prioritizing other personal safety concerns throughout the pandemic. This positive association could be due to significant fear and stress experienced by the general public, or worsening substance abuse or mental health state during the pandemic.

Figure 1: Incidence of violence per 1,000 patients ED volume compared to average monthly HRR rate ($r = 0.24$)



70 Can 8-Point Lung Ultrasound Be Used as a Risk Stratification Tool in Patients Under Investigation for COVID-19

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Background: Point of care lung ultrasound (LUS) has become an integral part in the clinical care and evaluation of patients presenting with respiratory complaints in the setting of COVID-19 infection. Since the start of the COVID-19 pandemic, LUS has been used not only to help identify possible COVID-19 infection, but also to help prognosticate and risk stratify patients with known, or highly suspicious for, COVID-19 infection 24.

Study Objective: To determine if point-of-care LUS can be used to risk stratify patients presenting under suspicion of COVID-19 infection.

Methods: 118 patients were scanned using 8-point LUS score method looking at 4 lung fields on each side in order to evaluate the diagnostic and prognostic value of LUS in COVID-19 patients. Scores were assigned to each field based on presence of B-lines, pleural abnormalities, and subpleural consolidations. All lung ultrasounds were performed in the emergency department on persons under investigation (PUI) for COVID-19 respiratory infections.

Result: There is a clear trend of increasing mean total LUS score with increasing severity of illness. The increasing severity was defined in ascending order as patients discharged, admitted to floor, admitted to ICU, and death in hospital. The mean total LUS score for each was: discharged (5.18 ± 1.47 [95% CI 3.71-6.65]), admitted to floor (9.82 ± 1.57 [95% CI 8.25-11.4]), admitted to ICU (10.83 ± 1.99 [95% CI 8.84-12.8]), and death in hospital (13.14 ± 4.64 [95% CI 8.5-17.8]). One of the deaths was a patient with a means total LUS score of 3 who was placed on comfort care and then terminally extubated in the setting of metastatic lung disease. If this patient is removed, the mean LUS score associated with death in hospital is 14.83 ± 3.83 [95% CI 11-18.7]. Overall, patient's that tested positive for COVID-19 had a higher mean LUS score (8.71 ± 1.3 [95% CI 7.41-10]) than those that tested negative (7.24 ± 1.86 [95% CI 5.38-9.1]). A SpO2 greater than or equal to 90% was associated with a lower average LUS score (7.76 ± 1.24 [95% CI 6.52-9]), than a SpO2 less than 90% (12.24 ± 2.24 [95% CI 10-14.5]). Patient's requiring high flow nasal cannula, non-invasive positive pressure ventilation, or intubation had a mean LUS score of 12.75 ± 2.05 [95% CI 10.7-14.8], while those who only required nasal cannula or no supplemental oxygen had mean LUS score of 8.76 ± 1.5 [95% CI 7.26-10.3].

Conclusion: Our results show that by using an 8 zone lung ultrasound protocol not only are we able to identify those patients more likely to test positive for COVID, but also to risk stratify those patients under suspicion of a COVID infection.

71 Implementation of an Ed-Based COVID-19 Vaccine Program

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Study Objectives: Vaccinating eligible high-risk patients, against the COVID-19 virus is a public health priority. The Veterans Health Administration serves as the nation's largest safety-net health system, serving a population with both a high level of medical comorbidities and socioeconomic factors that can create barriers to care. To expand access to vaccines beyond the regularly scheduled vaccine clinic hours, an ED-based COVID-19 vaccine program was developed, at our facility.

Methods: The setting is a 27,000 visit Veterans Health Administration ED that is also an ACEP Level 1 Geriatric ED. The existing vaccine program used the Pfizer vaccine, with appointments scheduled through a vaccine clinic that operated 7 days a week. With the approval of the single dose Janssen vaccine, to expand our outreach and vaccinate more patients, an ED-based vaccination program was developed. At triage, the triage nurse reviewed the charts of all stable (ESI 3-5) patients to determine if they had already received at least one dose of vaccine, or were scheduled to receive a dose of vaccine in the outpatient clinic. If not, then a flag would be placed on the tracking board to alert the provider seeing the patient that they were a candidate for the single-dose Janssen vaccine. The provider would then screen for contraindications and obtain consent for the vaccine. Only patients who were checking into the ED for another complaint were screened; the ED was not advertised as an alternative site for vaccine-only visits.

Results: From initiation of the program on March 16, 2021, until the pause on use of the Janssen vaccine on April 13, a total of 27 patients received the vaccine. A total of 37 patients were screened as eligible for the vaccine. For those not receiving the vaccine, 6 had documentation of a reason; 1 had a contraindication, and 5 refused the vaccine. 4/27 were female (14.8%); female patients comprise 7% of our ED volume. The average age of the female patients was 37 (range, 24-55). 23/27 (85.2%) were male; their average age was 57 (range, 39-69). 15/27 (55.5%) patients resided in an urban area. 6/27 (22%) lived in areas classified as rural. 8/27 patients (30%) were Black, 3/27 (11%) were latino, and 16/27 (59%) were white. There were no documented allergic reactions or other immediate adverse events reported for any of the ED-vaccinated patients.

Conclusion: We report preliminary results for an ED-based COVID vaccine program using the single-dose J&J/Janssen vaccine. Female patients represented a higher percentage of those receiving the vaccine than represented by their percentage of our total ED visits. Further research needs to be done into those who refuse the vaccine, as well as interventions to reduce the number of missed opportunities (patients who were flagged on the tracking board but did not receive further screening for vaccine eligibility by the ED provider). Adverse events were not reported in our cohort.

72 Perceptions of the COVID-19 Vaccine Amongst Health Care Workers in a Southeast Michigan Hospital: A Cross-Sectional Survey

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Study Objectives: The new coronavirus that emerged in Wuhan, China was declared a global pandemic in March 2020 sparking a worldwide effort to find a vaccine that could effectively prevent continued spread of the virus. The Gallup's tracking poll findings from 9/16/2020 to 9/29/2020 showed that 63% of Americans would be agreeable to being vaccinated if an FDA-approved vaccine were available to them at no cost. A survey conducted in France from March to July 2020 to determine COVID-19 vaccine acceptance specifically amongst health care workers (HCW) revealed that 75% of their HCWs intended to be vaccinated. Our literature search however did not yield studies assessing the acceptability of a COVID-19 vaccine amongst HCWs, specifically in the United States. The aim of this study was to determine COVID-19 vaccination rates amongst HCWs within a single hospital, any differences between HCWs acceptability of the vaccine, and which factors were most important in their decision-making.

Methods: A prospective cross-sectional study of HCWs at Ascension Macomb-Oakland Hospital was conducted in February 2021 – March 2021 soon after vaccines became available at the hospital. A SurveyMonkey was mass-distributed by email to HCWs including doctors, nurses, administrators, pharmacists, technicians,