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.

visits in 2019 and 2020. We report the changes in these proportions from 2019 to 2020, along with 95% CIs.

Results: Total ED visits decreased 27%, from 844,017 in 2019 to 618,195 in 2020. In 2019 and 2020 combined, the number of patients were: 13,151 with anxiety disorders, 6884 with depression, 8886 with suicidal ideation/self-harm, 3252 with bipolar disorder, and 7129 with psychotic disorders. The changes [with 95% CIs] in the proportion of visits from 2019 to 2020 were: anxiety disorders -1% [-4, +3%], depression -5% [-10, -1%], self-harm/suicidal thoughts +23% [+18, +29%], bipolar disorder +14% [+6, +22%], and psychotic disorders +23% [+18, +29%].

Conclusion: The proportion of adult ED visits for self-harm/suicidal thoughts, bipolar disorder, and psychotic disorders increased following the arrival of COVID-19, whereas the proportions for anxiety and depression changed minimally. These results are somewhat different from the findings in the previously reported study. Our study highlights the need for continued surveillance of the impact of COVID-19 on mental health.

287 Association Between Comorbid Mental Illness and Preceding Emergency Department Visits in Unplanned Admissions

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Study Objective: Patients with mental illness are likely to revisit emergency departments (EDs) and become "frequent flyers," resulting in the potential underestimation of their illness severity. However, little is known about whether patients with mental illness have preceding ED visits before unplanned admission. The aim of this study was to investigate the association between having mental illness and having preceding ED visits in patients with unplanned admission.

Methods: This is a case-control study using data from EDs of three large tertiary medical facilities in Japan. We included adult patients (aged ≥16 years) who were admitted to these hospitals via the ED from 2017 to 2020. To investigate whether patients with mental illness were more likely to have preceding ED visits within 30 days before admission compared to those without, we used univariable and multivariable logistic regression models. In the multivariable model, we adjusted for age category (≤34, 35–54, 55–64, 65–84, and ≥85 years), sex, facility, year, and ambulance use.

Results: Of a total of 15, 429 admissions, 766 (5.0%) had mental illness and 14, 663 (95.0%) did not have mental illness. Patients with mental illness was younger than those without mental illness (70 years old vs. 76 years old, $p<0.001$). The prevalence of preceding ED visits within 30 days before unplanned admission among patients with mental illness was significantly higher than in patients without mental illness (17.1% vs. 8.8%; unadjusted odds ratio, 2.15; 95% confidence interval, 1.76–2.61; $p<0.001$). In the multivariable regression model, having mental illness was significantly associated with a higher prevalence of preceding ED visits within 30 days of unplanned admission (adjusted odds ratio, 2.57; 95% confidence interval, 2.10–3.15; $p<0.001$). The median intervals between preceding ED visits and unplanned admissions were similar between the two groups (6 days vs. 5 days, $p=0.20$).

Conclusions: The presence of mental illness was significantly associated with a higher prevalence of preceding ED visits within 30 days before unplanned admission. The result suggests that physicians should be more deliberate in discharging patients with mental illness from EDs and in providing care post-ED discharge. Our findings warrant further investigation on the potential influence of having mental conditions on the screening process currently undertaken at the preceding ED visits.

288 Assessing the Performance of Clinical Diagnostic Models for Dehydration among Patients With Cholera and Undernutrition in Bangladesh

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Study Objective: Diarrheal diseases are one of the most common acute conditions, ranking 5th in causes of death in low-income countries in 2019. Though a critical step in reducing mortality from diarrheal disease, accurately assessing dehydration severity is complicated by cholera and undernutrition. This study seeks to assess the accuracy of two clinical diagnostic models for dehydration among patients over five years in two distinct subgroups (those with cholera and undernutrition) and compare their respective performance to the World Health Organization (WHO)'s algorithm.

Methods: This is secondary analysis of data collected from the NIRUDAK study, a prospective cohort study conducted at the ICDDR, between March 2019 – 2020. Clinical and sociodemographic information along with a stool sample for culture were collected from each patient upon enrollment and dehydration assessment. In this subgroup analysis, accuracy of the full and simplified NIRUDAK models for predicting severe and any dehydration was measured using the area under the receiver-operator characteristic curve (AUC) among patients over five with/without cholera and with/without wasting. Bootstrap with 1000 iterations was used to compare the m-index for each NIRUDAK model to that of the WHO algorithm. Statistical significance was established at an alpha level of 0.001.

Results: A total of 2,139 and 2,108 patients were included in the nutrition and cholera subgroups respectively with an overall median age of 35 years (IQR=42) and 49.6% female. All subgroups had acceptable discrimination in diagnosing severe or any dehydration (AUC >0.60); though the full NIRUDAK model performed best among patients without cholera, with an AUC of 0.82 (95% CI: 0.79, 0.85), and among patients without wasting, with an AUC of 0.79 (95% CI: 0.76, 0.81). Compared to the WHO's algorithm, both the full and simplified NIRUDAK models performed significantly better in terms of their m-index ($p<0.001$) for all comparisons, except for the simplified NIRUDAK model in the wasting group ($p=0.003$).

Conclusions: Both the full and simplified NIRUDAK models performed less well in patients over five years with cholera and/or wasting; however, both performed better than the WHO algorithm. Further research should be conducted to explore potential differences in the accuracy of clinical signs of dehydration and clinical diagnostic models of dehydration in new patient populations.

289 Connecting Patients Diagnosed With HIV in the Emergency Department to Care During the COVID-19 Pandemic

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Study Objective: HIV screening in the ED is an effective means of identifying new cases of HIV. The COVID-19 pandemic caused significant disruptions to both ED operations and outpatient care, yet little is known about the impact of the COVID-19 pandemic on ED-based HIV screening programs. We hypothesized that our electronic medical record (EMR) triggered HIV screening program would continue to identify new HIV positive patients and link them to care during the COVID-19 pandemic.

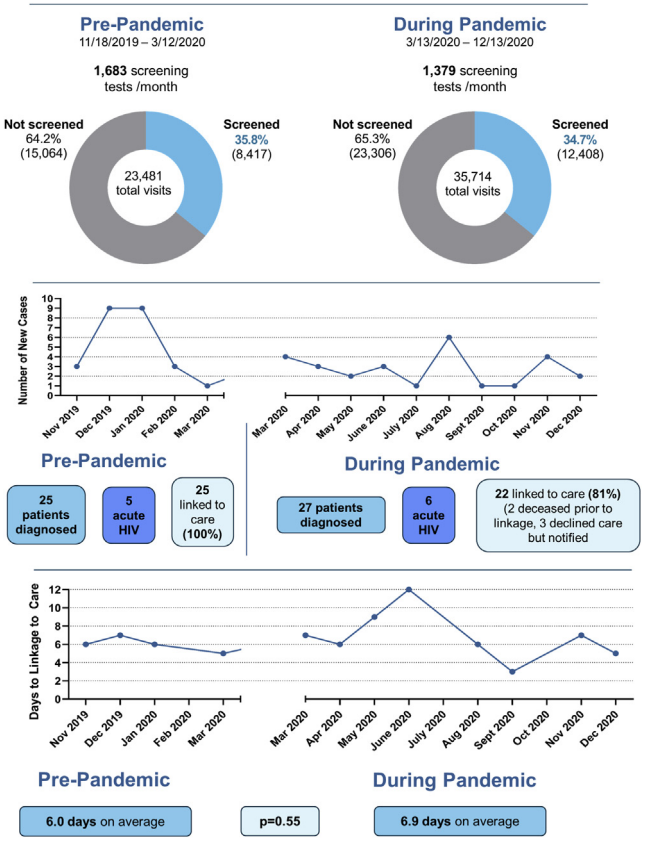
Methods: We conducted a retrospective chart review of ED patients screened for HIV and compared the average monthly tests performed, number of confirmed HIV positive cases, and rates of linkage to care before and after the onset of the COVID-19 pandemic. We used 3/13/2020 as the start date for the pandemic and compared data in a 5-month period prior to the pandemic (limited to initiation of EMR triggered HIV screening) and a 9-month period during the pandemic. Two tailed t-tests were used for comparison of means.

Results: A total of 20,825 patients were screened for HIV from 11/18/2019 to 12/12/2020 (8,417 pre-pandemic and 12,408 during the pandemic). On average, more HIV screening tests were performed in the pre-pandemic period compared to the pandemic period (1,683/month pre-pandemic versus 1,379/month during pandemic).

However, when accounting for ED volume changes, a similar rate of patients in the pre-pandemic period (35.8% of all patients seen in the ED) were screened compared to during the pandemic (34.7% of all patients seen). In the pre-pandemic period 11/18/2020 – 3/12/2020, a total of 25 patients were diagnosed with HIV and all patients were linked to care. In the pandemic period 3/13/2020 – 12/12/2020, 27 patients were diagnosed with HIV. Of the 27 patients diagnosed, 22 (81%) were linked to care. Two patients died prior to attending specialist appointments during the pandemic (88% linkage to care accounting for deaths). The average time to the first attended specialist appointments for non-admitted patients was not significantly greater during the pandemic period (6.0 days pre-pandemic vs. 6.9 days during pandemic, $p=0.55$).

Conclusion: EMR-generated HIV screening allows for continued efforts to diagnose and link patients to care despite the global disruptions caused by the COVID-19 pandemic. The lack of disruption to screening rates may be partly due to the minimal disruption of the screening and the linkage to blood tests being

performed for clinical care. These efforts are critical to the mission to end the HIV epidemic by 2030.



290 A Novel Triage and Evaluation Process During the COVID-19 Pandemic

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Study Objective: The COVID-19 pandemic put an immense strain on emergency departments (ED) throughout the country. Many patients required hospitalization, while others required symptomatic care and testing. We established a novel triage and treatment process, using a combination of telemedicine and a tent site adjacent to the ED, that provided safer and more efficient patient care.

Methods: We conducted a retrospective study of patients with suspected COVID-19 evaluated at a suburban, academic medical center in Long Island, New York. Patients who presented to the ED with symptoms of COVID-19 during a 30-day timeframe between the hours of 11 am to 7 pm were triaged by vital signs and a questionnaire at the main ED entrance. If appropriate, patients were then directed to our tent site. Our primary outcome was 30-day return visits for acute medical concerns related to COVID-19.

Results: We assessed 693 patients. 505 patients (73%) tested positive for COVID-19. The mean age was 41.6 years old. In regards to 30-day revisits, a total of 74 patients (10.1%) returned to the ED, and 38 (5.5%) of these were related to COVID-19. Of this group, 11 patients (1.6%) were admitted to the hospital, including one ICU admission. There was one death in the 30-day revisit group (COVID-related complications).

Conclusion: Our novel triage and evaluation model provided a safe environment for testing and treating patients during the first wave of the COVID-19 pandemic. This information can help emergency departments provide alternative treatment models to care for patients during future surge scenarios.

Outcome Variable	
Patients Per Day (mean, range)	21.7 (0 - 42)
Tent Length of Stay (mean minutes, range)	43 (13 - 349)
Transferred to ED from tent for further workup	4 (0.6%)
Discharged from ED	3 (0.4%)
Admitted from ED	1 (0.1%)
Total 30-Day Return Visits	74 (10.7%)
Median Days To Return Visit for All Return Visits	7 (range 1-28)
30-Day Return Visit for Acute Medical Reason Related to COVID	38 (5.5%)
ED Visit for Additional Testing and Discharge	27 (3.9%)
Admitted to Floor	10 (1.4%)
Admitted to ICU	1 (0.1%)
Median Days to Return Visit for Acute Medical Reason Related to COVID	5 (range 1-28)
30-Day Return Visit for Other Cause	36 (5.2%)
Return for Education or Requesting Re-Testing	26 (3.8%)
Unrelated Chief Complaint	8 (1.2%)
Return for Labor & Delivery	2 (0.2%)
60-Day Return Visit (31 - 60 Day)	3 (0.4%)
Death (30-Day Mortality related to COVID)	1 (0.1%)

291 Utility of Measuring Serum Creatinine to Detect Renal Compromise in Emergency Department Patients Receiving IV Contrast-Enhanced CT Scan

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Study Objectives: To determine the efficacy of a roster of clinical factors in identifying risk for renal insufficiency in emergency department (ED) patients requiring intravenous contrast-enhanced CT scan (IVCE-CT); to help mitigate potential for developing contrast-induced nephropathy (CIN).

Methods: A review was conducted of consecutive ED patients who received IVCE-CT during a 4-month period in our urban ED. The values of ED serum creatinine (SCr) performed were tabulated. The medical records of all patients with an elevated SCr (>1.4mg/dL) were reviewed to determine and correlate the presence of clinical risk factors for underlying renal insufficiency.

Results: During the 4-month study period there were 2,260 consecutive cases who received IVCE-CT; of these, 2,250 (99.6%) had concomitant measurement of SCr. Elevated SCr occurred in 141 patients (6.2%); of these, 75 had a SCr >2 mg/dL. In all, 139/141 (98.6%) with an elevated SCr had an underlying chronic or acute medical condition identified by medical record review which potentially compromised renal function; including chronic renal disease, diabetes mellitus, HIV infection, cancer, hypertension, congestive heart failure, sepsis/septic shock, chronic alcoholism, and sickle cell disease. Two patients with no identified risk factor each had (mildly) elevated SCr; both had a normal SCr measured post-CT scan. The total cost of performing serum basic metabolic panel to measure SCr in all patients during the 4-month study period was $94,500.

Conclusion: Elevated SCr is rarely present in ED patients without recognized risk factors who receive IVCE-CT scan. The vast majority with underlying renal insufficiency are readily identified by a review of the patient's medical history and/or