

other group only received a referral for outpatient PrEP initiation. Participants lost to follow-up were presumed to not be taking PrEP or engaged in PrEP care.

Results: Between July 2021 and March 2023, 1455 ED patients were screened, of whom 1285 (90%) did not meet study eligibility criteria. Of 169 patients who were study eligible, 142 were not interested in starting PrEP and 1 withdrew prior to randomization leaving 26 participants randomized, 13 to iPrEP and 13 to referral. The study was closed early due to low recruitment. Groups (iPrEP v referral) were well matched by age (35 ± 3 vs. 33 ± 3), gender (11 (85%) vs. 11 (85%) male), ethnicity (4 (33%) vs. 2 (17%) Hispanic/Latino) and PrEP indication. There was no difference in engagement in PrEP care (1 (8%) iPrEP vs. 1 (8%) referral, $p=0.76$) or PrEP usage (2 (15%) iPrEP vs. 1 (8%) referral, $p=0.50$) at 90 days or at any other measured time. Most participants rated their satisfaction with screening as high 19 (73%) and did not find the screening inconvenient 16 (61%) or difficult 22 (85%).

Conclusion: Identifying PrEP eligible ED patients willing to initiate same day PrEP is challenging. In this pilot RCT there were no differences in PrEP usage or engagement in PrEP care between those randomized to iPrEP compared to those given a referral only. Additional work is needed to streamline PrEP education and screening and to increase interest and motivation for starting PrEP in EDs.

787 | Emerging trends in risk factors among patients diagnosed with human immunodeficiency virus in an urban essential emergency department

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Background and Objectives: Boston Medical Center (BMC) is New England's largest essential hospital and a major reporter of new HIV cases in Massachusetts. Since 2019, transmission risk factors among patients diagnosed with HIV have changed, though the trends and reasons behind them have not been fully elucidated. The objective of this study is to assess changes in HIV transmission risk factors among patients newly diagnosed with HIV in order to inform future ED-based targeted HIV testing programs.

Methods: This study is a retrospective chart review of all patients with incident HIV infections diagnosed in the BMC ED between January 1, 2019 and December 8, 2023. We identified unique patients via a report generated by the BMC clinical laboratory. Patient demographic and clinical information was abstracted for each patient from the electronic medical record. Demographic variables include age, sex, race, ethnicity, country of origin, and region of origin. Clinical variables include primary HIV risk, HIV or PrEP status, and pregnancy status. HIV risk was characterized by patient-identified sexual and/or drug use risk, which is a requirement for offering government-funded HIV services. Descriptive statistics were used to evaluate trends in HIV risk factors and demographics.

Results: Since 2019, 63 new cases of HIV have been identified in the ED. Prior to 2022, on average, injection drug use (IDU), heterosexual intercourse, and men who have sex with men (MSM) all contributed substantially as HIV risk factors (45%, 36%, 20%), and new diagnoses were made in both U.S.-born and foreign-born individuals in close to equal proportion (43%, 57%). In 2022 and 2023, the dominant risk factor was heterosexual transmission (80%) and new diagnoses were made almost exclusively in foreign-born patients (89%). In 2023, the majority of new HIV diagnoses were among individuals from the Caribbean (50%) and Latin America (38%).

Conclusion: The BMC ED has seen an increase in new HIV diagnoses among non-U.S.-born individuals who engage in heterosexual sex, particularly in those from the Caribbean and Latin America. These data present a call to action for those interfacing with foreign-born ED populations to increase HIV screening among this high-risk patient group.

788 | Clinical and patient characteristics associated with long-haul symptoms following an acute COVID-19 infection

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Background and Objectives: Post-acute sequelae of COVID (PASC), colloquially referred to as long COVID or long-haul COVID, encapsulates an array of symptoms that may persist 4 or more weeks beyond initial infection. Although a significant proportion of patients report long-term effects, there is minimal evidence on predictors, screening, and diagnostics to guide clinical decision making. We sought to identify clinical and sociodemographic characteristics that may predict PASC care seeking.

Methods: We conducted a retrospective review of adult patients within KPNC with a COVID-19 diagnosis between November 1, 2020 and April 1, 2021. The primary study outcome was one or more PASC care seeking encounters (including referral to a PASC clinic, attendance of a PASC class, or a new diagnosis or problem list entry of PASC) occurring at least 28 days after the initial COVID-19 positive lab test or diagnosis. Demographics (age, sex, and race/ethnicity categories of non-Hispanic white, black, Asian, Hispanic/Latino, or other), social determinants of health, neighborhood deprivation index (NDI), prior medical history, COVID immunization status, and severity of index COVID illness were extracted from the health record as exposures of interest.

Results: From a cohort of 790,548 patients, 4751 (0.65%) had one or more PASC care seeking encounters. Demographic characteristics associated with a higher risk for PASC care seeking included female sex (RR 1.29, 95% CI 1.20–1.39), non-Hispanic white race, and age in the 40 – 49 years range (RR 2.35, 95% CI 2.08–2.66). Patients with

a more severe acute COVID illness including an ED visit were more likely to seek care for PASC (RR 4.41, 95% CI 3.92–4.96). Completed immunization series and booster at the time of COVID episode was protective against PASC (RR 0.87, 95% CI 0.78–0.96). Patients who developed COVID when omicron was the dominant variant were less likely to seek care for PASC (RR 0.54, 95% CI 0.49–0.60). Patients who had depression before their index COVID episode, especially when categorized as having severe depression (PHQ-9 score of 20–27), were more likely to seek care for PASC (1.69, 95% CI 1.32–2.16). **Conclusion:** Our data reinforce that higher illness severity, medical comorbidities, and infection during the delta and pre-delta periods were associated with PASC care seeking. Further study will be required to understand these apparent associations and their underlying mechanisms.

789 | Association between household size and vaccination status on SARS-CoV-2 positivity in health care personnel

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Background and Objectives: Household member infection has been found to be a predominant SARS-CoV-2 exposure risk among health care personnel (HCP). The objective of this study was to determine whether an increased number of household members and households with unvaccinated members are associated with increased odds of SARS-CoV-2 infection in HCP.

Methods: We conducted a multicenter ($n=20$) prospective case-control study, enrolling HCP with COVID-19 symptoms, between August 13, 2022 and August 30, 2023 and collected additional information on household risk factors for SARS-CoV-2 infection. Household characteristics and past infection were obtained by electronic survey through HCP self-report; SARS-CoV-2 testing and vaccination data were validated. Multivariable mixed-effects logistic regression was used to model the odds of SARS-CoV-2 infection, adjusted for age, sex, race/ethnicity, job, education, comorbidities, vaccination, and prior infection clustered on site and 3-month period.

Results: We enrolled 3173 HCP with 1429 (45%) testing positive for SARS-CoV-2. Being exposed to a confirmed (SARS-CoV-2 positive) COVID-19 symptomatic household member was associated with higher risk of SARS-CoV-2 infection (adjusted odds ratio=2.47, 95% CI [1.97–3.11]). Prior infection (aOR=0.48 [0.41–0.56]) and HCP vaccination (aOR=0.66 [0.55–0.8]) were both protective. Compared to living alone, those who lived with one (aOR=1.40 [1.07–1.83]), two or three (aOR=1.40 [1.09–1.81]), or four or more (aOR=1.38

[1.01–1.89]) individuals were more likely to have SARS-CoV-2 infection. We found that living with an unvaccinated individual was not associated with increased contemporary SARS-CoV-2 infection (aOR=0.93 [0.76–1.14]), but was associated with prior infection (unadjusted odds ratio=1.42 [1.22–1.67]).

Conclusion: Living with other household members was associated with higher risk of SARS-CoV-2 infection in HCP. Living with an unvaccinated household member was not associated with an increased risk of contemporary SARS-CoV-2 infection in HCP, but was associated with an increased risk of previous infection. Prior infection was subsequently associated with a lower risk of contemporary infection in HCP. Understanding nonoccupational risk and immunity factors for HCP infection can improve protection of the health care workforce and enhance recommendations for SARS-CoV-2 booster vaccination.

790 | Increasing hepatitis C screening in the emergency department by utilizing a best practice advisory alert

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Background and Objectives: The Center for Disease Control and Prevention (CDC) recommends adults over the age of 18 be tested at least once in a lifetime for Hepatitis C Virus (HCV). Hudson County has one of the highest rates of HCV cases in New Jersey. Jersey City Medical Center's (JCMC) Emergency Department (ED) serves about 100,000 individuals a year with at least 40% receiving bloodwork. There is a potential to significantly increase HCV testing in this high-volume ED by using JCMC's Electronic Health Record (EHR), EPIC. EPIC has a function called the Best Practice Advisory (BPA) alert, which can notify the provider of the current CDC HCV testing guidelines. The aim of this study is to increase HCV screenings in the ED using an opt out screening method via the EHR BPA alert.

Methods: All patients who meet the eligibility criteria set, trigger the BPA alert for HCV screening. The BPA alert criteria for HCV screening includes patients 18 years and over, no past medical history of HCV, and no HCV bloodwork within the past 5 years. The BPA alert prompts providers to accept HCV screening for eligible patients. The screening is automatically added to bloodwork orders after the BPA alert is accepted. If the patient verbally refuses, automatic orders will be cancelled. This study examines the HCV screening data 31 days before (September 22 to October 22) and 31 days after (October 24 to November 23) the BPA alert implementation on October 23, 2023. **Results:** Before the BPA alert, the ED averaged 2.6 HCV tests per day with 81 tests in 31 days. After the BPA alert activated, the ED averaged 26.7 tests per day with 827 tests in 31 days. A two tailed t test was performed on a 31 day cycle before and after activation ($t(30)=-9.7674$; p -value<0.001) which shows a statistically significant difference.

Conclusion: The implementation of opt out HCV screening using EHR BPA alerts has increased the HCV testing volume in the ED.