and expanding our capacity to shelter all "in-need" early minimized the flow of clients through public places. Onsite medical and psychiatric assessment identified high-risk individuals to prioritize for isolation. We optimized communication within our site with phone meetings 3 times daily and had daily communication with the local public health team.

Our study has several limitations. The success of our implementation was challenged by innate health risks faced by the population served, including mental health conditions and substance abuse. The sensitivity of our screening protocol was decreased by clients presenting intoxicated. In response, we added clinical cues to screen this population. We observed that intoxicated clients were less adherent to social distancing and more likely to have another comorbid medical condition. Alcohol-based hand sanitizer use was inhibited by risk of ingestion by clients and we were limited on sinks. Increased family obligations and self-quarantining strained staff, which we addressed by addition of temporary staff. All of the efforts described required significant unbudgeted expenses. As the COVID-19 pandemic continues, we anticipate difficulty sustaining this level of protection due to funding limitations, team fatigue, and the client flow into the community.

When universal testing was offered, <10% of residents refused COVID-19 testing. Still, no further cases were identified in the following 2 months.

In conclusion, where prior reports of COVID-19 among homeless shelters and other congregate settings have been concerning, our experience is hopeful. Interrupting the spread of COVID-19 in congregate settings poses a great challenge, more pressing as states lift aspects of quarantine. Our outcomes demonstrate that an early and comprehensive COVID-19 preparedness plan may effectively protect a vulnerable homeless population. The reality of homelessness in the United States has become more visible in the COVID-19 pandemic as we assess our capacity to protect the most vulnerable. Any long-term plan should include a commitment to housing for all. In the short term, continued support to extend implementation of COVID-19 infection prevention and control activities, like those we describe here, is imperative. Key aspects of our model may be adapted to other settings to protect vulnerable populations.

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Prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) in respiratory cultures and diagnostic performance of the MRSA nasal polymerase chain reaction (PCR) in patients hospitalized with coronavirus disease 2019 (COVID-19) pneumonia

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To the Editor—The need for studies on coronavirus disease 2019 (COVID-19) superinfections that can inform rational antimicrobial treatment and stewardship strategies has been recognized.[1] In a recent review from our institution,[2] we found that up to 71% of patients admitted with COVID-19 received antibiotics. Anti–methicillin-resistant *Staphylococcus aureus* (anti-MRSA) agents, particularly vancomycin, are important stewardship targets, and they are included in the 2019 World Health Organization (WHO) Watch List of Antibiotics.

Recently, guidance was published on the treatment of possible concomitant community-acquired bacterial pneumonia

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(CAP) for patients admitted with COVID-19.[3] The authors recommend selective use of anti-MRSA therapy, as for any other patient with CAP, and the utility of the MRSA nares PCR is not addressed. However, the empiric use of these agents for admitted COVID-19 patients remains prevalent, driven by several factors. For one, staphylococcal superinfection is a common complication of other viral pneumonias, such as influenza,[4] and the 2018 Infectious Diseases Society of America (IDSA) guidelines on influenza treatment state that "agents with activity against MRSA should be included in the empiric regimen for critically ill patients."[5] Additionally, the real-world treatment of patients with COVID-19 is complicated by recurrent fevers, fluctuating oxygen requirements, prolonged hospitalization and/or ventilation, blurring the line between community-acquired versus hospital-acquired pneumonia. Therefore, we sought to determine the prevalence of MRSA in respiratory cultures of patients admitted with COVID-19, and we evaluated the diagnostic performance of the MRSA nares PCR test, a valuable stewardship tool for ruling out MRSA pneumonia in low-prevalence settings,[6] in this cohort.

Methods

We conducted a retrospective, cohort study including adult patients admitted with COVID-19 (SARS-CoV-2 PCR test positive) between March 13, 2020, and May 17, 2020, across all campuses of Montefiore Medical Center (MMC), an academic center in the Bronx, New York. To determine the prevalence of MRSA in respiratory cultures, we included all patients with respiratory cultures obtained within 3, 7, 14, or 28 days of admission, and we calculated prevalence for each of these time points. To determine the diagnostic performance of the MRSA nares PCR, we included all COVID-19 patients who had MRSA nares PCR performed and a respiratory culture obtained within 5 days of the PCR test, at any point during their hospitalization. Data were obtained through Clinical Looking Glass, a computerized healthcare surveillance software at MMC linked to the electronic health record.

Results

During the study period, 4,221 adult patients were admitted with COVID-19; only 472 patients (11.1%) had a respiratory culture. Patients with respiratory cultures were more severely ill than the patients without respiratory cultures, 78% of patients were intubated versus only 12% of those without respiratory cultures. Additionally, patients with respiratory cultures had longer lengths of stay (median, 19.5 days vs 6 days) and higher mortality (56% vs 21.5%) versus those who had no respiratory culture. Overall, 904 (21.4%) received empiric vancomycin within 48 hours of admission, and this was more commonly seen in the group that had respiratory cultures obtained (33.4%). Patient characteristics are summarized in Supplementary Table 1 (online).

Among the 4,221 patients in the entire cohort, 158 patients had respiratory cultures obtained by day 3 of hospitalization, 285 by day 7, 405 by day 14, and 472 by day 28. The prevalence of MRSA in respiratory cultures ranged from a low of 0.6% on day 3, to 5.7% on day 28, cumulatively (Table 1).

Also, 369 MRSA nares PCR tests were performed among the patients in the cohort; of these patients, 122 had corresponding respiratory cultures within 5 days of the PCR test. Of these 122 MRSA PCR tests, 12 were positive, of which 2 patients had a corresponding positive respiratory culture for MRSA. Of the 110 negative nasal MRSA PCR tests, none of the corresponding respiratory cultures had MRSA isolated, yielding a negative predictive value (NPV) of 100% (Supplementary Table 2 online).

Table 1. Prevalence of Methicillin-Resistant *Staphylococcus aureus* (MRSA) in Respiratory Cultures at Different Time Points of Hospital Stay

Days from Admission	Day 3	Day 7	Day 14	Day 28
Total patients with respiratory cultures obtained, no.	158	285	405	472
Patients with MRSA in respiratory cultures, no	1	7	18	27
Prevalence, %	0.6	2.4	4.4	5.7

Discussion

Patients requiring hospitalization for COVID-19 are often admitted with a severe pneumonia and critical illness. Given the severity of illness and a lack of data on superinfections, MRSA is often a clinical concern, and we noted frequent empiric use of vancomycin, especially in those who were more severely ill.

Respiratory cultures were not frequently obtained, reflecting the concern that suctioning or sputum induction would cause aerosolization. Those who got respiratory cultures, however, tended to be more severely ill, the very group in which a MRSA coinfection would be most concerning. Even in this more severely ill group, MRSA was not commonly identified as a respiratory copathogen, especially early in the course of admission. The prevalence increased with prolonged hospital stay, implying that it is more likely to be a hospital-acquired or ventilator-associated complication than a community-acquired coinfection. Nevertheless, rates still remained low further into admission. Our findings suggest that continued empiric usage of vancomycin for pneumonia in patients with COVID-19 is likely not warranted. Clinicians should remain guided by local epidemiologic data; notably, however, the Bronx has had the highest rates of MRSA infections in New York City.[7] Additionally, our findings are in keeping with decreasing rates of MRSA infections across the United States in recent years.[8,9]

Given the low prevalence, we found excellent diagnostic performance of the MRSA nares PCR test, with 100% negative predictive value, confirming that the MRSA nares PCR test remains an important stewardship tool to guide discontinuation of anti-MRSA antibiotics, if started empirically for pneumonia in patients with COVID-19.

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Asymptomatic coronavirus disease 2019 (COVID-19) in hospitalized patients

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To the Editor—In 1 week, 9 in 120 asymptomatic inpatients (7.5%) were diagnosed with coronavirus disease 2019 (COVID-19) at a hospital with a universal face mask policy. The median length of stay was 11 days, suggesting nosocomial infections. Most were presymptomatic, with median cycle threshold value of 22, indicating high viral loads. Assessment of asymptomatic COVID-19 can help determine the true impact of the disease and improve knowledge on transmission potential, which is of paramount relevance for public health policies and for infection control.[1,2]

Between the July 6 and 12, 2020, 120 patients aged >18 years at São Paulo Hospital in São Paulo, Brazil, were screened for severe acute respiratory coronavirus virus 2 (SARS-CoV-2) with RT-PCR on nasopharyngeal specimens. All patients were assessed for symptoms (including fever ≥37.8°C, cough, anosmia, dysgeusia, dyspnea, myalgia, headache, and nasal discharge), and were asymptomatic at enrollment.

The hospital normally has ~600 beds, but during the pandemic, this hospital was divided between isolated COVID-19 units with 120 beds and general units with restricted capacity, leaving ~100 beds to non–COVID-19 patients. The hospital had a universal face mask policy for healthcare staff (surgical), patients, and visitors (cloth or surgical) at the time of sample collection. None of the patients were suspected COVID-19 cases nor had known exposure to confirmed cases, so the standard care for the condition which they were hospitalized was carried out normally for these patients. Outcomes were monitored until test results were received. If a test was positive, the patient was transferred to an isolated unit. This study was approved by the local ethics committee and all subjects signed a written informed consent form.

Data are summarized as percentages and medians (ranges), and 95% confidence intervals were calculated via the binomial method using free Statistics version 4.0 software.

Results

Overall, 9 asymptomatic patients (7.5%; 95% CI, 3.48%–13.76%) were diagnosed with COVID-19 (Table 1). Two patients (22.2%) were in the hospital due to surgery, and the others were hospitalized due to clinical conditions. The median time of hospitalization was 11 days (range, 1–39).

All asymptomatic patients with COVID-19 had considerable comorbidities, including hypertension (n = 7, 77.7%), obesity (n = 5, 55.5%), and diabetes (n = 4, 44,4%). Also, 4 patients (44.4%) had immunocompromising conditions: 2 had rheumatic diseases, 1 had had a kidney transplant, and 1 had a nephrotic syndrome requiring high-doses of corticotherapy.

Notably, 6 patients (66.7%) developed respiratory tract symptoms a median of 2 days (range, 1–5) after the sample collection; thus, they were recategorized as presymptomatic at time of testing, and all required respiratory support: 3 patients (50%) required mechanical ventilation (of these, 2 died and 1 was discharged). The other 3 patients received supplemental oxygen with nasal cannula and 1 of them was discharged. The others are still in the hospital due to their comorbidities. The 3 asymptomatic patients were discharged without complications. The median cycle thresold (Ct) values were 22 (range, 19–37) and 38 (range, 35–39) for the presymptomatic and asymptomatic subgroups, respectively.

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