Table. Observed vs Predicted Risk of Critical Illness Based on COVID-GRAM Score by Quintile of Predicted Risk Among 214 Patients Hospitalized With COVID-19 in Spain

Quintile (No. of patients)	Critical illness predicted, No. (%) [range]	Critical illness observed, No. (%)	*P* value[a]
Q1 (42)	2 (3.4) [0.4-5.0]	1 (2.4)	.50
Q2 (43)	3 (7.6) [5.1-10.6]	7 (16.3)	.21
Q3 (43)	6 (14.5) [10.7-20.6]	6 (14.0)	>.99
Q4 (43)	14 (31.3) [21.5-41.4]	13 (30.2)	.82
Q5 (43)	25 (57.5) [41.6-98.8]	14 (33.0)	.01

[a] *P* value from χ^2 test comparing observed vs predicted values.

The **Table** shows the distribution of observed vs predicted risk based on the COVID-GRAM score by quintile of predicted risk. The COVID-GRAM predictions were similar to the observed outcomes among patients in the first 4 quintiles of risk for critical illness, but it overestimated the predicted risk of events in the highest quintile by almost 2-fold. The accuracy of the COVID-GRAM in the cohort was moderate, with an AUC of 0.72 (95% CI, 0.64-0.80) compared with an AUC of 0.88 (95% CI, 0.84-0.93) in the Chinese validation cohort.[1] A score of 89 or higher showed a sensitivity of 97.7% and a specificity of 32.7% for development of critical illness.

Discussion | We were unable to fully validate the COVID-GRAM tool for predicting critical illness among patients hospitalized with COVID-19 in Europe because, although the tool showed good predictive ability for critical illness in lower-risk patients, it overestimated risk in the highest-risk patients. The study may have been limited by differences in patient age and comorbidities, disease severity, and other variations between the cohorts in China and Spain. Still, these findings reflect that caution is needed when applying risk prediction tools in new populations.

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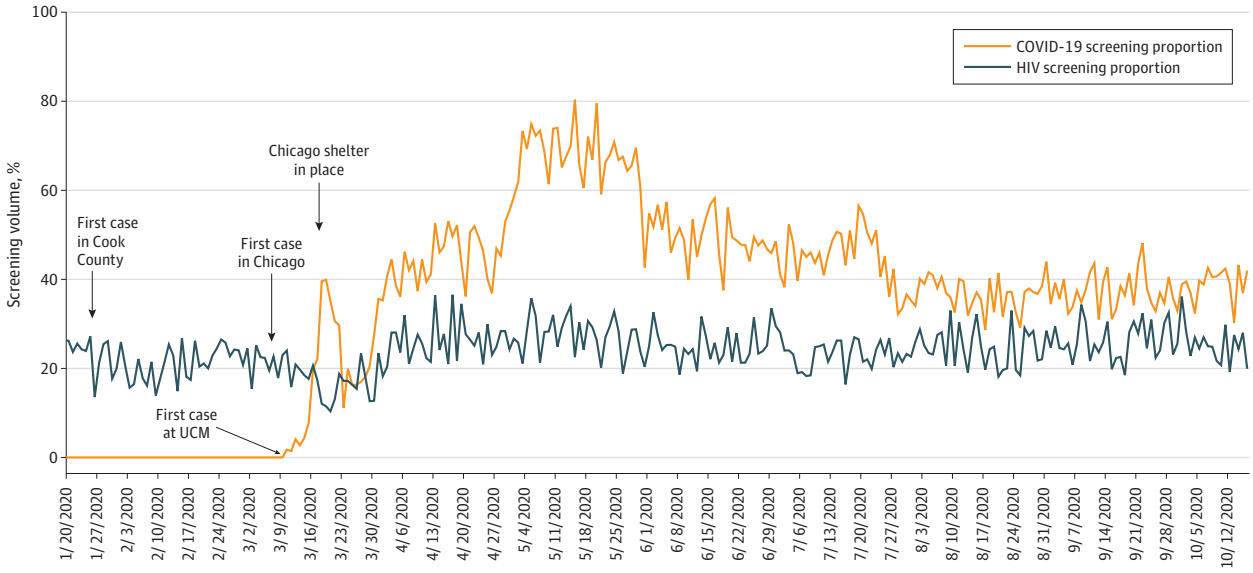
Incorporating HIV Screening With COVID-19 Testing in an Urban Emergency Department During the Pandemic

The COVID-19 pandemic has had negative consequences on HIV care and prevention programs, including routine HIV screening in health care settings.[1] This has serious implications for the Ending the HIV Epidemic plan for the United States.[2] Herein, we report the results of incorporating phlebotomy for universal HIV screening into COVID-19 testing at The University of Chicago Medicine (UCM) emergency department (ED) for the purpose of maintaining screening volumes.

Methods | The institutional review board at the UCM Medical Center granted exemption for this project because the data set analyzed contained deidentified data. We reviewed data from the Expanded HIV Testing and Linkage to Care Program, a collaboration between 13 health care centers on the South and West sides of Chicago, during the COVID-19 pandemic.[3] Sites include community health centers, community hospitals, and academic hospitals, including 5 EDs, all of which implemented opt-out HIV screening according to guidelines.[4] Since 2016, sites perform combination HIV antigen-antibody testing and have processes for rapid link-

Figure. Proportion of Emergency Department Visits at UCM With HIV Screening and COVID-19 Testing During the COVID-19 Pandemic



UCM indicates The University of Chicago Medicine.

Table. HIV Screens, New HIV Diagnoses, and Acute HIV Infections Diagnosed in the Emergency Department (ED) at UCM and Other EDs[a]

Year	No.					
	HIV screens in ED at UCM	New HIV diagnoses in ED at UCM	AHI diagnoses in ED at UCM	HIV screens in other x-TLC EDs	New HIV diagnoses at other x-TLC EDs	AHI diagnoses at other x-TLC EDs
2016	2837	18	5	16 008	57	3
2017	3651	22	7	21 175	53	8
2018	5748	39	4	21 133	39	4
2019	11 861	39	9	16 878	48	12
2020	14 215	39	12	14 470	32	4

Abbreviations: AHI, acute HIV infection; UCM, The University of Chicago Medicine; x-TLC, Expanded HIV Testing and Linkage to Care Program.

[a] Dates of comparison are from January 1, 2016, through October 16, 2020.

age to care and antiretroviral initiation for patients with acute HIV infection (AHI).[5] The ED at UCM designed a rapid COVID-19 testing area to seamlessly incorporate phlebotomy for HIV screening without any additional personnel. Responsibilities for test review, patient notification, and linkage to care were assigned to the HIV Care Program. Statistical analysis was an interrupted time series Poisson regression comparing the rate of AHI diagnoses per day for the 1461 days prior to January 1, 2020, and the 290 days between January 1 and October 16, 2020. Analyses were completed using SAS, version 9.4 (SAS Institute Inc), and 2-sided $P < .05$ was considered statistically significant.

Results | Most sites experienced significant reductions in HIV screens during the pandemic, and overall, the program saw a 49% reduction in testing events from January 1 to April 30, 2020. The ED at UCM, however, maintained HIV screening volumes throughout the pandemic (**Figure**) and performed 19 111 HIV screens (14 215 in the ED) between January 1 and October 16, 2020, along with 112 242 COVID-19 polymerase chain reaction (PCR) tests (18 830 in the ED). Twelve patients were diagnosed with AHI after the first COVID-19 diagnosis in Cook County on January 24, 2020 (**Table**). The rate of AHI diagnoses per day was significantly higher during the pandemic compared with the prior 4 years (incidence rate ratio, 2.43; 95% CI, 1.22-4.83; $P = .01$). Other EDs not incorporating HIV screening into COVID-19 testing saw a 25% decrease in AHI diagnoses (incidence rate ratio, 0.75; 95% CI, 0.26-2.14; $P = .59$) that was not statistically significant.

Patients with AHI comprised 12 of 46 (26.1%) new diagnoses at UCM, the highest proportion on record. Included were 9 men (6 men who have sex with men, 2 heterosexual, and 1 undisclosed) and 3 cisgender women with a median (range) age of 25 (21-28) years. The median (range) viral load was 6 million (115 000 to >6 million) copies/mL. Eleven of 12 patients presented with symptoms consistent with COVID-19. One patient had COVID-19 infection and AHI. All were linked and initiated antiretroviral therapy by a median (range) of 1 (0-38) day from the time of PCR result but 3 (1-41) days from sample collection owing to delays in reflex PCR confirmatory testing, a result of high demands on laboratory personnel and scarcity of supplies (eg, amplification and testing trays) owing to COVID-19 testing volumes.

Discussion | The COVID-19 pandemic is superimposed on the HIV pandemic, jeopardizing progress toward HIV elimination. Routine HIV screening in health care settings is a key elimination strategy that has been negatively affected during the pandemic. A limitation to this study is that the reasons for refusal of HIV screening by patients or health care professionals are not known. Also, we do not know how many COVID-19 tests were triggered by symptoms or were screening of asymptomatic patients owing to exposures or screening of potential admissions for infection control purposes. However, we saw a considerable increase in AHI diagnoses with incorporating HIV screening into COVID-19 testing in the ED at UCM. This could be because of increased screening. Alternatively, patients with AHI may be more likely to present for care because of concern for COVID-19 infection. Finally, new transmissions may be increasing owing to disrupted HIV care and prevention efforts. Thus, HIV screening programs, particularly in EDs, should incorporate or even link HIV screening to COVID-19 testing. Modeling suggests this would reduce HIV incidence and health care costs.[6]

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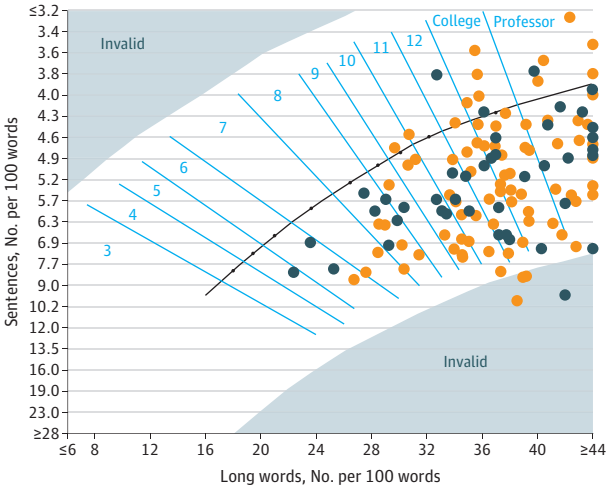
Systematic Assessment of Online Health Information for Coronary Revascularization

Coronary artery bypass grafting (CABG) and percutaneous coronary intervention (PCI) are the most common interventions for coronary artery disease.[1] For both, patient involvement in the

Figure. Readability of Online Resources on Coronary Artery Bypass Grafting and Percutaneous Coronary Intervention



Blue dots indicate percutaneous coronary intervention, orange dots indicate coronary artery bypass grafting, and the black line represents the mean for the education level.