

Brief Educational and Process Change Intervention Increases HIV, Hepatitis C, and Syphilis Screening in Psychiatric Inpatients Admitted from a Psychiatric Emergency Service



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Background

- Psychiatric disorders increase risk for infection with human immunodeficiency virus (HIV), hepatitis C virus (HCV), and syphilis, and these infections carry implications for psychiatric symptoms and treatment.¹
- At the University of New Mexico Psychiatric Center (UNMPC), no standardized protocol existed for HIV, HCV, and syphilis screening among patients admitted for psychiatric hospitalization.

Methods

- In January 2020, residents and faculty at UNMPC began a quality improvement intervention aimed at increasing screening for HIV, HCV, and syphilis among patients admitted for hospitalization from the psychiatric emergency service.
- The intervention consisted of four components: Safe Zone training for residents; addition of HIV, HCV, and syphilis testing prompts to the admission order set in the electronic health record (EHR); resident education about screening and consent; and posted reminders at resident workstations.
- Retrospective evaluation of de-identified EHR data compared screening rates over the nine months post-intervention versus the nine months pre-intervention.
- Secondary evaluations investigated whether onset of the COVID-19 pandemic in New Mexico in March 2020, or the start of the new resident class in July 2020, affected screening rates post-intervention.
- Pearson chi-square analyses tested for screening rate differences.
- This study was approved by the UNM Human Research Protections Office.

Results

- Screening rates for all conditions increased post-intervention.
- HIV screening increased from 7.7 to 14.4% ($X^2(1, 1838) = 20.89, p < .001$), HCV from 4.9 to 15.3% ($X^2(1, 1838) = 54.66, p < .001$), and syphilis from 15.6 to 21.5% ($X^2(1, 1838) = 10.60, p = .001$). See Figure 1.
- Neither the onset of the COVID-19 pandemic in New Mexico in March 2020 ($X^2(1, 488) = 0.31, p = .579$), nor the start of the new resident class in July 2020 ($X^2(1, 679) = 0.03, p = .863$), impacted screening rates post-intervention. See Figure 2.

Figure 1: HIV, HCV, & Syphilis Screening Rates Pre-Post Intervention

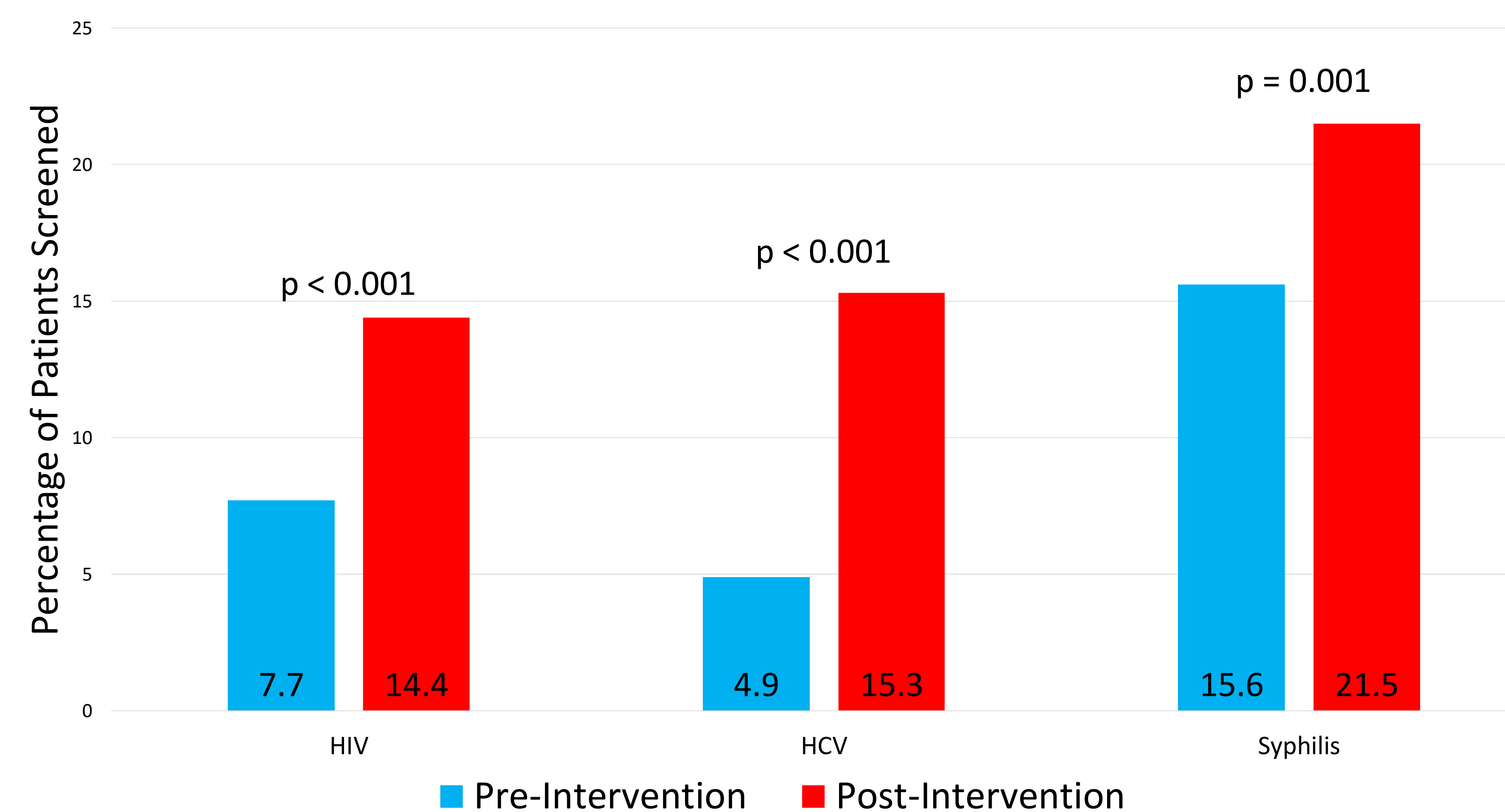
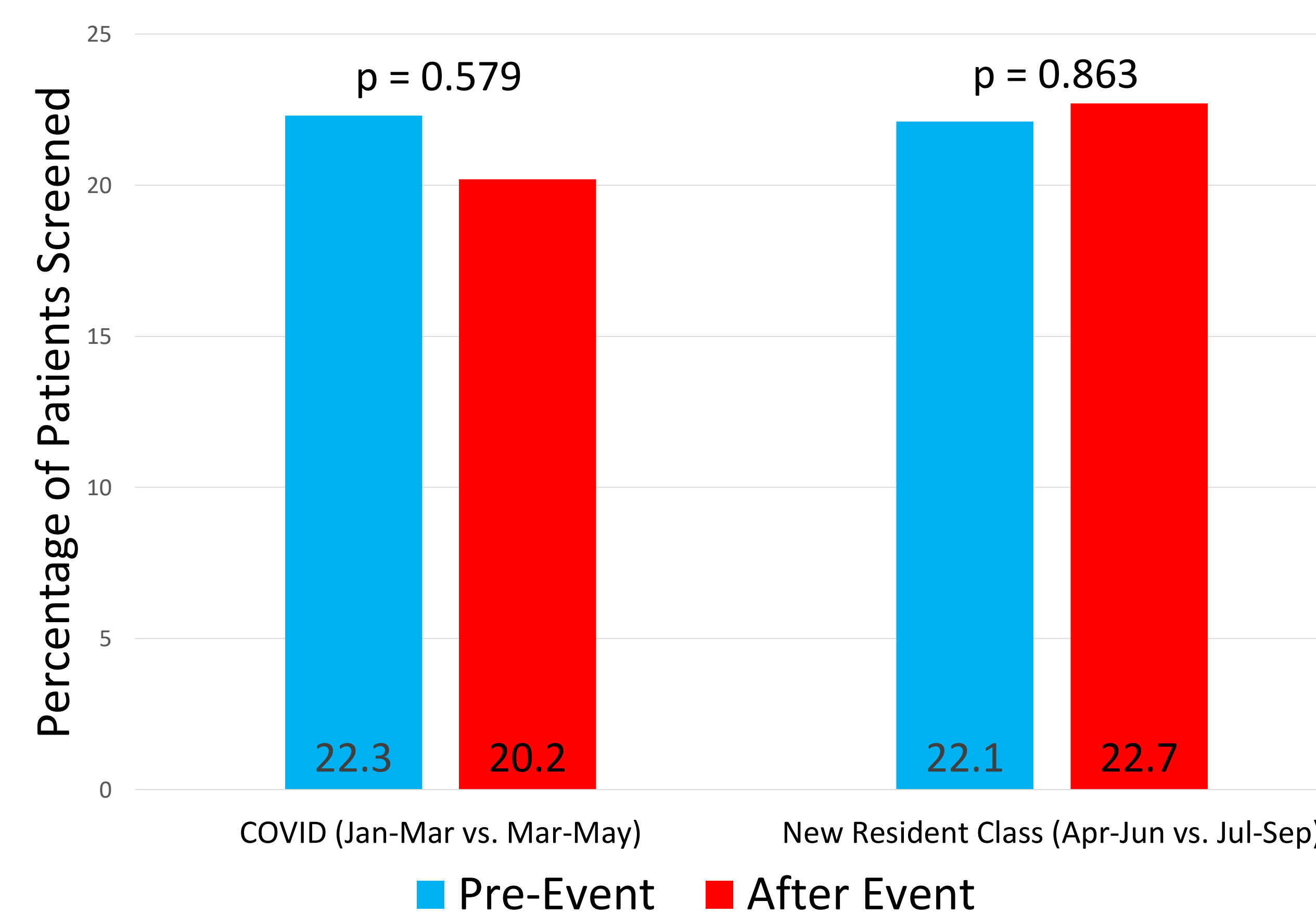


Figure 2: COVID-19 and New Resident Class Impacts on Screening for Any Condition Post-Intervention



Discussion

- This brief quality improvement intervention significantly increased screening rates for HIV, HCV, and syphilis in psychiatric inpatients admitted from the psychiatric emergency service.
- Even post-intervention, screening rates remained low.
- These findings mirror previously published data on the impact of a low-intensity administrative advocacy and in-service training intervention on HIV screening rates in psychiatric inpatients.²
- Barriers to routine screening may include limited provider awareness, discomfort with obtaining consent, and difficulty ordering associated laboratory tests within existing electronic admission order sets.

Conclusions

- In light of the bidirectional risks of psychiatric disorders and infection with HIV, HCV, and/or syphilis, and in keeping with United States Preventive Service Task Force guidelines pertaining to screening for these infectious diseases, further quality improvement initiatives remain necessary for increasing screening for these conditions amongst persons admitted for psychiatric hospitalization.³

References

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