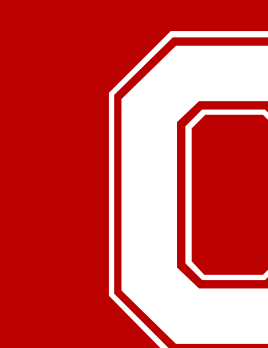


Increased Early Syphilis Detection and Treatment in an Urban Emergency Department During the COVID-19 Pandemic

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Background

- Many people at risk for sexually transmitted infections (STIs) utilize the emergency department (ED) for evaluation and treatment of STI-related complaints¹.
- While most patients are routinely screened for gonorrhea and chlamydia, rates of syphilis and HIV screening in the ED setting have historically been low^{2,3}.
- In 2018, a multidisciplinary team of Emergency Medicine (EM) and Infectious Disease (ID) clinicians was created which resulted in improved rates of syphilis and HIV screening in the ED⁴.
- In this current analysis, we sought to evaluate trends in syphilis testing and case finding, and to evaluate demographic and clinical outcomes for patients diagnosed with early syphilis in the Ohio State University Wexner Medical Center (OSUWMC) East ED between 2019 and 2021.
- Years 2020 and 2021 were marked by significant disruptions to healthcare delivery due to the COVID-19 pandemic; this included stay at home orders, clinic/health department closures, and other disruptions to STI/HIV prevention efforts.

Methods

- As part of the previously described collaborative intervention that was designed to increase syphilis screening in the ED, a member of the ID team reviewed all positive syphilis results each day and facilitated follow up and treatment.
- For this analysis, medical records were reviewed for all patients who were diagnosed with early syphilis in the OSUWMC East ED between January 1 2019 and December 21 2021.
- This study was approved by the Ohio State University Biomedical Sciences Institutional Review Board.

Results

- Compared with 2019, we observed a significant increase early syphilis cases identified in our ED during the 2020 and 2021 (during the COVID-19 pandemic) despite stable rates of testing (Figure 1).
- In total, there were 55 cases of early syphilis, including 3 with neurosyphilis (NS) at the time of diagnosis (Figure 2).
- Most cases of early syphilis were men (38/55; 69%), Black/African American (44/55; 80%), and presented with symptoms (48/55; 87%).
- Nine of 55 patients (16%) had HIV co-infection, including 2 that were newly diagnosed at time of syphilis diagnosis.
- Most patients (44/55; 80%) completed appropriate treatment.
- Of patients presenting with symptoms suggestive of syphilis, 17/45 (37%) received presumptive treatment during their ED visit before test results were available (3 cases of NS excluded).
- Of those who received treatment after discharge from the ED, the median time to treatment completion was 3 days (range 0-30 days), with 11/24 (46%) choosing to return to the ED for treatment

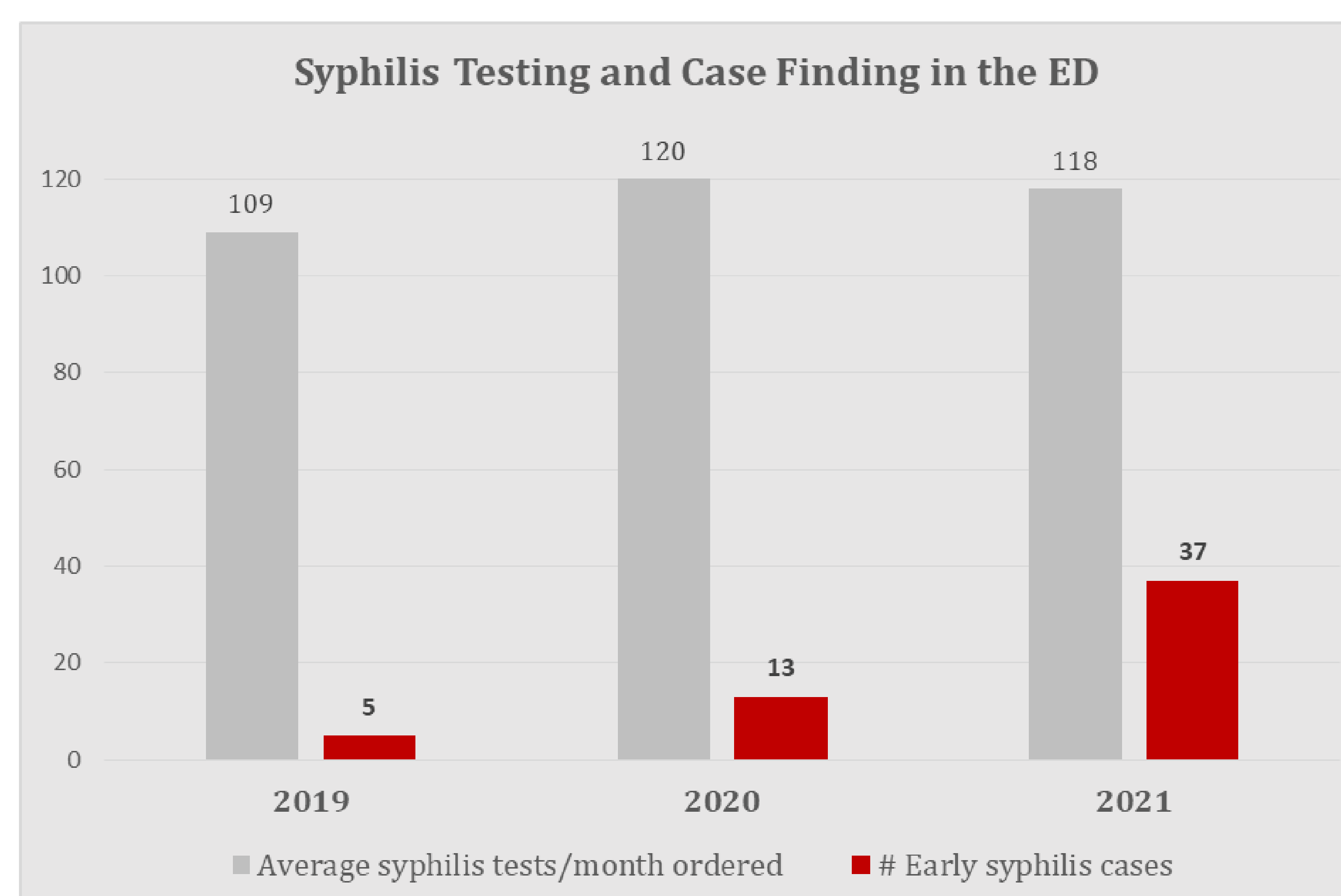


Figure 1.

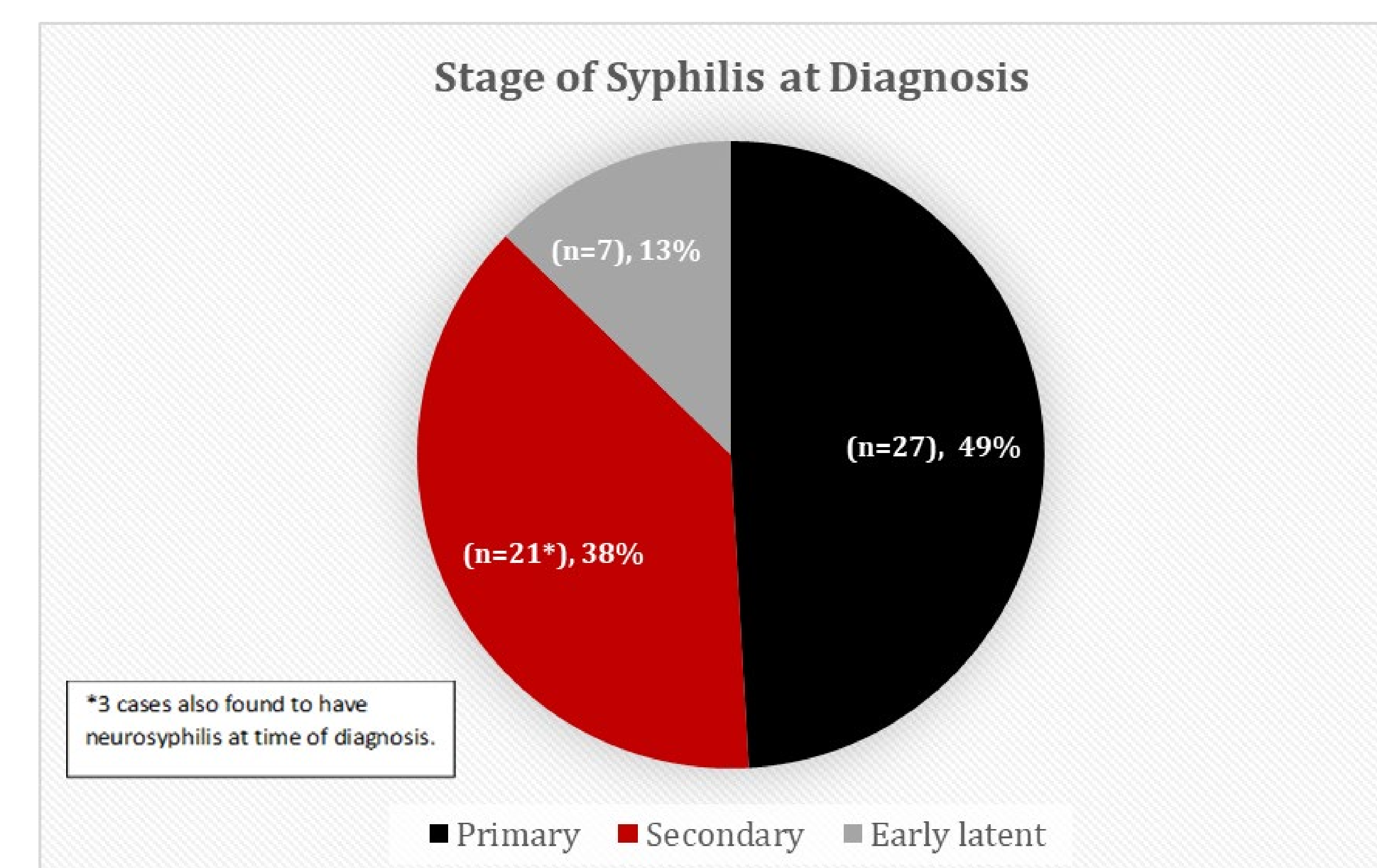


Figure 2.

Conclusions

- As a result of a collaborative intervention between ID and EM clinicians that began in 2018, there has been improvements in rates of HIV and syphilis screening in patients who present to the ED with STI-related complaints.
- The majority of patients who were diagnosed with early syphilis in the ED completed appropriate treatment in a timely manner.
- In 2020 and 2021, during the height of the COVID-19 pandemic, there were significant increases in cases of early syphilis identified in the ED, despite stable rates of testing. This was likely a result of pandemic related disruptions to essential healthcare services (including the closure of the local health department sexual health clinic).

References

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