# Missed Opportunities for Confirmatory HIV Testing at a Midwestern Medical Center

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## Introduction

- HIV nucleic acid tests (NATs) are not done reflexively in our lab for discordant screening and confirmatory results due to the need for a sample in a different blood tube
- This requires providers to act on the recommendation in the report for HIV NAT, and for most patients to return for an additional blood draw

## Objective

To evaluate the performance of an institutional HIV testing algorithm without reflex to HIV NAT, specifically whether appropriate HIV NAT confirmatory testing is being performed.

#### Methods

Retrospective chart review of patients with a positive p24Ag

Was confirmatory HIV NAT testing performed?

What factors were associated with confirmatory NAT testing?

Statistical analysis with T-tests and Fisher's exact test at 5% significance level

# Results 37 positive p24Ag component of HIV Ag-Ab screening test + negative HIV2 6 (17%) did NOT 31 (83%) had have confirmatory confirmatory HIV NAT NAT 3 providers did 24 (77%) not recognize negative NAT need for HIV NAT 7 (23%) 1 patient did not return for test positive NAT 2 other factors prevented follow-up

- Mean time difference between positive Ag-Ab immunoassay and completion of HIV NAT was 4.5 days (SD=5.7 days)
- Patients with an HIV NAT ordered were younger and more likely to be female than those who did not have an HIV NAT ordered (p=0.05, p=0.01, respectively)
- There were no associations with patient location (outpatient vs. inpatient), provider specialty, or other factors



## Discussion

- Our HIV testing algorithm is missing opportunities for HIV NAT testing
- The high rate of positive HIV NAT compared to the regional prevalence indicates cases of acute HIV are also likely being missed
- Identifying acute HIV infection is important for preventing transmission and improving patient outcomes

#### Conclusion

- HIV testing algorithms without reflex to HIV NAT or other systems in place to ensure follow-up can lead to missed opportunities
- Future work will evaluate the impact of a best practice alert to prompt providers to order a confirmatory HIV NAT

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## References

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