

# Investigation of a network of HIV/syphilis cases in young Black men who have sex with men (MSM) in Milwaukee and follow-up by Disease Intervention Specialists (DIS)

M. Gasiorowicz<sup>1</sup>, L. Stockman<sup>1</sup>, C. Schumann<sup>1</sup>, B. Kufalk<sup>1</sup>, D. Shrestha<sup>1</sup>, K. Grande<sup>1</sup>, R. LeBeau<sup>1</sup>, I. Reitl<sup>2</sup>, P. Biedrzycki<sup>2</sup>, J. Vergeront<sup>1</sup>

(1) Wisconsin Division of Public Health (2) City of Milwaukee Health Department

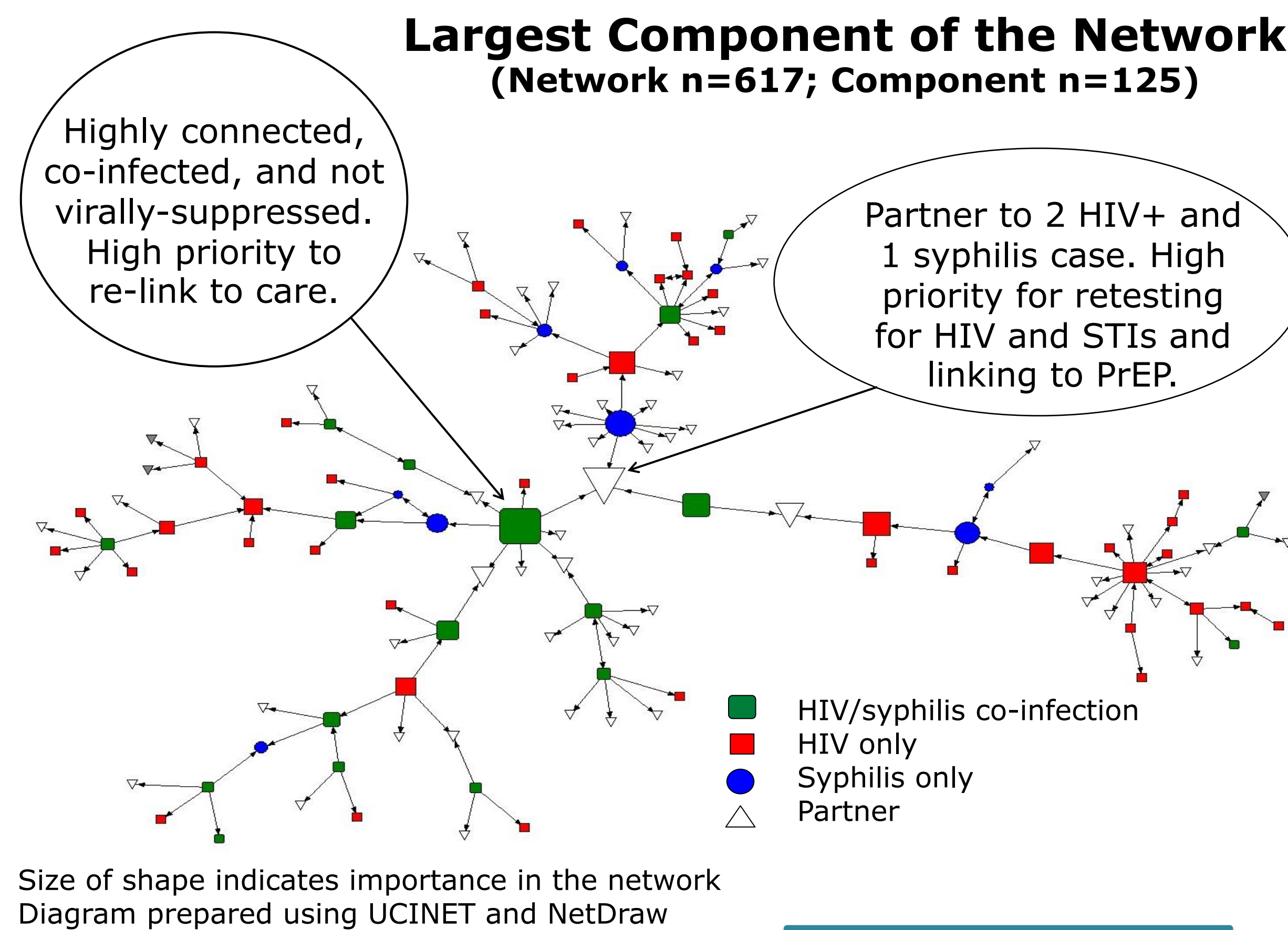


## BACKGROUND

One in three early syphilis cases in Milwaukee, Wisconsin, during 2012-2014 had a prior HIV diagnosis; the majority of both infections occurred in young Black MSM. In order to reduce new HIV and syphilis infections, the state and city health departments conducted an investigation in 2015 and prioritized HIV and syphilis cases for follow-up by Disease Intervention Specialists (DIS), clinic staff, and community providers.

## METHODS

Males aged <30 years diagnosed with HIV or early syphilis in Milwaukee County during 2012-2014 were identified through HIV and sexually transmitted infection (STI) surveillance systems. Their sexual partners were reported in partner services data systems. Cases and partners were matched by last name, date of birth, and soundex of the first name. The HIV surveillance system provided information on HIV care and viral load status in the six months prior to the investigation. LexisNexis® Accurant® was used to update locating information for cases and partners.



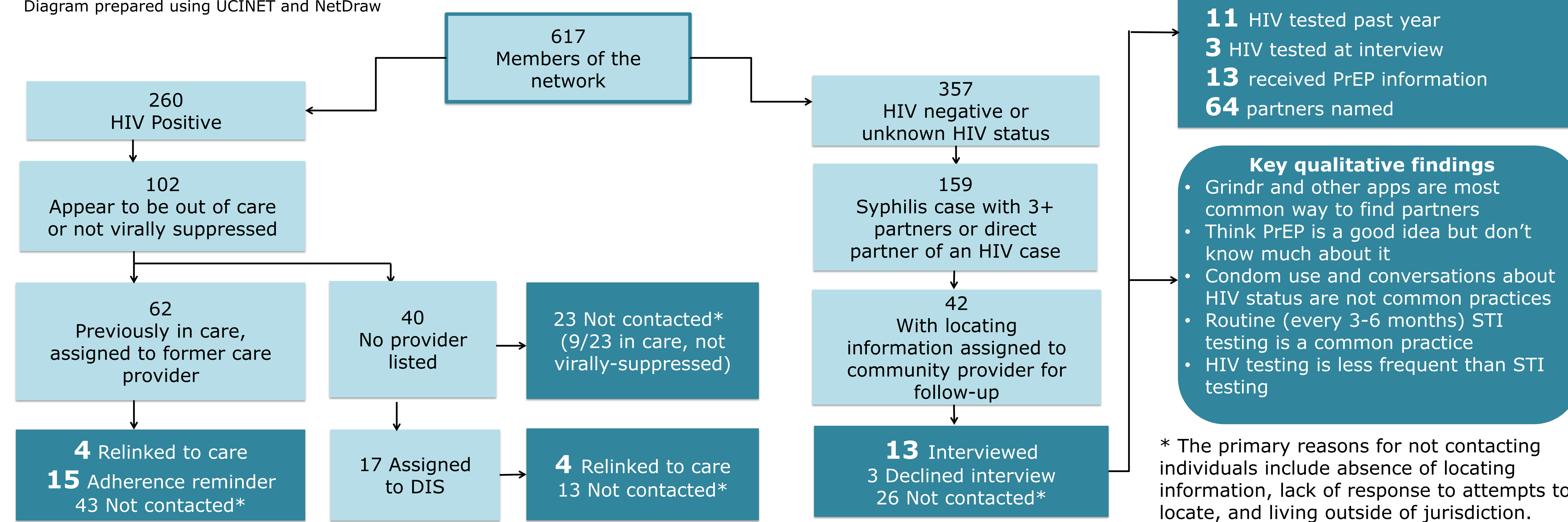
## RESULTS

### Network Member Characteristics (n=617)

- Black (n=422; 68%)
- Male (n=523; 85%)
- Cases (n=360, 58%): HIV (n=207); Syphilis (n=100); Co-infection (n=53)
- HIV+, in care and virally suppressed: 158/260 = 61%
- Non-case partners (n=257, 42%)

### Outcomes of investigation

- **121** Assigned for follow-up (62 HIV+ assigned to former HIV provider; 17 HIV+ to DIS; 42 HIV- to community provider)
- **15** HIV+ received adherence reminder
- **8** HIV+ re-linked to HIV care (4 former HIV provider; 4 DIS)
- **13** HIV- interviewed and received information about Pre-Exposure Prophylaxis (PrEP); **3** re-tested for HIV and STIs



## CONCLUSIONS

Use of HIV and syphilis case report and partner data can enable individual-level follow-up to help improve the health of people with HIV and STIs and avert new infections. Locating individuals begins with review of address information in HIV and STI surveillance, partner, and public records databases. Follow-up by DIS and clinic staff takes place by letter, text, phone, social media, and in-person. Echoing findings from other states, both review of locating information and follow-up steps are time-consuming and yield relatively low numbers linked to care and prevention services. However, those reached are at highest risk of transmitting or acquiring HIV and STIs.

## ACKNOWLEDGEMENTS

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## DATA SYSTEMS AND SOFTWARE

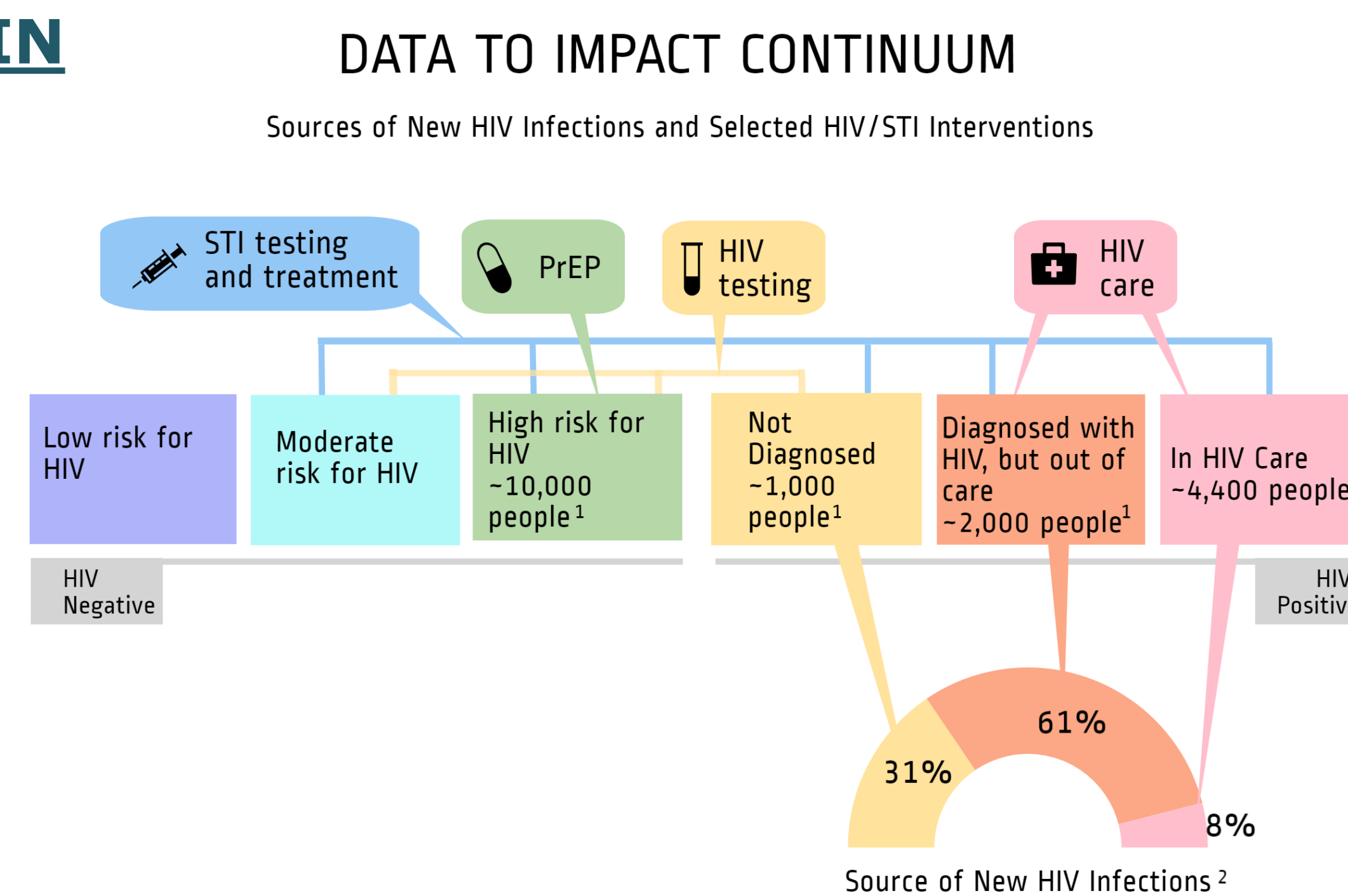
Enhanced HIV/AIDS Reporting System (eHARS), CDC: HIV surveillance  
Wisconsin Electronic Disease Surveillance System (WEDSS), Atlas: STI surveillance  
PartnerServicesWeb®, Luther Consulting: Partners of HIV cases  
STD\*MIS, CDC: Partners of STI cases  
LexisNexis® Accurant®: Public records database  
UCINET and NetDraw: Network diagramming software  
SAS VERSION 9.3: Statistical software for data matching

## REFERENCES

1. Wisconsin HIV Surveillance Reports 2016 and AIDS/HIV Program Notes, May 2016; March 2016 Supplement, <https://www.dhs.wisconsin.gov/aids-hiv/data.htm>
2. Skarbinski, J. et al. Human immunodeficiency virus transmission at each step of the care continuum in the United States. JAMA Inter Med 2015. Apr;175(4):588-96.

## FUTURE WORK IN WISCONSIN

The investigation led to development of the *Data to Impact Continuum*, which shows that more than half of new HIV infections are the result of transmission from people who are aware of their HIV status but are not in care.<sup>2</sup> The figure also shows individual-level interventions needed at each stage of the HIV/STI risk continuum.



The Wisconsin Division of Public Health is in the planning stages of:

- More closely aligning STI and HIV DIS work.
- Expanding follow-up with people living with HIV who are out of care, and HIV-negative people with indications for PrEP.
- Expanding linkage to care and to PrEP services conducted by community providers.

## STI AND HIV DISEASE INTERVENTION/ PARTNER SERVICES

