

HIV PREVENTION AND CARE AMONG TRANS PEOPLE IN SAN FRANCISCO

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UCSF Profiles
Women in Science at UCSF



THE SCIENCE OF HIV AMONG TRANS PEOPLE – [GOOGLE SCHOLAR](#)



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CECIL
CHUN
TRANS HIV/
ADVOCATE

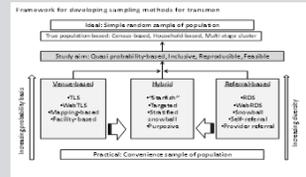
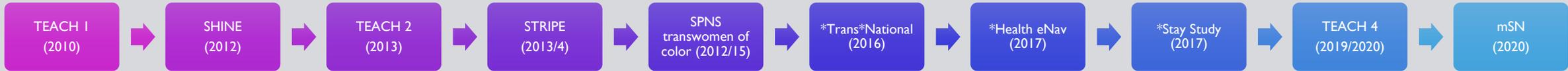
Meet Ms. Billie Cooper

At the Intersection of
Black, Transgender,
and HIV Communities,
the Outspoken Activist
Fights for All of Our
Needs

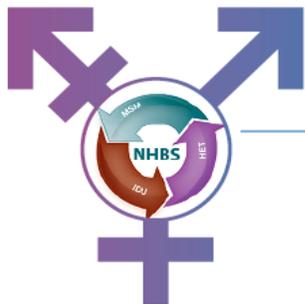
by Hank Trout
Photos by Saul Bromberger and Sandra Hoover Photography



EXTRAMURAL GRANTS (NIH, HRSA, CDC, SAMHSA) OBTAINED BY OUR TEAM TO SERVE THE LOCAL TRANS COMMUNITY



HIV SURVEILLANCE SPECIAL REPORT

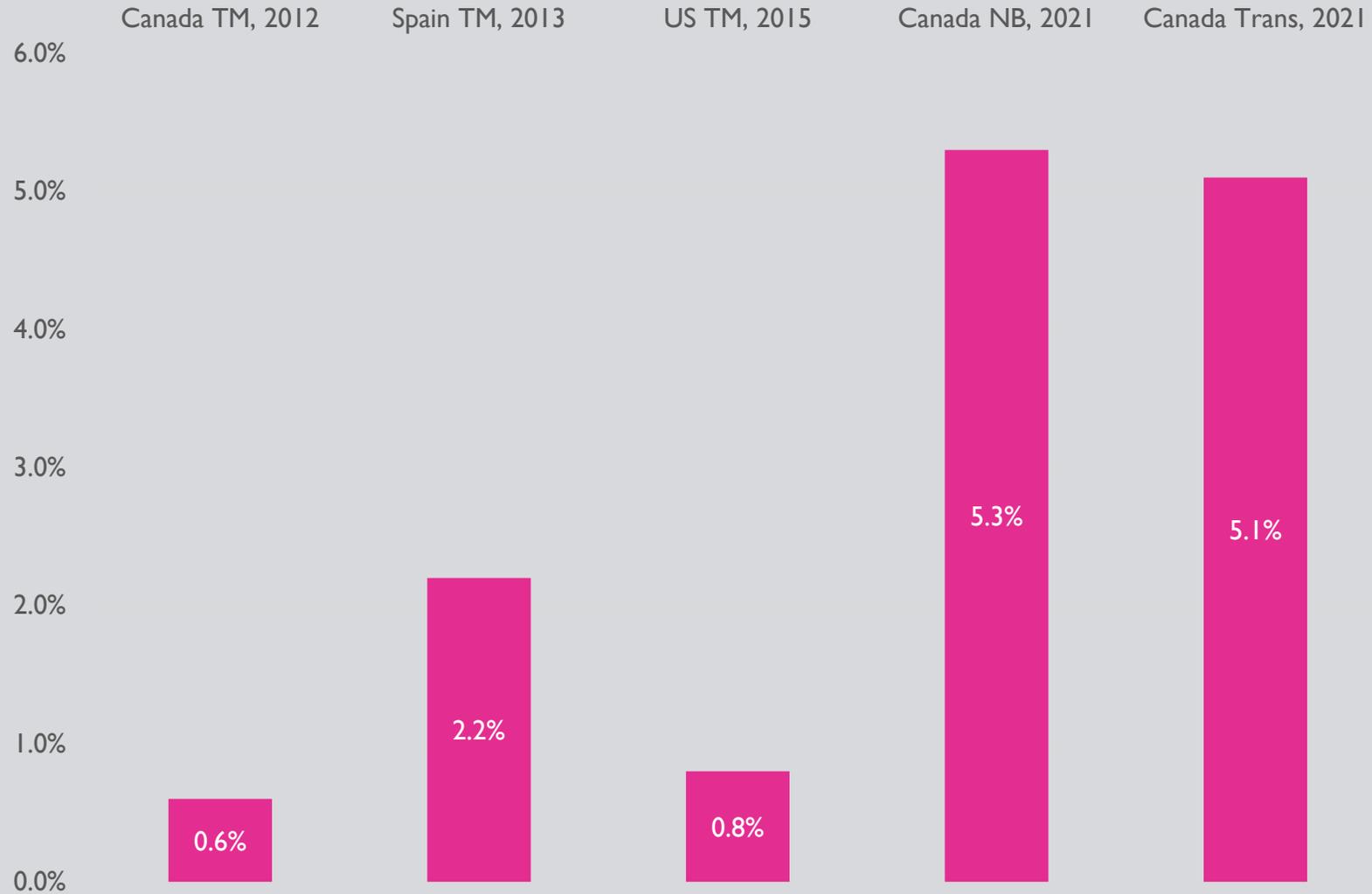


**HIV Infection, Risk, Prevention, and Testing
Behaviors Among Transgender Women**
National HIV Behavioral Surveillance • 2019–2020

1,608 transgender women were
interviewed in **7 cities** with high levels of HIV.

42% had **HIV**

LIMITED HIV EPIDEMIOLOGICAL DATA WITH TRANS MEN & NON-BINARY PEOPLE

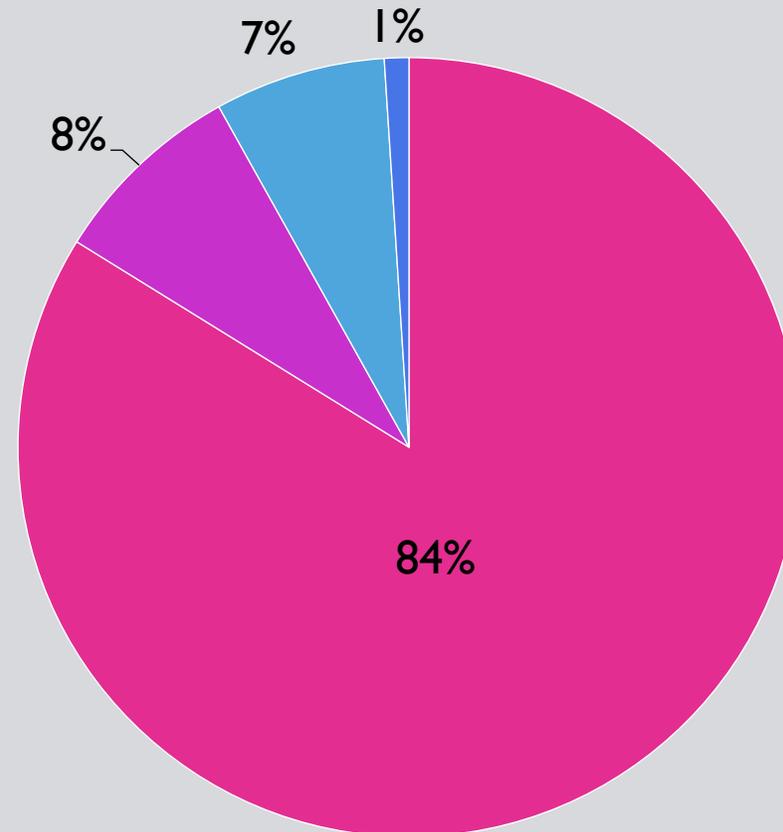


IMPACT OF HIV ON TRANS PEOPLE IN SAN FRANCISCO

What do we know locally in San Francisco?

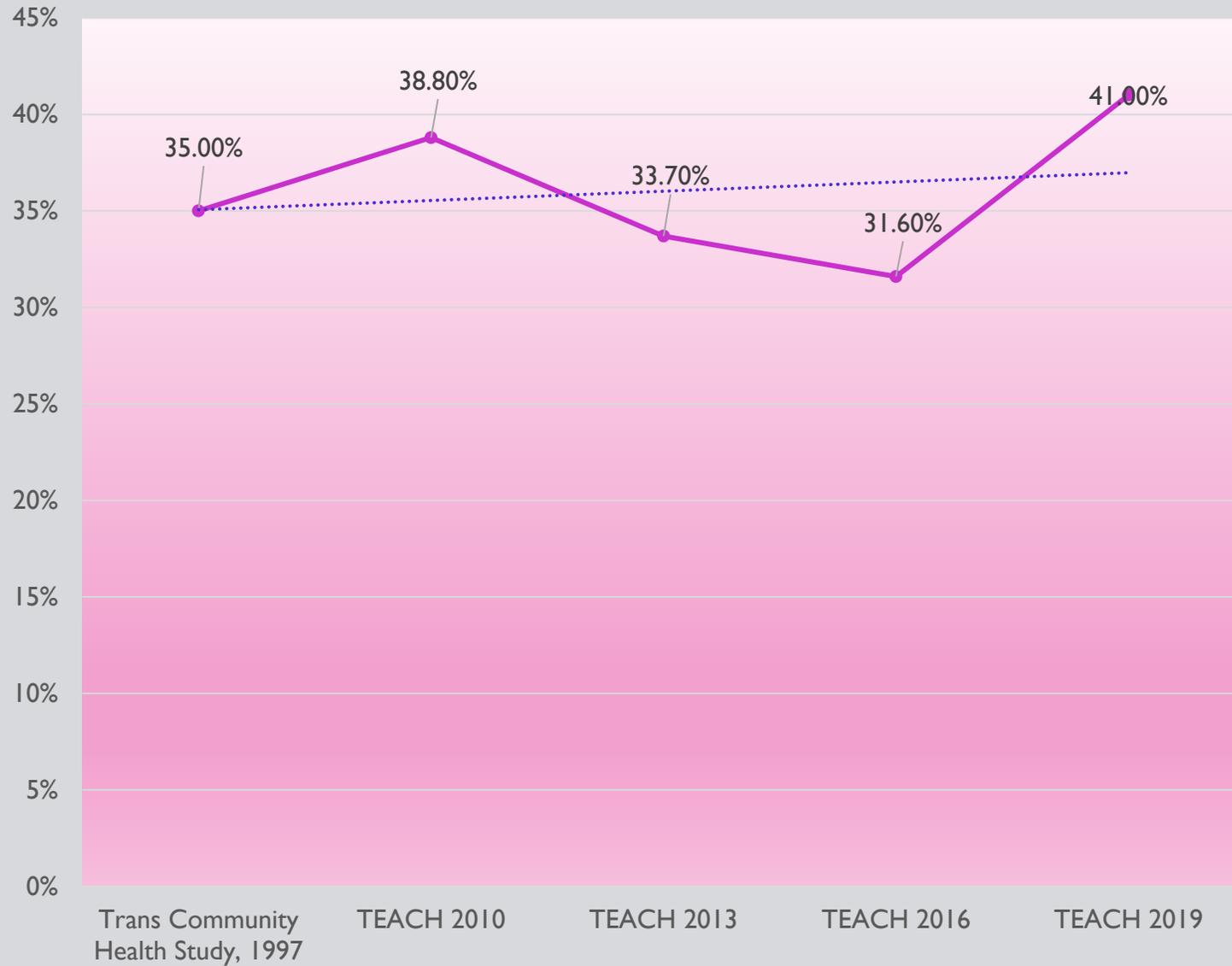
SAN FRANCISCO HIV-EPIDEMIOLOGY SURVEILLANCE DATA, 2019 REPORT

■ cis men ■ cis women ■ trans women ■ trans men



- Gender of people living with HIV/AIDS Cases (n=15,908)

Trends in HIV prevalence among trans women



IN THEIR OWN WORDS – HOW TRANS WOMEN IN SF ACQUIRED HIV

- Sex with a straight cisgender man partner when the respondent identified as a trans woman' (43.0%)
- Sexual assault (13.9%)
- Injection drug use (IDU) (10.1%)
- IDU or sexual contact (7.6%)
- Sex with a partner who injected drugs (7.6%)
- Sex work (6.3%)
- Sex with partner who was gay or MSM was (6.3%)

When first HIV-positive test was done		
Period	Era	n (%)
Up to 1986	Pre- effective AIDS treatment	5 (6.3)
1987 - 1994	Improving AIDS care and early ART	13 (16.5)
1995 - 2009	Highly effective ART	36 (49.4)
2010 - 2016	PrEP scale-up	17 (21.5)
2017 -	U=U, viral suppression as non-infectious	7 (8.9)
Don't know		1 (1.2)
Where first HIV-positive test was done		
Facility, site	Context	n (%)
Public health clinic	In the course of primary care	27 (34.2)
Correctional facility	Opportunistic testing in facility	18 (22.8)
Hospital, emergency room	In the course of other urgent care	15 (19.0)
Private doctor's office	In the course of primary care	6 (7.6)
HIV testing site, outreach, mobile	Specifically seeking HIV testing	6 (7.6)
Other	Other	7 (8.9)

INCIDENCE DATA SHOW DISPARITIES IN NEW CASES AMONG TRANS WOMEN IN SF BAY AREA

HIV incidence rate of 1.3 per 100 py among trans women overall

18-24 yo trans women had **2.8 HIV incidence** compared to those who were 25 and older

Latina/x transwomen had **2 x HIV** incidence of White trans women.

Trans women who had been incarcerated had **1.7 x HIV incidence** than those w/o a hx of incarceration

Trans women w/o health insurance **had 5 x HIV incidence** than those with health insurance

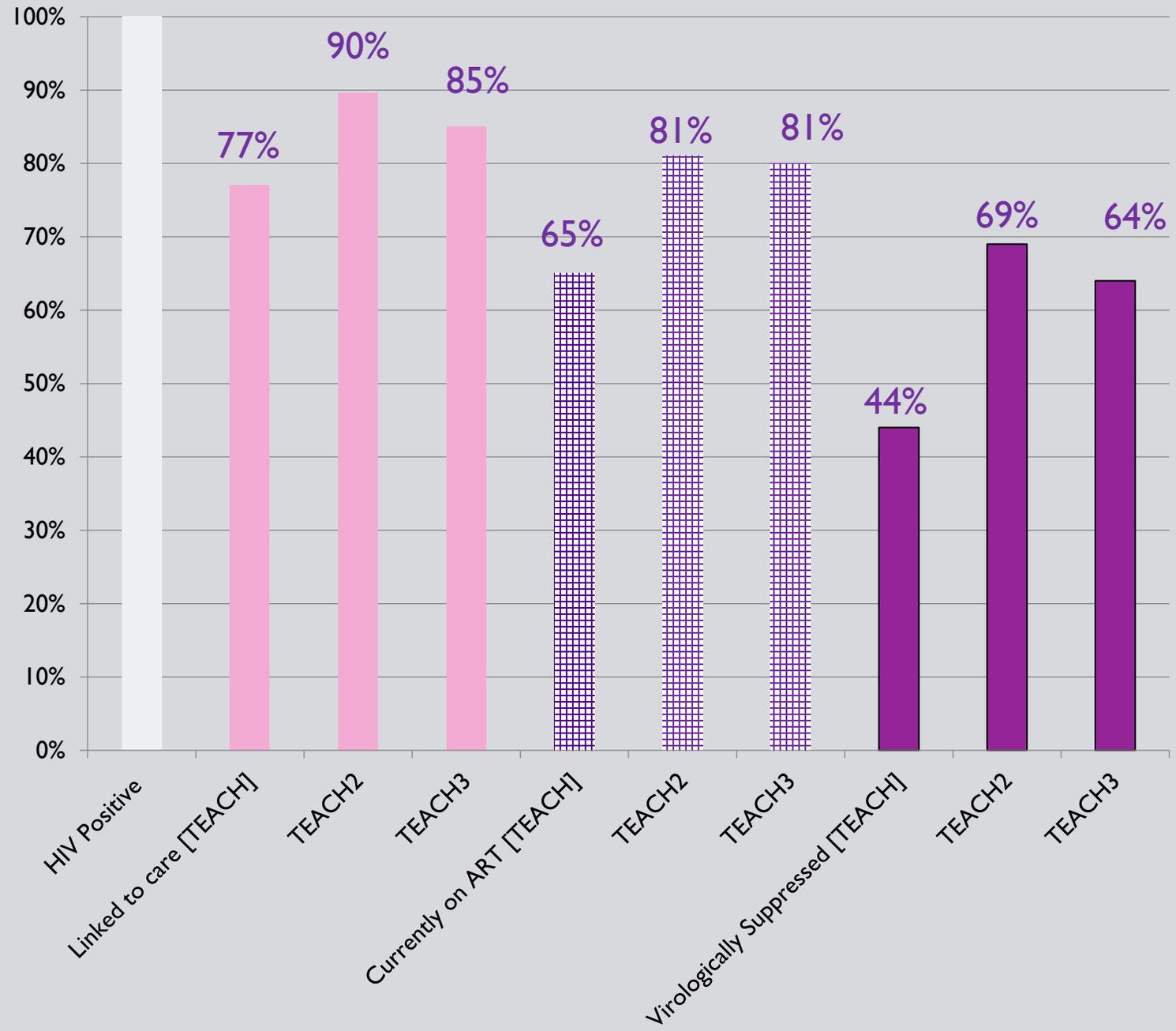
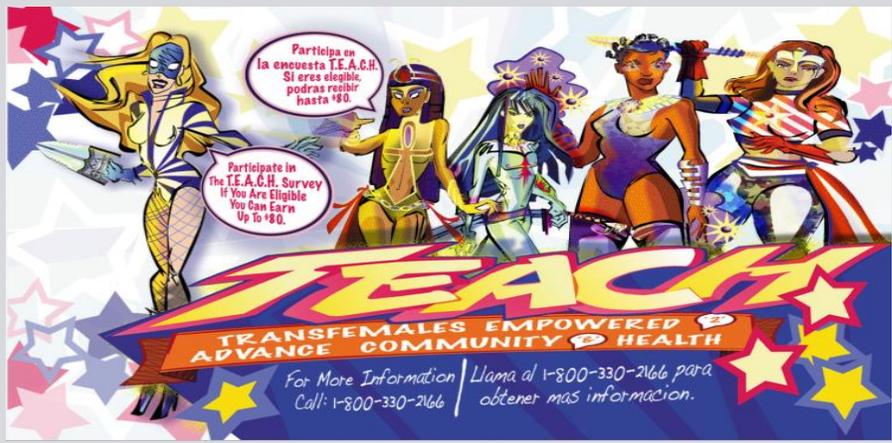


TIME SPENT UNSUPPRESSED AND TRANSMITTABLE, 2012-2014

- The overall mean time spent unsuppressed over the 2-year time period was 12%
 - 7% of the time with a transmittable viral load
- Comparatively, trans women spent significantly more time above both viral thresholds (43% of time unsuppressed and 35% of time transmittable, $P < 0.0001$ for both).

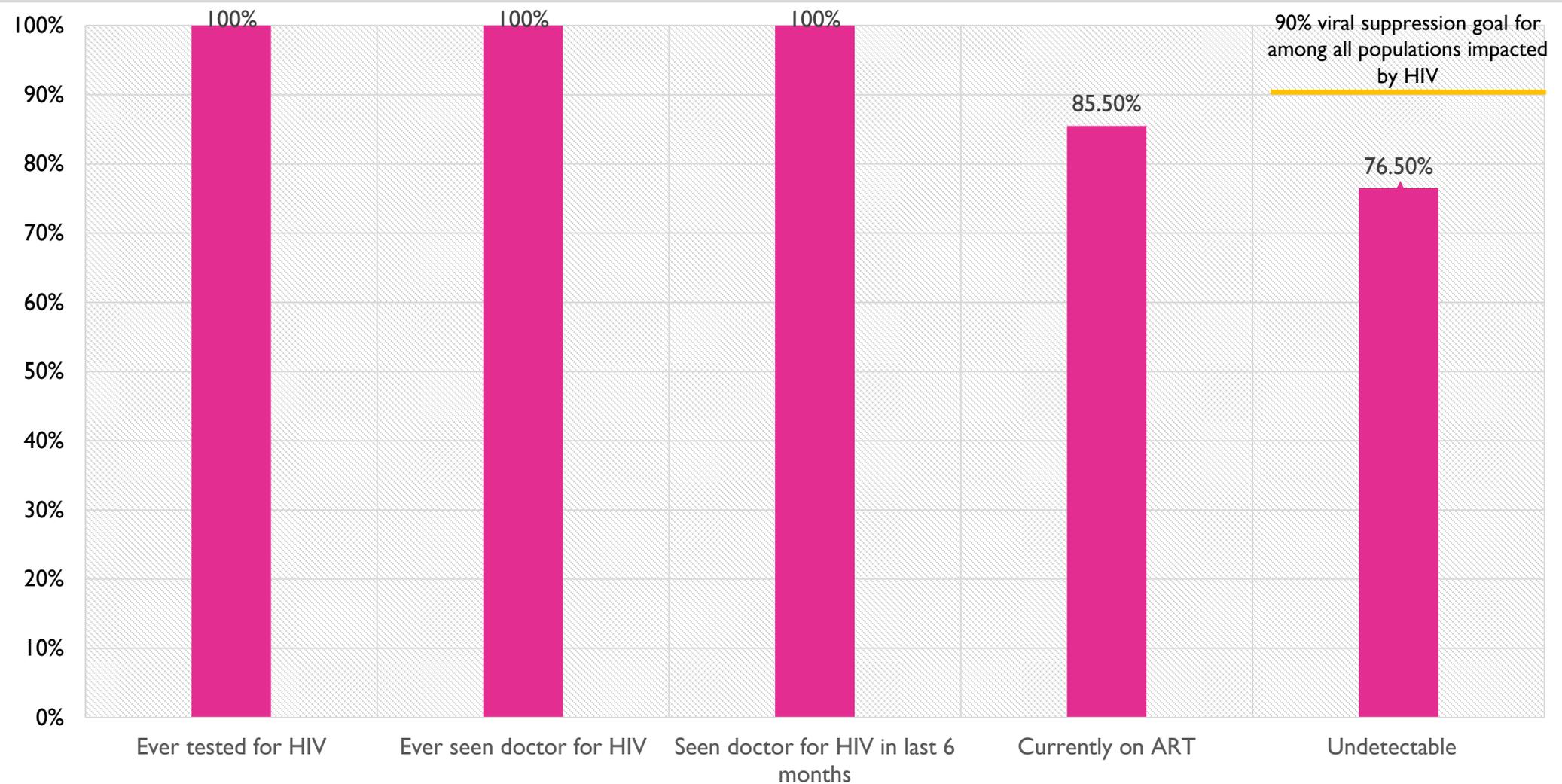
► Steady Improvements in HIV care cascade indicators

► 2010, 2013, 2016

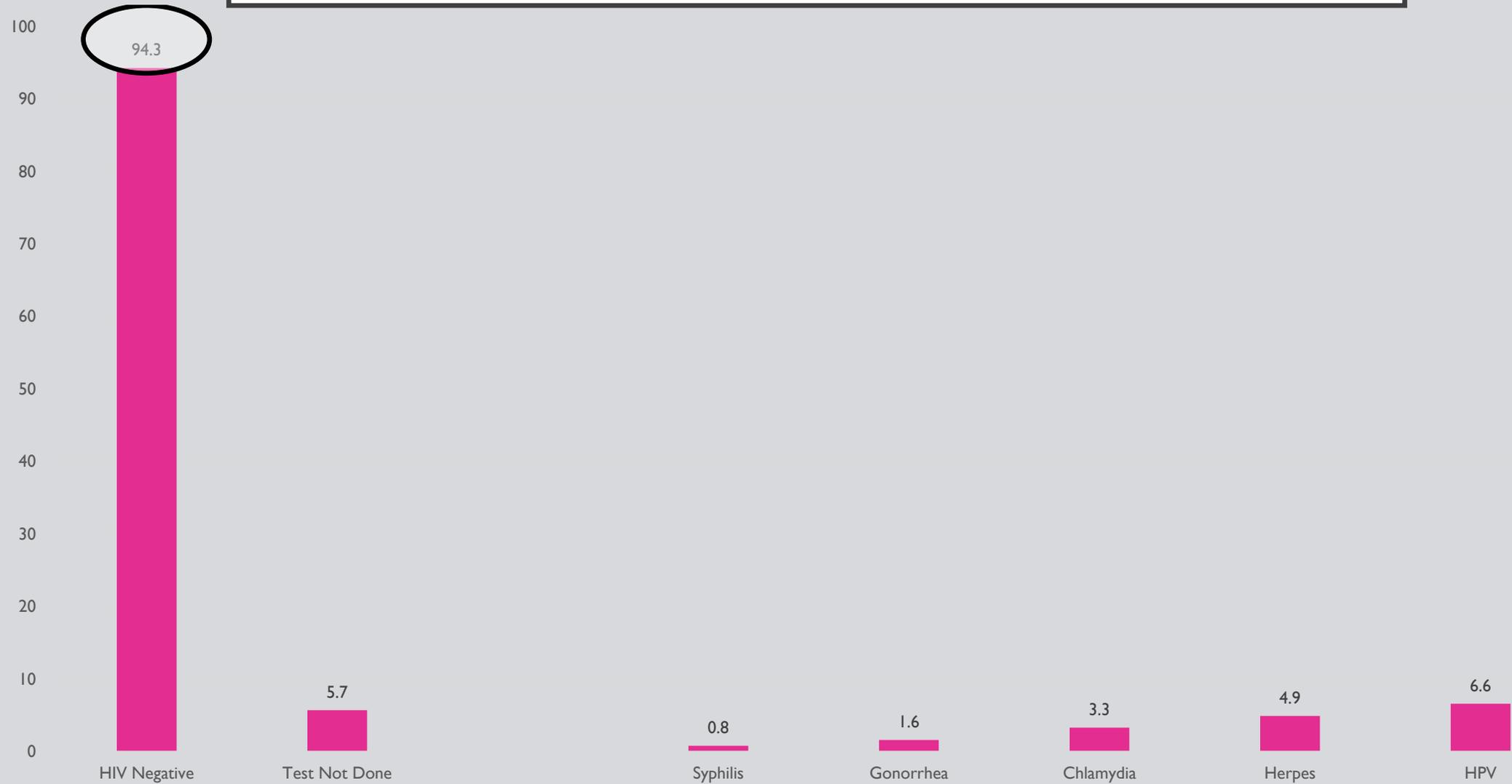


Not yet achieving 90% viral suppression among trans women in San Francisco

NHBS-Trans 2019/2020, (n = 85)



HIV AND STIS AMONG TRANS MEN IN SAN FRANCISCO COMMUNITY STUDY



ROOTS OF HIV IN SAN FRANCISCO TRANS COMMUNITIES

- Invisibility
 - When new prevention modalities are introduced, trans communities are not a focus in rollout (e.g., PrEP)
 - Lack of HIV prevention and care models designed and tested with trans communities
 - Models developed for HIV prevention and care are not grounded in the lived experience of trans women
 - Systemic racism and violence towards trans people prevents focus on HIV and health



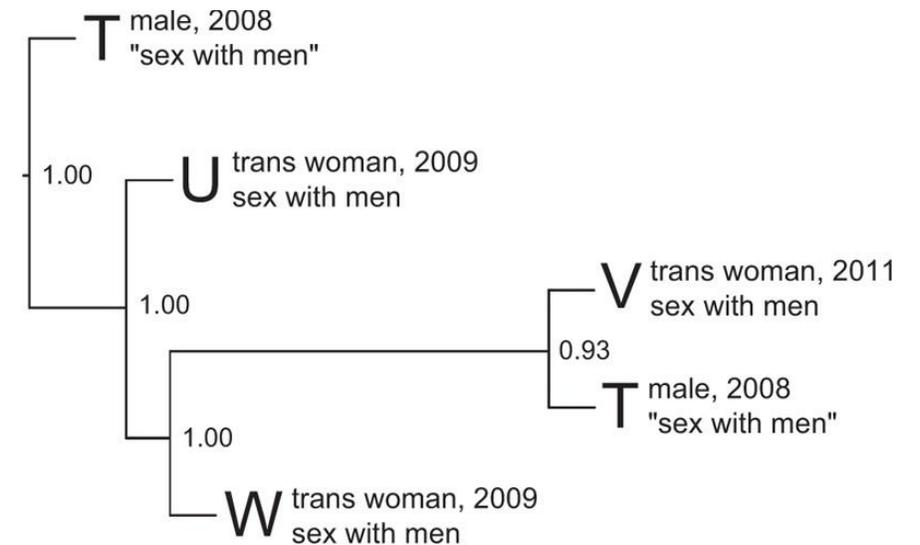
AGGREGATION OF TRANS WOMEN WITH MSM IN SURVEILLANCE DATA

How are transgender women acquiring HIV? Insights from phylogenetic transmission clusters in San Francisco

Truong, Hong-Ha M.; O'Keefe, Kara J.; Pipkin, Sharon; Liegler, Teri; Scheer, Susan; Wilson, Erin; McFarland, Willi

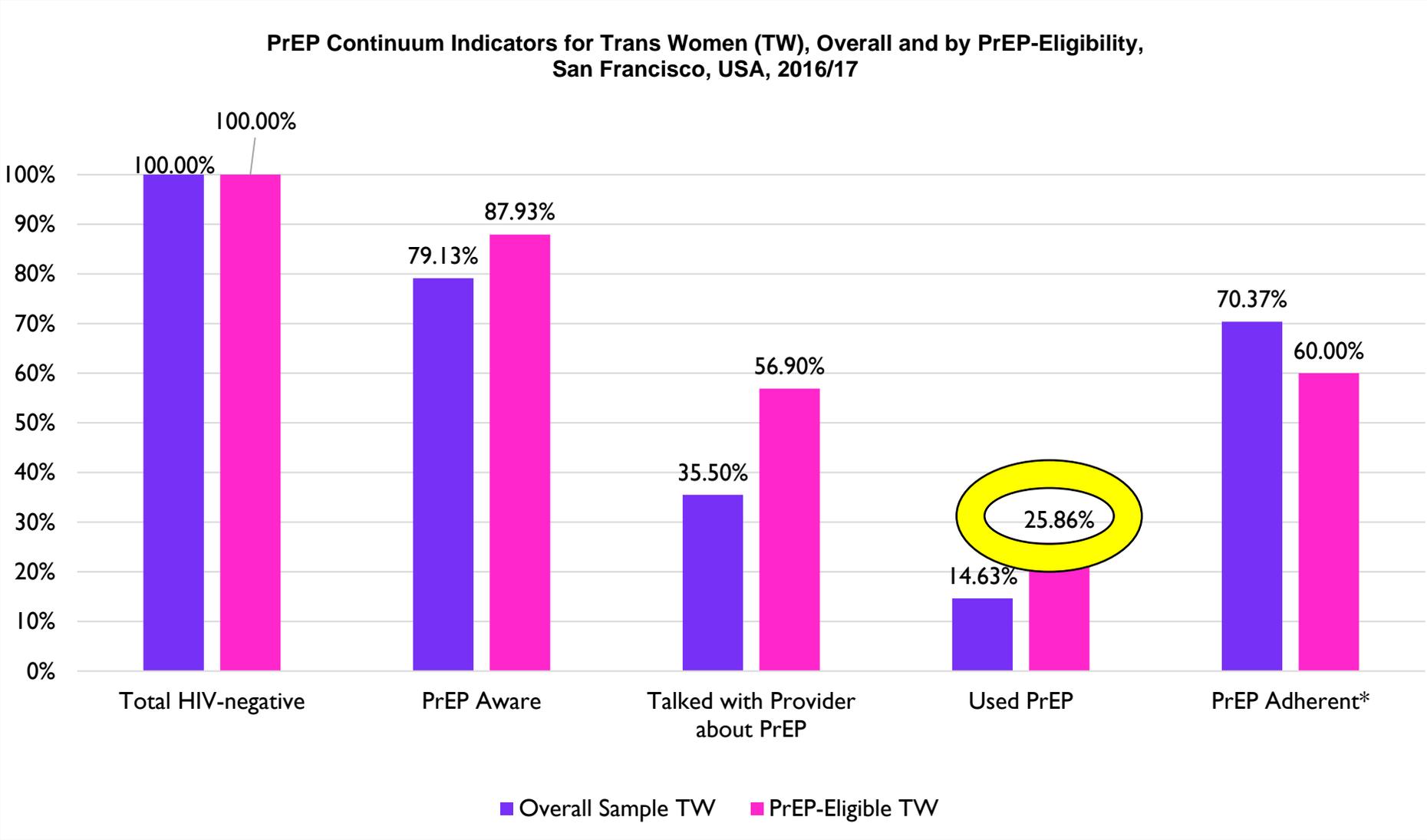
AIDS33(13):2073-2079, November 1, 2019.

doi: 10.1097/QAD.0000000000002318



AIDS

LOW PREP USE AMONG TRANS WOMEN IN SAN FRANCISCO, 2016/2017



BARRIERS ARE MULTI-LEVEL AND INTERSECTIONAL

Systemic

- Institutionalized racism
- HIV stigma
- Economic disparities
- Access to employment
- Social injustice

Structural

- Trans-affirming clinics & providers
- Urgent life priorities
- Housing crisis
- Acuity >> Access

Anti-trans
stigma
Racism
Violence

Interpersonal

- Trauma
- Trust & support
- Shared decision making
- Gender affirming medical care care

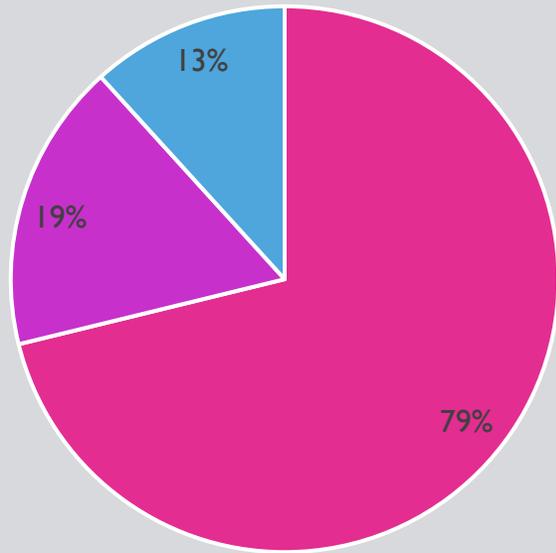
Trans-specific

- Gender affirming therapy
- Trans humility lacking
- Trans visibility, peers & community engagement
- Margins → center of larger LGBT movement

NOT MEETING BASIC NEEDS OF OUR COMMUNITY

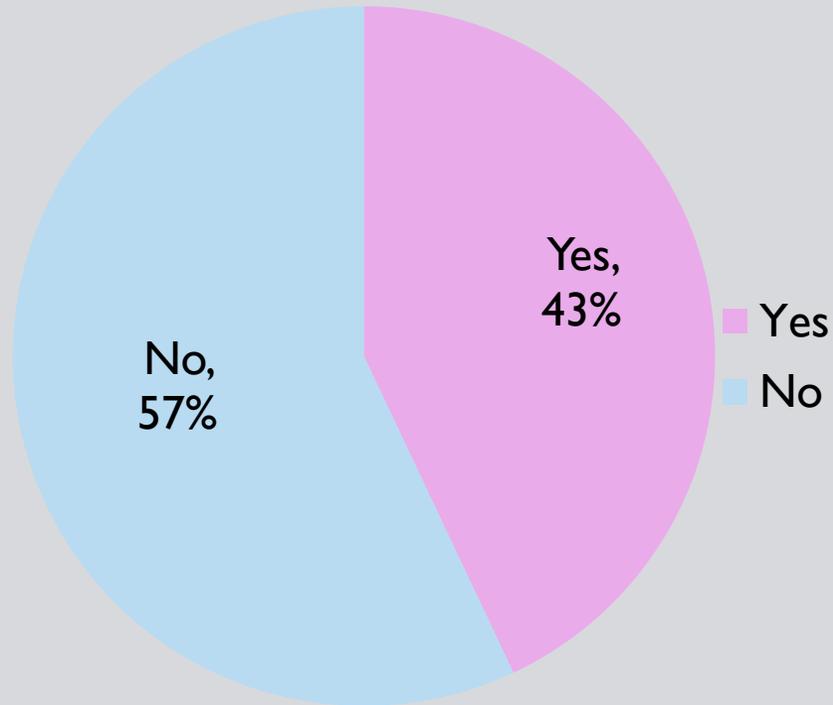
*DATA FROM BAY AREA TRANS WOMEN OF COLOR LIVING WITH HIV

Ran out of \$ in last month



■ 2+ times ■ 1-2 times ■ Never

Sex work in last 6 mos

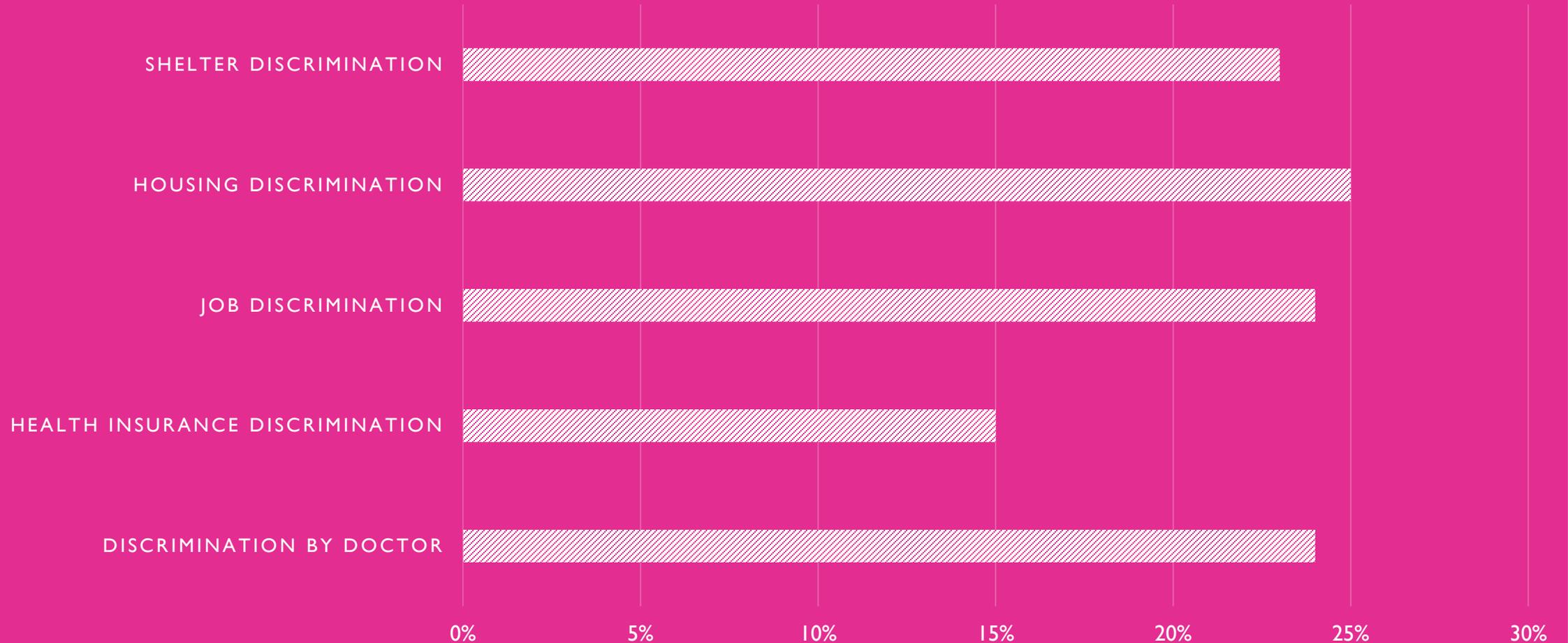


■ Yes
■ No

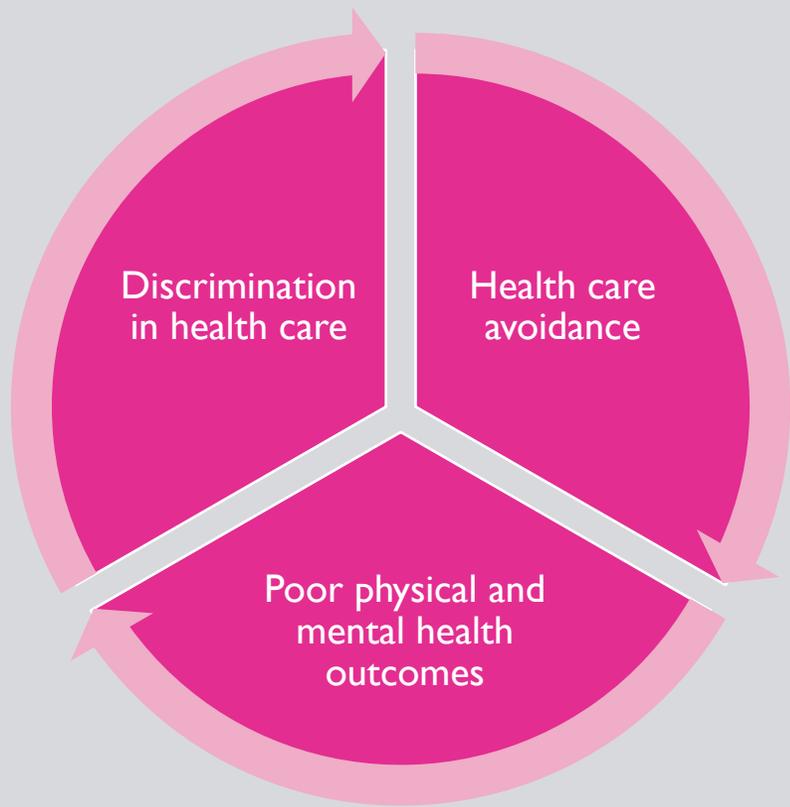
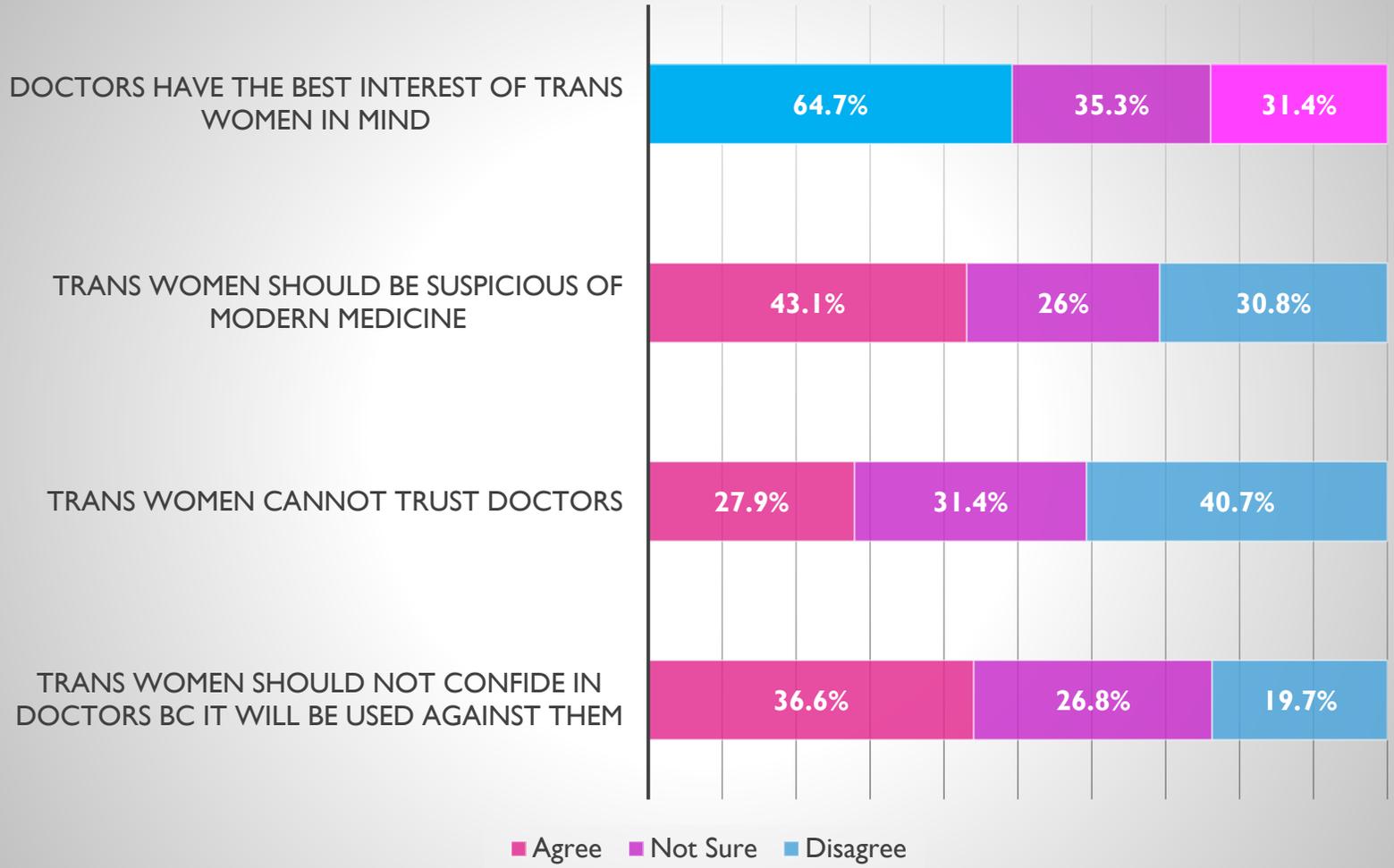
15% were incarcerated in the last 6 months

DISCRIMINATION

DISCRIMINATION IN LAST 6 MOS



MEDICAL MISTRUST



VIOLENCE
TOWARDS TRANS
WOMEN IN SAN
FRANCISCO IS AN
EPIDEMIC

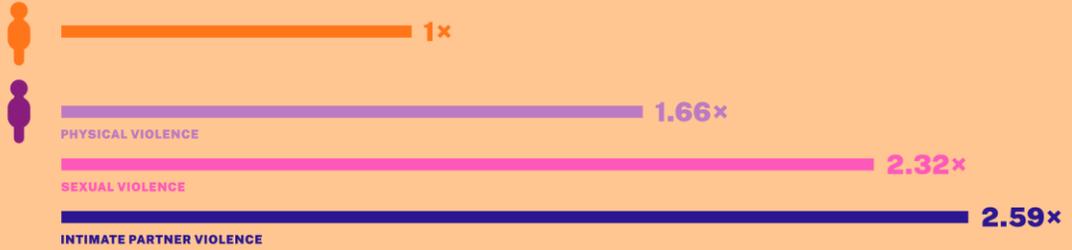
Trans Women, Violence, & Homelessness

More than one third of trans women in a community survey experienced violence within 2019 and over 75% of violent experiences occurred to trans women who experienced homelessness.



Likelihood to Encounter Violence

Trans women who experienced homelessness encountered significantly more instances and types of violence.



SECONDARY DATA ANALYSIS OF THE 41.2% OF TRANS WOMEN IN SF LIVING WITH HIV

HIV outcomes

- 15% not taking ARTs
- 23.5% reported having a detectable viral load

Mental health needs

- 57% have a cognitive disability
- 12% reported feeling depressed
- 15% reported suicidality in the last year

Substance use need

- 15.3% binge drank in last 30 days
- >30% used meth in the last year

COVID-19 IMPACT ON HIV CARE FOR TRANS WOMEN IN SF

SYSTEM LEVEL

- Transition to telehealth
 - Less viral load monitoring
 - Lack of opportunity for assessment of MHSA need

CLINIC LEVEL

- Major staff changes
 - Covid-19 activation
 - Shifts in roles and responsibilities

PATIENT LEVEL

- Increased mental health needs
 - Heightened isolation socially- Little to no social engagement- leading to increased depression and anxiety
 - Lack of safe transportation

WHAT DO WE KNOW
ABOUT BEHAVIORS OR
TRANS WOMEN AND
THEIR SEXUAL
PARTNERS

Variable	Trans women (N=158)	Sexual Partners (N=121)	Test statistic
RISK BEHAVIORS			
# sexual partners in past 6 months	M = 9.72	M = 10,07	t(220) = .141, p = .888
Exchanged sex in past 3 months	38 (24.1%)	16 (13.2%)	$\chi^2(1) = 5.147, p = .023$
Sex with someone who injects drugs in past 3 months	22 (13.9%)	20 (16.5%)	$\chi^2(1) = .365, p = .547$
Anal sex w/o condom in last 6 months	94 (60.3%)	70 (63.6%)	$\chi^2(1) = .312, p = .577$
Insertive Condomless Anal Sex	M = 1.32	M = 3.80	t(277) = 2.587, p = .010
Receptive Condomless Anal Sex	M = 22.83	M = 0.97	t(277) = -2.816, p = .005
STI last 6 months	M = 0.65	M = 0.62	t(277) = -.248, p = .805
Binge drank in last year	M = 18.31	M = 30.75	t(245) = 1.533, p = .127
Currently using			
Meth	28 (50.9%)	24 (37.5%)	
Crack	4 (7.3%)	4 (6.9%)	
Cocaine	14 (8.9%)	16 (13.2%)	
Currently using substances	M = .84	M = 1.14	t(262) = 1.67, p = .097
Injected drugs last 6 months	8 (5.1%)	6 (5.5%)	$\chi^2(1) = .014, p = .907$
Currently depressed	23 (14.6%)	17 (14.0%)	$\chi^2(2) = .348, p = .840$
Most or all of the time			
Virally detectable	3 (1.9%)	3 (2.5%)	$\chi^2(1) = .110, p = .740$

AND PROTECTIVE FACTORS

Variable	Trans women (N=158)	Sexual Partners (N=121)	Test statistic
Relationship Type, last 12 mos			
<i>Main</i>	72 (45.5%)	65 (53.7%)	
<i>Casual</i>	61 (38.6%)	71 (58.7%)	
<i>Commercial</i>	22 (13.9%)	13 (10.7%)	
Relationship Status			
<i>Single</i>	58 (36.7%)	45 (37.2%)	
<i>Coupled, living together</i>	55 (34.8%)	41 (33.9%)	
<i>Coupled, not living together</i>	45 (28.5%)	34 (28.1%)	
<i>Other</i>	-	1 (0.8%)	
PROTECTIVE BEHAVIORS			
<i>Engaged in HIV care</i>	29 (18.4%)	17 (14.0%)	$\chi^2(1) = .922, p = .337$
<i>On ART</i>	29 (18.4%)	16 (13.2%)	$\chi^2(1) = 1.334, p = .248$
<i>Recent PrEP use</i>	50 (31.6%)	19 (15.7%)	$\chi^2(1) = 9.357, p = .002$
<i>Recently tested for HIV</i>	157 (99.4%)	119 (98.3%)	$\chi^2(1) = .670, p = .413$

UNMET MENTAL HEALTH NEEDS AMONG TRANS MEN

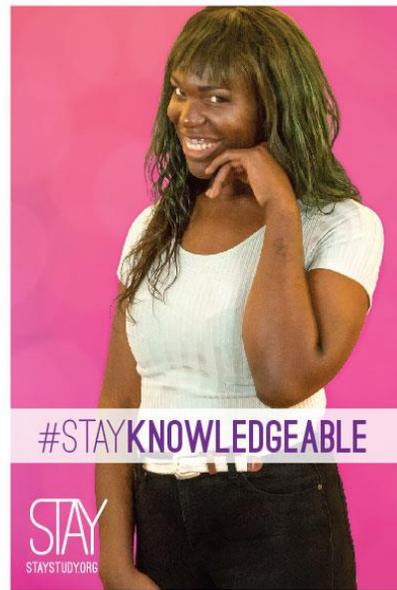
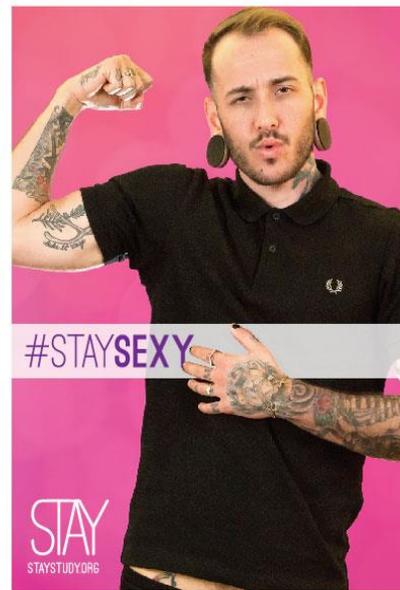
- 81% of trans men in our STRIPE study reported suicidal ideation
 - 48% of those reported a suicidal attempt
- Factors associated with lifetime suicidal ideation were
 - Being a trans man of color
 - Having a prior depression diagnosis
- Protective factors
 - Social support

SEXUAL BEHAVIOR CHANGES AMONG TRANS MEN RELATED TO TESTOSTERONE

- 69% of trans men reported new sexual behaviors as a result of starting to take testosterone
- 72% reported an increase in sexual activity
- Increase in number of cis men and trans women sexual partners after starting testosterone
 - 3.3% of trans men had cis men sexual partners before starting testosterone and 25.4% after
 - 4.1% of trans men had trans women sexual partners before starting testosterone and 13.9% after



WHAT ARE WE DOING TO ADDRESS
HIV IN TRANS COMMUNITIES?



STAY

NOW THERE'S A PILL THAT CAN HELP PREVENT HIV INFECTION FOR TRANS PEOPLE. IT'S CALLED PrEP. IT'S SAFE. IT CAN HELP YOU STAY HIV-NEGATIVE.

AWARE

Get PrEP for free, the support you need to take it every day and up to \$375.

Text "STAY" to (617) 826-9932 to find out how or visit us at StayStudy.org

the
center
for public
health
research.

BridgeHIV™

San Francisco Department of Public Health

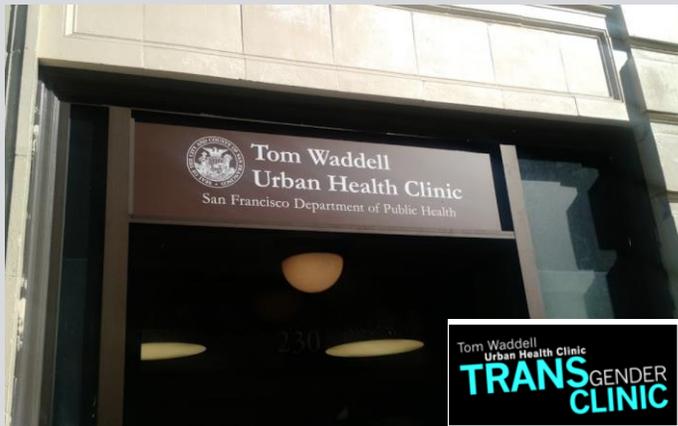
STAY STUDY COMMUNITY-BASED TRANS CLINIC SITES



San Francisco Community Health Center, formerly API Wellness Center



Castro Mission Health Center



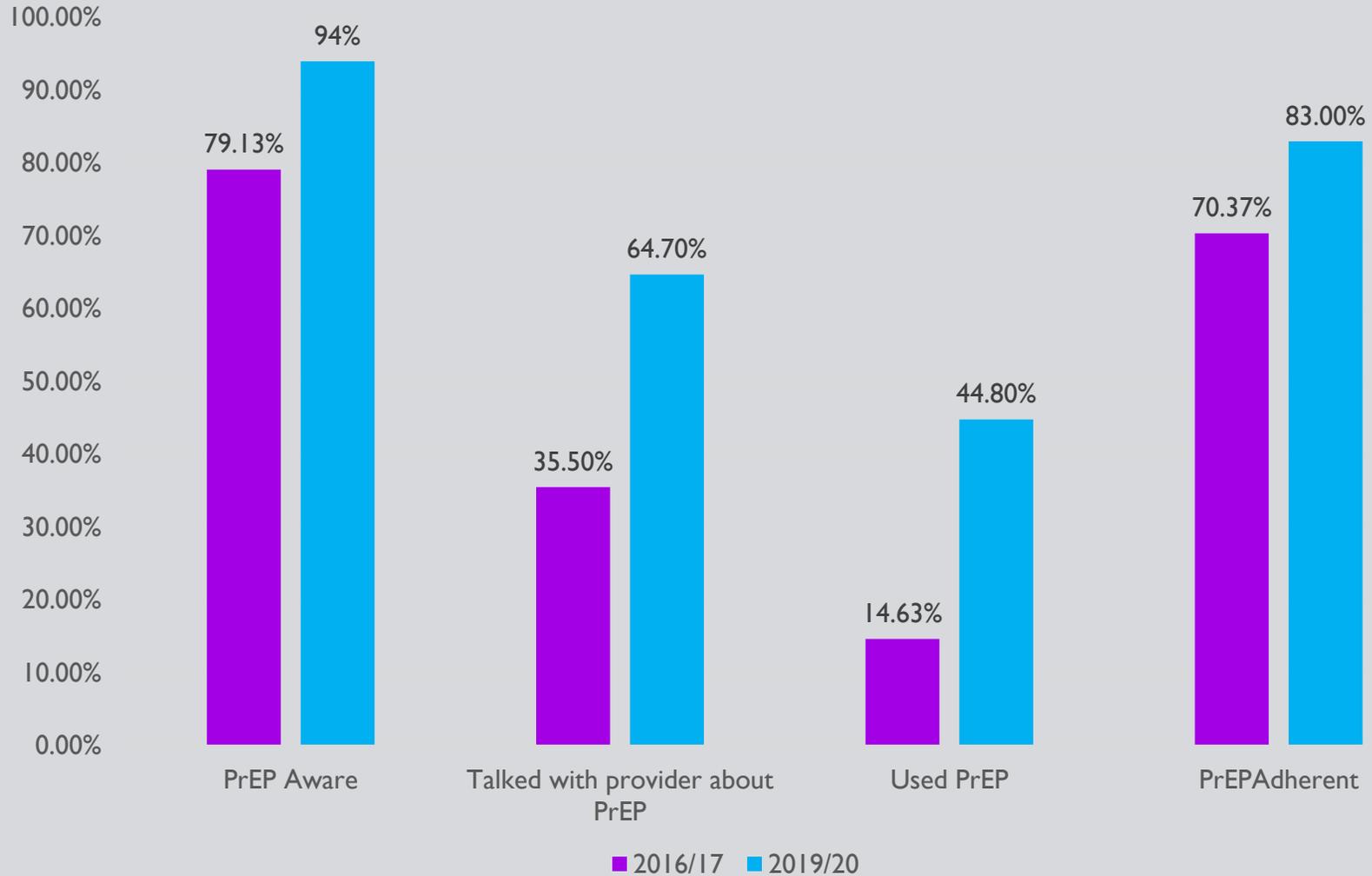
Tom Waddell Urban Health Center



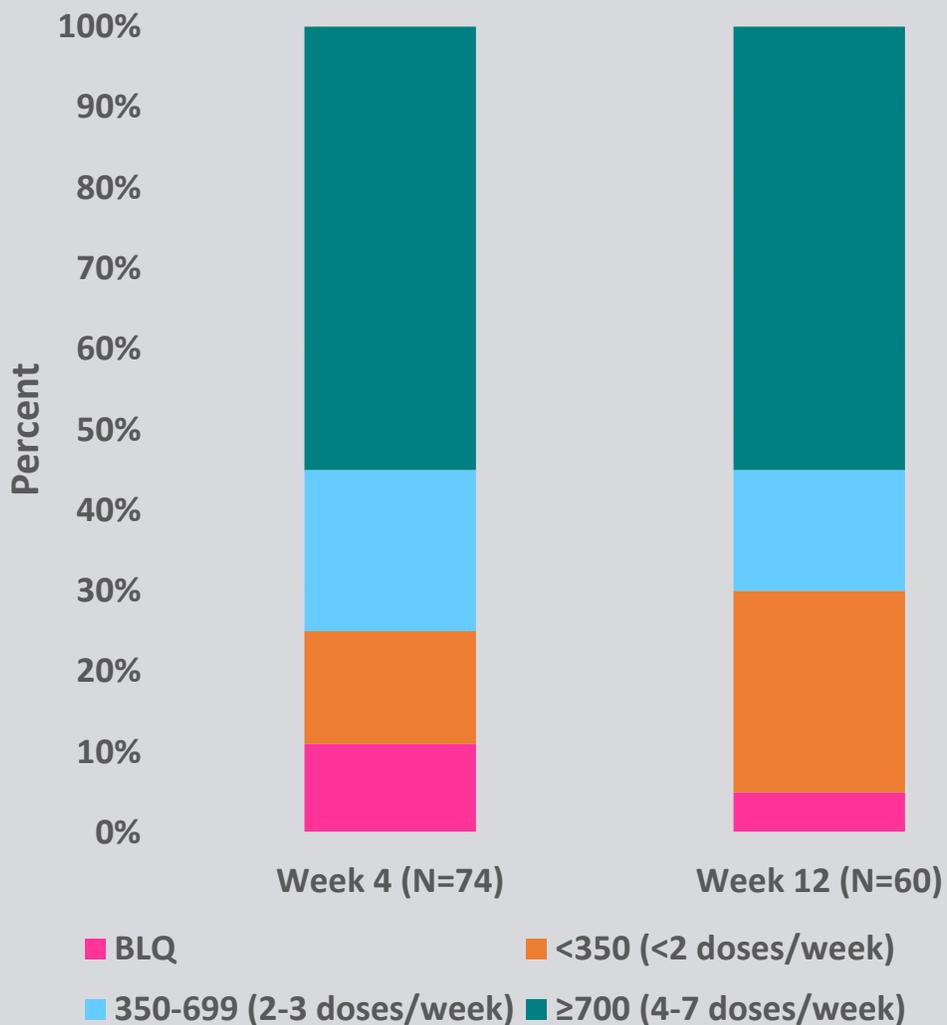
Tri-City Health Center

PREP INCREASED AMONG TRANS WOMEN IN SAN FRANCISCO 2016/17 TO 2019/20

Chart Title



Tenofovir diphosphate (TFV-DP) levels in dried blood spots at 4 and 12 weeks



MV MODEL OF FACTORS ASSOCIATED WITH TFV-DP LEVELS CONSISTENT WITH 4-7 DOSES/WEEK

Characteristics	AOR (95% CI)	P value
Race/ethnicity		
White	(ref)	
Latinx	0.29 (0.08-1.04)	0.06
Black/African-American	0.27 (0.06-1.20)	0.08
Asian	1.09 (0.23-5.27)	0.91
Multirace/Other	0.11 (0.03-0.45)	0.002
Current living situation		
Homeless/shelter	(ref)	
Own	0.23 (0.01-3.67)	0.30
Rent	2.99 (0.64-13.84)	0.16
Someone else's home	0.70 (0.10-4.79)	0.71
Institution	2.19 (0.25-18.83)	0.48
Motel, hotel, boarding house	8.47 (1.56-45.85)	0.013
Other	5.19 (0.50-54.07)	0.17
Any food insecurity	0.26 (0.07-0.94)	0.04

Use of gender affirming hormones was not associated with TFV-DP levels ($p=0.77$)

REMAINING CHALLENGES WITH PREP

- Over half of STAY participants with DBS tested at early follow-up visits had high PrEP adherence
- Food insecurity was highly prevalent and associated with lower PrEP adherence
- Relative housing stability was associated with higher PrEP adherence, highlighting the impact of structural factors on PrEP adherence in this population
- Hormone use was not associated with TFV-DP levels in this real-world cohort
- **Addressing social and structural determinants of health are critically needed to support HIV prevention needs in trans communities**

BREAKING SYSTEMS BARRIERS FOR TRANS WOMEN OF COLOR LIVING WITH HIV

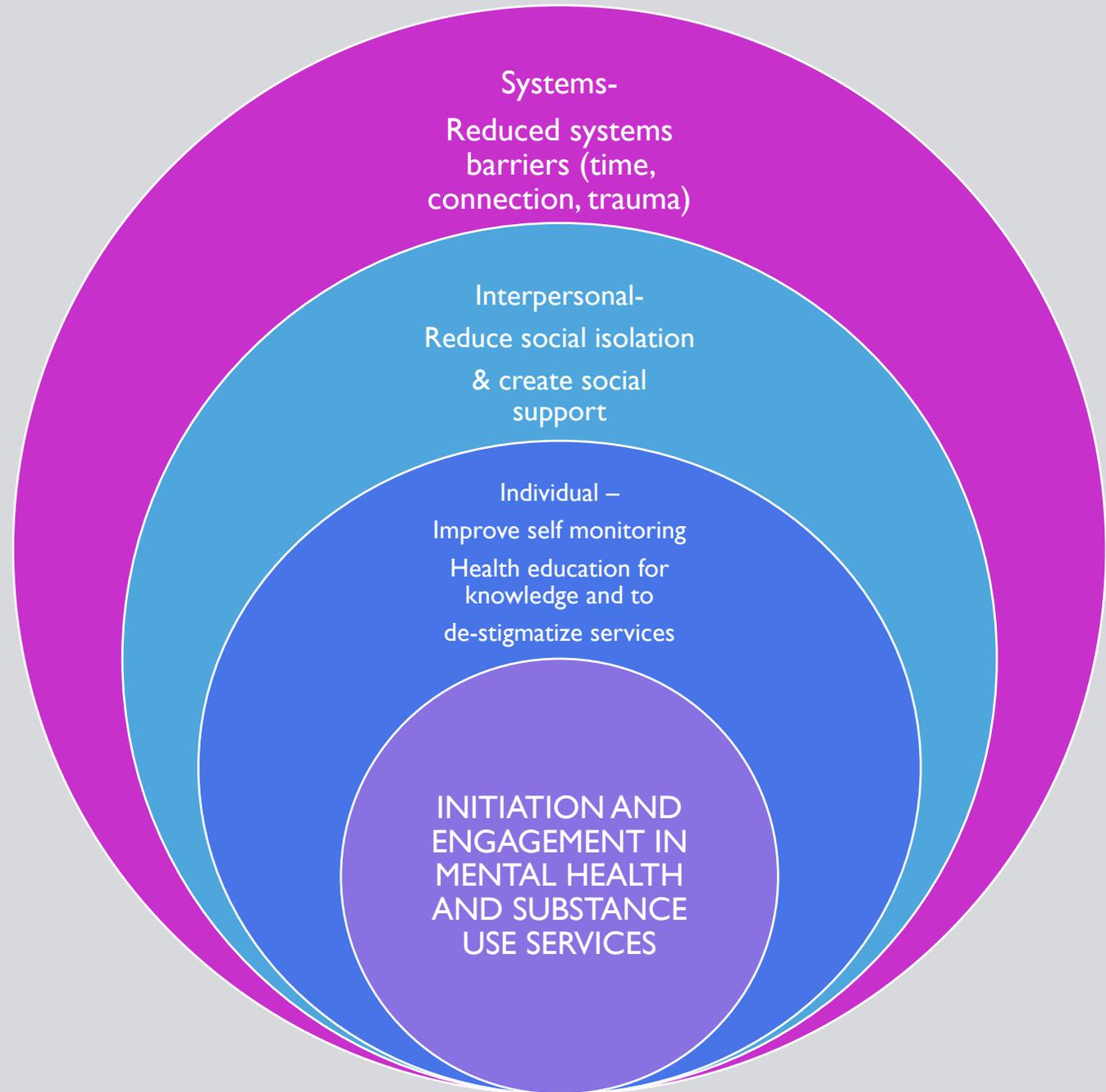


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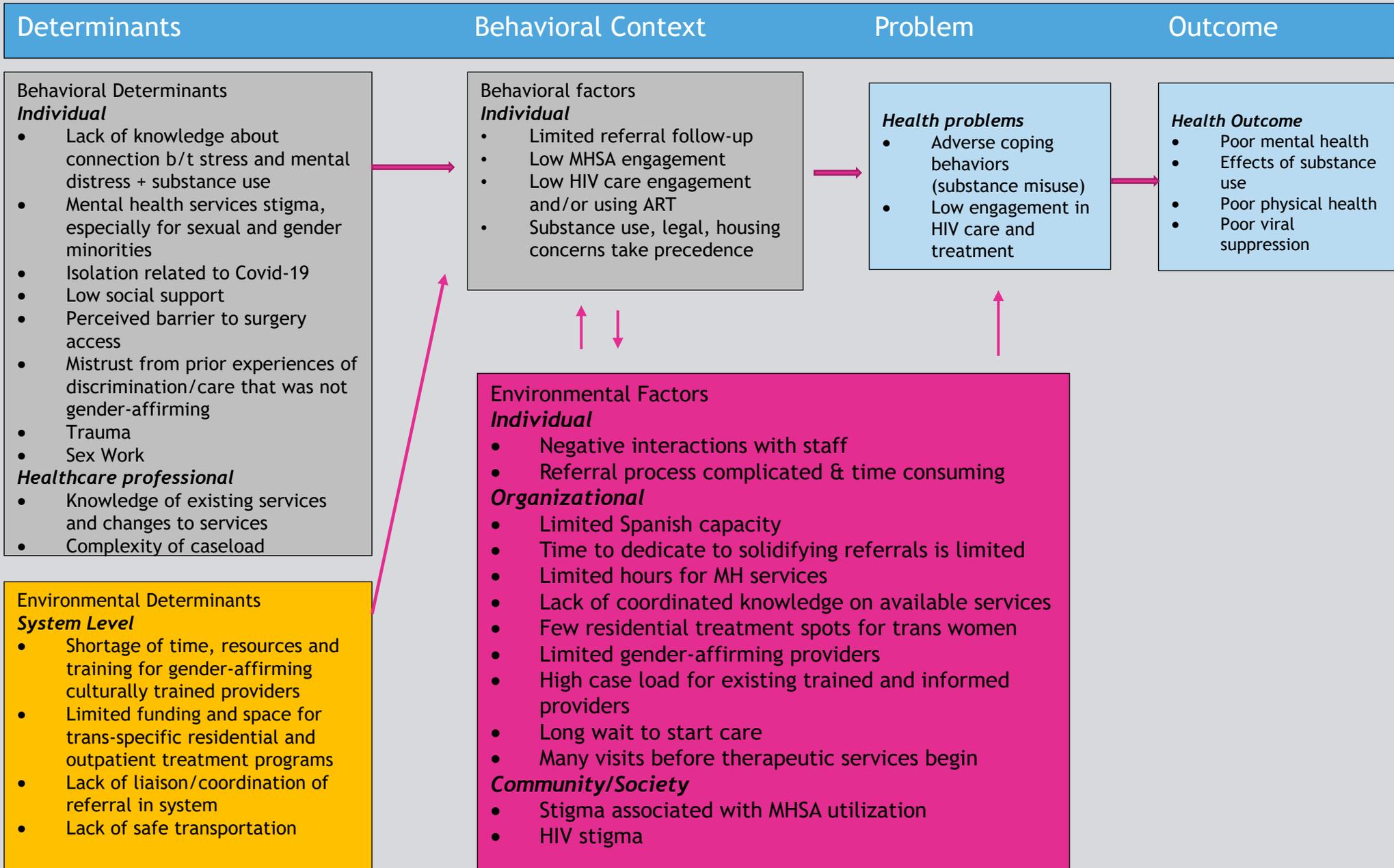


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**MSN
INTERVENTION**
(NIMH, R34MH124626)



LOGIC MODEL FOR BARRIERS TO MENTAL HEALTH AND SUBSTANCE USE SERVICES FOR TRANS WOMEN



INTERSECTIONAL INTERVENTIONS IN HIV PREVENTION AND CARE MUST ADDRESS...

Systemic

- Address anti-trans discrimination and racism
- Visibility and Leadership
- Quality assurance in existing services

Structural

- Housing
- Education
- Income
- Employment
- Legal services (civil, criminal and immigration)

Psycho-social

- Reduce medical mistrust
- Ensure trauma-informed care
- Substance use harm reduction and treatment access
- Mental health care

Human Rights

- Access to gender-affirming care
- Prioritize trans communities in the response to HIV (on demand PrEP, injectables)
- Addressing violence

SHINE Strong

the first undergraduate training program for HIV prevention science
and trans and nonbinary scholarship

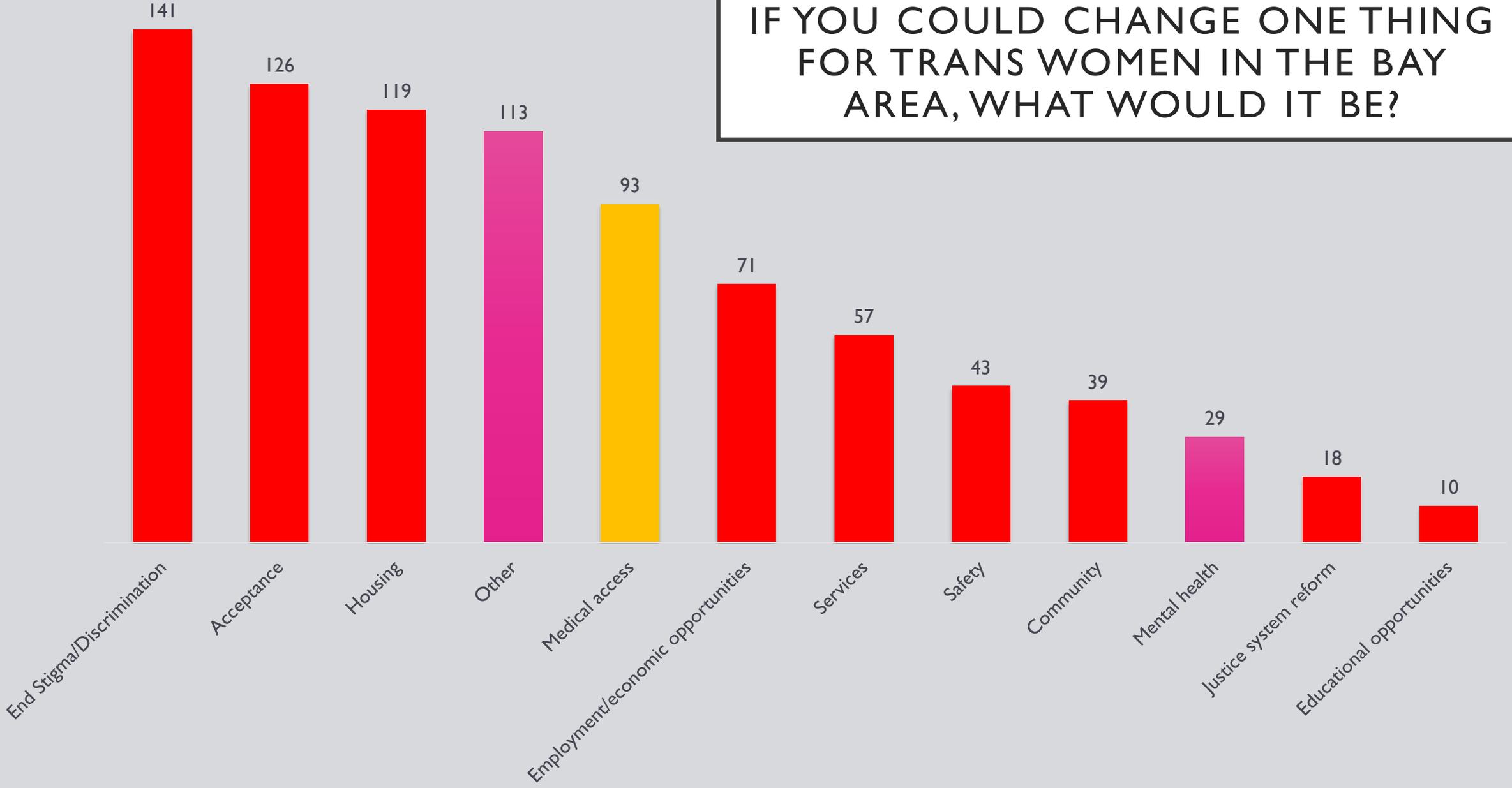
OUR PRIORITIES

Train the next generation of scholars and leaders in HIV
research who are from trans communities

RESEARCH APPROACHES TO INTERSECTIONAL NEEDS

- Engaging partners
- Re-visiting surveillance to make trans people visible in our data
- Inclusion of trans masculine people in studies of MSM and lobbying for inclusion of non-binary people in trans studies
- Working with partners to support the services in the SFDPH
 - mHealth Systems Navigation Project
 - Ending the HIV Epidemic
- Leadership engagement at NIH on issues related to violence

IF YOU COULD CHANGE ONE THING FOR TRANS WOMEN IN THE BAY AREA, WHAT WOULD IT BE?



ALL THANKS TO OUR AMAZING TEAM OF RESEARCHERS



Victory Le
Joaquin Meza
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Sofia Sicro
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Mackie Bell
Caitlin Turner
Dillon Trujillo
Paul Wesson
Willi McFarland

