Bridge HIV: Research Overview Innovations in HIV Prevention

Health Commission Community and Public Health Committee November 16, 2021

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Who weNIH-funded Clinical Trials Unit which operates within
the San Francisco Department of Public Health and is
affiliated with UCSF

Bridge
HIV
HIV
MissionTo collaborate with communities in conducting
innovative research that will guide HIV prevention
locally and globally.





Bridge HIV: A Tradition of Innovative Research to Prevent HIV/AIDS



COVID-19 Prevention Network

Vaccine Preparedness **Studies**

- Recruitment and retention of at-risk cohorts

- Risk factors for infection
- Per-contact risk
- Natural history

SF City Clinic

Cohort Study

- HIV antibody test

- Long term nonprogression (LTNP)

centered counseling - Preventive Vaccines* - STD interventions (HSV-2

- Peer navigation among Black and Latino MSM*

Behavioral and

Biomedical

suppression)

Prophylaxis*

microbicides*

- Pre-exposure

Interventions

- Individualized, client

- Home HIV and STI testing*

- Rectal and vaginal

Evaluating Intervention **Delivery and Building Research** Capacity

- Combination **Prevention***

- Implementation **Research***

- Fostering a new generation of HIV researchers*





HIV VACCINE





HIV Vaccines bNAbs Novel PrEP agents Long acting PrEP formulations Integrated Strategies

PrEP support tools

<image>



You've earned a badge! Golden Butt



Somebody is keeping it 100 in the best way. Congrats on protecting and enjoying yourself.

Earned 1 time

COVID-19 Prevention Network (CoVPN)

Formed by NIH

- <u>Global</u> network of NIH sites and Clinical Research Organization sites, as needed
- Links together multiple NIH-sponsored networks
- Local sites include Bridge HIV (SFDPH), UCSF/ZSFG, EBAC (Oakland), SFVAH
- Mission: To conduct Phase III efficacy trials to prevent infection and COVID-19 disease (Moderna, AZ, J&J, Novavax, Sanofi)

• We enrolled 256 participants in the AZ trial

- 32% Latinx, 20% Black/African American, 20% Asian, 19% White, 13% Asian, 2% Native Hawaiian/Pacific Islander; 1% American Indian/Alaskan Native
- 30% over 60 yo





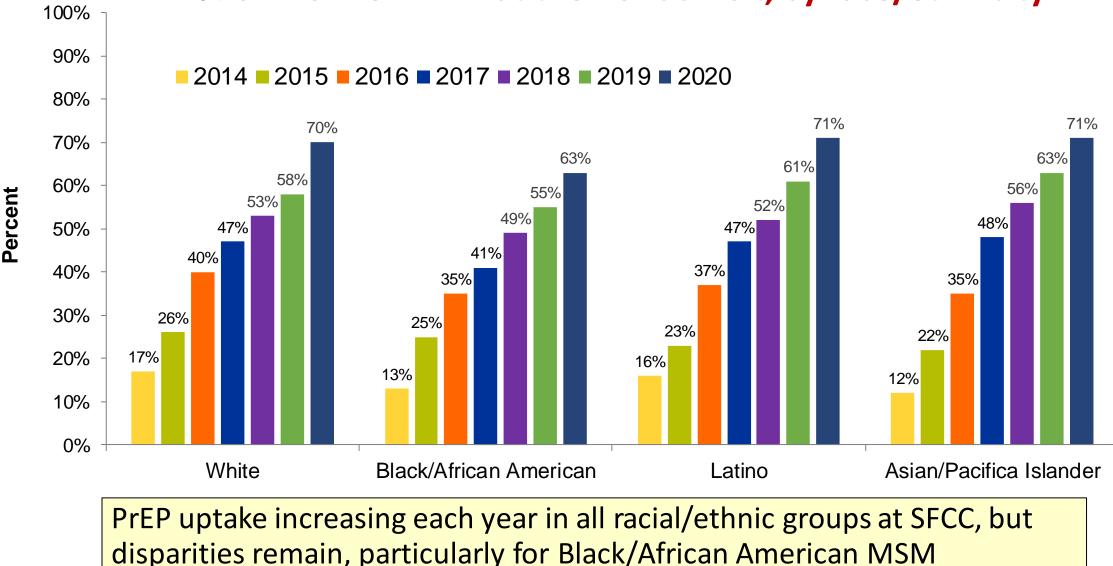
Community Engagement is Key

<complex-block>



TRANS*COVID A CONVERSATION TO ADDRESS THE TRANS COMMUNITY'S CONCERNS & TRANSCEND BEYOND THE COVID-19 PANDEMIC JOIN US ON ZOOM TO HELP EMPOWER OUR 4PM / SATURDAY **COMMUNITY & PROMOTE SELF ADVOCACY:** MAY 16, 2020 **TRANSCOVID.EVENTBRITE.COM** LOTUS DÕ, LCSW XRISTINA JA'LYXIE BLIOUX, CPT1 HE7HIM THEY/THEM SHE/HER/HERS NENNA JOINER LAURYN TERRY, RN FEELMORE510.COM HE/HER/HERS THEY/THEM BridgeHIV

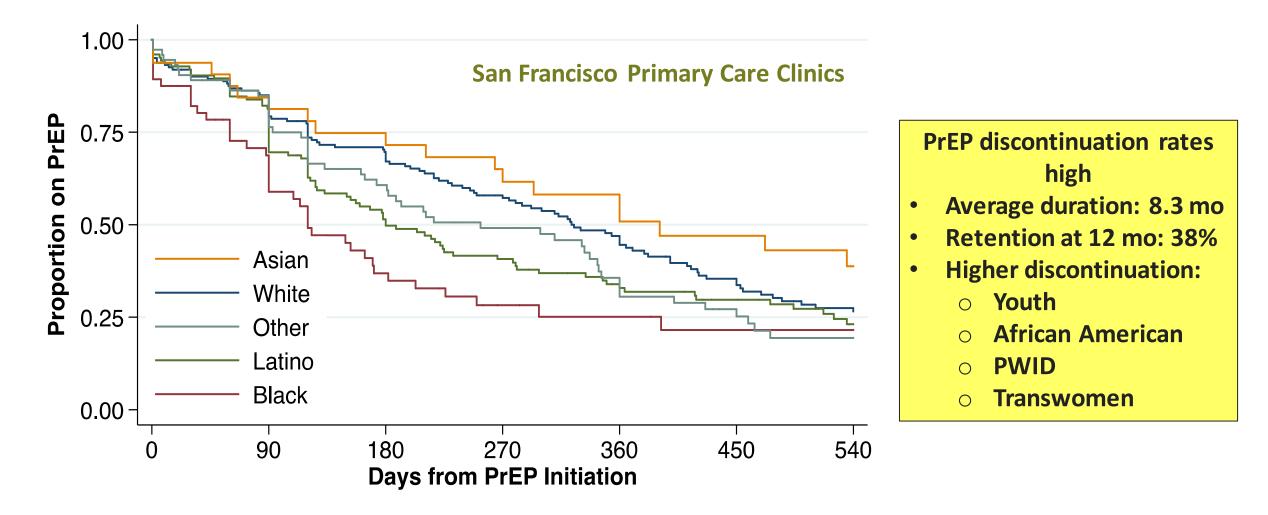
San Francisco City Clinic: % of MSM on PrEP at their SFCC visit, by race/ethnicity



SF Department of Public Health HIV Epidemiology Annual Report 2020



Lack of PrEP persistence accentuates disparities



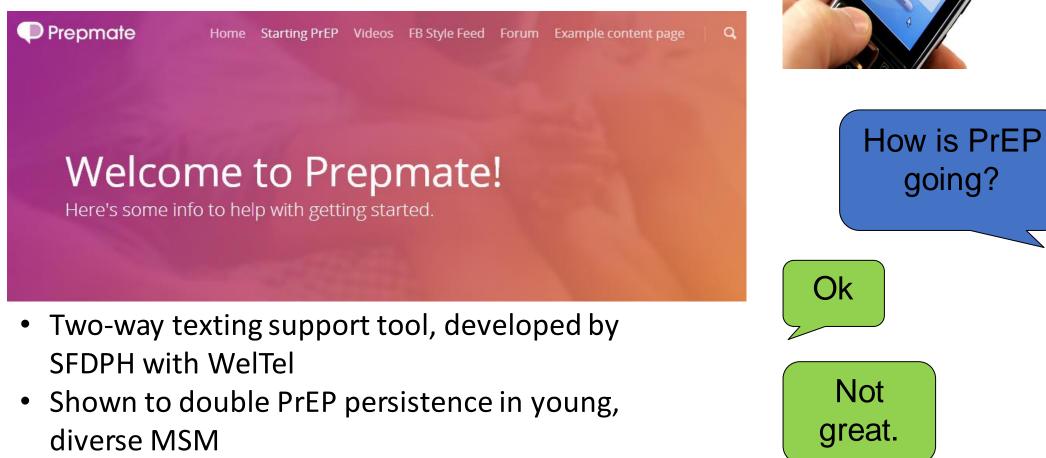
<u>LYNX</u>: Mobile app to increase HIV testing and PrEP uptake (ATN 140 and ATN 143)

	VLYNX 💄	VLYNX 🚨	VLYNX 🚨			
	YOUR SCORE WILL UPDATE IN 90 DAYS	M Your Partner Insights	NEED US NOW?	You've earned a badge!		
	Baseline Score	For 15 encounters with 10 partners:	When will I get my test kit?	Golden Butt 100% condom use as a bottom in a month		
Sex Pro		Your Partners 60% 15% 15% 10% 60% TS% 15% 10% MEN TRANS MEN WOMEN TRANS WOMEN	You, Sep 3, 3:12 PM Your test kit is on the way! Expect it in 2-3 days. If you have any ?'s when you get it let's chat again. Lynx Study, Sep 3, 3:38 PM I think I want to start PrEP. Where do I start? Where do I go? Help!			
Welcome to Lynx! Lynx is all about blending pleasure with HIV prevention. It'll help you track, check, and protect so you can focus on the	LEVELS OF PROTECTION Want to get into the green? PrEP is a great	Partner types 60% 15% 10% 15% 10%	You, Dec 7, 8:18 AM Hey. Thanks for reaching out. Let me see what's in your neighborhood. Hold on & I'll be right back with info.	Somebody is keeping it 100 in the best way. Congrats on protecting and enjoying yourself.		
pleasure of sex.	way to make it happen & protect your sexual health. Hit us up, we can help.	PRIMARY FRIENDS WITH BENEFITS REGULAR HOOK-UP ONE-NIGHT STAND	Lynx Study, Dec 7, 9:23 AM Message	Earned 1 time		
NEXT	Home Diary Testing PrEP Chat	Home Diary Testing PrEP Chat	Home Diary Testing PrEP Chat	GOT IT!		

Liu, Scott, Buchbinder JMIR 2018

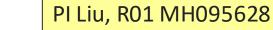
Hightow-Weidman NICHD 1U19 HD089881

SMS Support for PrEP Retention & Adherence



 First CDC-adopted Evidence-Based Intervention for PrEP

Liu CID 2018; Lester Lancet 2010; Chiang JMIR mHealth & uHealth 2018





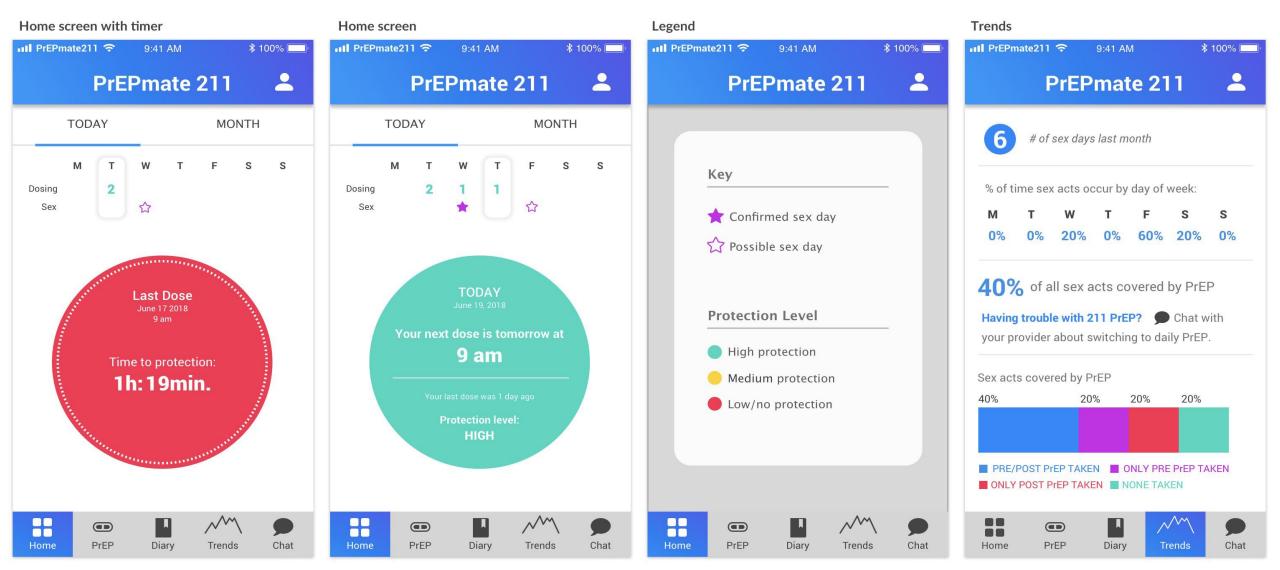
Adherence Tracking and Protection Levels

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Digital Support for PREP 2-1-1

Bridgehiv

PI Liu, R34 MH121139



sutsainable can reduce burden Tue Sen 14th IN AT&T 5:16 PM @ √ \$ 98% on clinics^{1,2} You've taken 1 of your 4 meds today Messaging

ablet

Tablet

Tablet

6PM

SPM

- PrEP-3D
 - Online pharmacist provides PrEP Rx, orders/tracks lab monitoring through collaborative practice agreement

Pharmacy-led models of PrEP

delivery are feasible and

- Medication delivery through courier
- Online tools (pill/sex diary, bi-directional messaging) support adherence and persistence

PrEP-3D: Digital Diary and Delivery for MSM

IN FPO ONLY ?

9:41 AM

Reminders

You're doing great! Keep it up

Truvada 200-300 MG

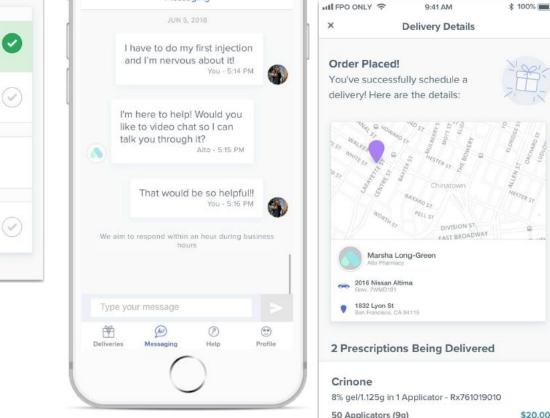
Sildenafil 20 MG

Finasteride 1 MG

Ibuprofen 600 MG

\$ 100%

1





\$20.00

Buchbinder R01 MH119956-01

Studies underway or on the horizon

- Merck
 - New monthly PrEP pill for MSM/TGW
- Gilead
 - New semi-annual injectable PrEP for TGW
- GSK
 - Study of genital herpes outbreaks
 - Possible study of the meningococcal vaccine to prevent gonorrhea
- AMBER
 - Socio-behavioral research to guide PrEP implant development in MSM, cisgender women, and TGW
- PrEP and ART implementation
 - PCORI: Comparative effectiveness trial evaluating 2 mobile technologies to support PrEP use
 - Viiv: Novel delivery model for injectable ART treatment for transwomen
 - HOPE: Mobile clinic delivery of HIV status neutral services to the African American community
- HIV Vaccines and monoclonal antibodies
 - Mosaico: HIV vaccine efficacy trial (fully enrolled)
 - Four Phase 1 or 2 studies of new vaccine or monoclonal antibodies for HIV prevention









