

TELEPREP AND TELE-STI CARE: OPTIMIZING SAFER SEX IN THE PANDEMIC

Kenneth Mayer, MD
December 9th, 2020



OUR ROOTS

Fenway Health

- Independent 501(c)(3) FQHC
- Founded 1971
- Mission: To enhance the wellbeing of the LGBTQIA+ community as well as people in our neighborhoods and beyond through access to the highest quality health care, education, research, and advocacy
- Integrated primary care model, including HIV and transgender health services

The Fenway Institute

- Research, Education, Policy



LGBTQIA+ EDUCATION AND TRAINING

The National LGBTQIA+ Health Education Center offers educational programs, resources, and consultation to health care organizations with the goal of providing affirmative, high quality, cost-effective health care for lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minority (LGBTQIA+) people.

- Training and Technical Assistance
- Grand Rounds
- Online Learning
 - Webinars, Learning Modules
 - CE, and HEI Credit
- ECHO Programs
- Resources and Publications

www.lgbtqiahealtheducation.org



TECHNICAL QUESTIONS?

- Please call Zoom Technical Support: 1.888.799.9666 ext 2
- You can contact the webinar host using the chat function in Zoom. Click the “Chat” icon, and type your question.

SOUND ISSUES?

- Ensure your computer speakers are not muted.
- If you cannot hear through your computer speakers:
Navigate to the bottom toolbar on your screen, go to the far left, and click the arrow next to the phone icon.
- Choose “I will call in.”
- Dial the phone number and access code.

WHEN THE WEBINAR CONCLUDES:

- Complete the evaluation that will be emailed to you.
- We very much appreciate receiving feedback from all participants.
- Completing the evaluation is required to obtain a CME/CEU certificates.

CME/CEU INFORMATION

This activity has been reviewed and is acceptable for up to 1.0 Prescribed credits by the American Academy of Family Physicians. Participants should claim only the credit commensurate with the extent of their participation in this activity.

Physicians	AAFP Prescribed credit is accepted by the American Medical Association as equivalent to AMA PRA Category 1 Credit™ toward the AMA Physician's Recognition Award. When applying for the AMA PRA, Prescribed credit earned must be reported as Prescribed, not as Category 1.
Nurse Practitioners, Physician Assistants, Nurses, Medical Assistants	AAFP Prescribed credit is accepted by the following organizations. Please contact them directly about how participants should report the credit they earned. <ul style="list-style-type: none">• American Academy of Physician Assistants (AAPA)• National Commission on Certification of Physician Assistants (NCCPA)• American Nurses Credentialing Center (ANCC)• American Association of Nurse Practitioners (AANP)• American Academy of Nurse Practitioners Certification Program (AANPCP)• American Association of Medical Assistants (AAMA)
Other Health Professionals	Confirm equivalency of credits with relevant licensing body.

LEARNING OBJECTIVES:

At the end of this sessions, participants will be able to:

1. Counsel patients on how SARS-CoV-2 is transmitted, and how to protect themselves in the context of sexual health.
2. Counsel patients about strategies minimize risk of SARS-CoV-2 acquisition while affirming the desire for intimacy.
3. Discuss telehealth and remote strategies for sexual health and screening for STIs.

PAST AS PROLOGUE: DEFINING SAFER SEX IN THE LAST PANDEMIC

J Clin Epidemiol Vol. 42, No. 9, pp. 849–856, 1989
Printed in Great Britain

0895-4356/89 \$3.00 + 0.00
Pergamon Press plc

INFECTIOUSNESS OF HIV BETWEEN MALE HOMOSEXUAL PARTNERS

VICTOR DEGRUTTOLA,¹ GEORGE R. SEAGE III,² KENNETH H. MAYER³
and C. ROBERT HORSBURGH JR⁴

¹Department of Biostatistics, Harvard School of Public Health, 677 Huntington Avenue, Boston MA 02115, ²Community Infectious Disease Epidemiology Program, Boston Department of Health and Hospitals, Epidemiology and Biostatistics Section, Boston University School of Public Health, Boston, Mass., ³Fenway Community Health Center, Boston, Mass., Brown University Program in Medicine, Providence, R.I. and Memorial Hospital, Pawtucket, R.I. and ⁴Centers for Infectious Disease, Centers for Disease Control, Atlanta, GA 30333, U.S.A.

(Received in revised form 25 January 1989)

Sexual Health in the SARS-CoV-2 Era

Jack L. Turban, MD, MHS; Alex S. Keuroghlian, MD, MPH; and Kenneth H. Mayer, MD

More than 200 000 people have died of severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) infection, leading to widespread concern regarding physical morbidity and mortality. The sexual health implications, however, have received little focus. On the basis of existing data, it appears all forms of in-person sexual contact carry risk for viral transmission, because the virus is readily transmitted by aerosols and fomites. This has resulted in broad guidance regarding physical distancing, with substantial implications for sexual well-being. Given the important role of sexuality in most people's lives, health care providers (HCPs) should consider counseling patients on this topic whenever possible. This is an unprecedented and stressful time for HCPs; facilitating brief conversations and referrals to relevant resources (Table) can help patients maintain sexual wellness amid the pandemic.

CURRENT EVIDENCE SUGGESTS THAT ALL IN-PERSON SEXUAL CONTACT CARRIES TRANSMISSION RISK

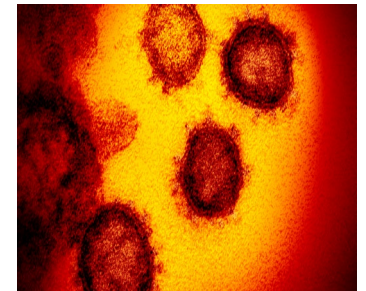
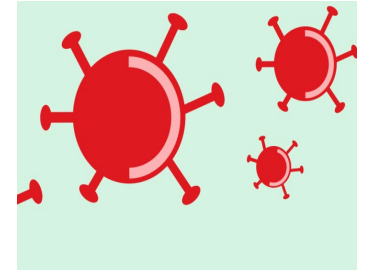
transmission owing to the virus' stability on common surfaces and propensity to propagate in the oropharynx and respiratory tract.

PSYCHOLOGICAL EFFECTS OF SEXUAL ABSTINENCE

Sexual expression is a central aspect of human health but is often neglected by HCPs. Messaging around sex being dangerous may have insidious psychological effects at a time when people are especially susceptible to mental health difficulties. Some groups, including sexual and gender minority (SGM) communities, may be particularly vulnerable to sexual stigma, given the historical trauma of other pandemics, such as AIDS. Abstinence recommendations may conjure memories of the widespread stigmatization of SGM people during the AIDS crisis. For the population at large, a recommendation of long-term sexual abstinence is unlikely to be effective, given the well-documented failures of abstinence-based public health interventions and their likelihood to promote shame (8).

SARS-COV-2 TRANSMISSION

- SARS-CoV-2 binds and replicates in the upper airway and oropharynx
- Mainly transmitted by droplets (>5 microns), aerosols?, fomites?
- 3 studies did not find virus in semen or cervicovaginal secretions, but 1 found 3/38 semen polymerase chain reaction positive (PCR+) (Li, JAMA Netw Open)
- 1 study found virus in urine (Wang, JAMA)
- 1 study found virus in stool (Chen, Med Virol)
- However, the clinical significance is unclear, since PCR+ does not necessarily indicate that replication competent virus is present



Household secondary attack rate of COVID-19 and associated determinants in Guangzhou, China: a retrospective cohort study



Qin-Long Jing, Ming-Jin Liu*, Zhou-Bin Zhang*, Li-Qun Fang*, Jun Yuan*, An-Ran Zhang, Natalie E Dean, Lei Luo, Meng-Meng Ma, Ira Longini, Eben Kenah, Ying Lu, Yu Ma, Neda Jalali, Zhi-Cong Yang, Yang Yang*

**Lancet Inf Dis, June 17,
2020**

- Followed 195 contact groups
- Rate of transmission to close relatives was 12.4%
- Higher infectiousness during asymptomatic period
- Period of potential transmission up to 13 days
- Individuals >60 y.o. most susceptible
- Indicator of contagion (Basic Reproduction Number)
- $R_0 = 0.5$ (i.e., index infected 1 of every 2 contacts)
- No data about per contact risk

SEXUAL HEALTH COUNSELING IN THE COVID-19 ERA

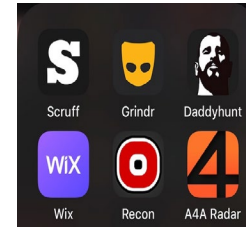
- Basic principle: sexual expression is central for health
- Any direct contact has the potential to transmit infection
- So, counseling needs to focus on sexual harm reduction, i.e., enabling the patient to understand risks and benefits and to develop strategies to mitigate risks while addressing personal needs.



SEXUAL HEALTH COUNSELING IN THE COVID-19 ERA

- Messages that sex is bad may be perceived as stigmatizing, particularly for sexual and gender minority people
- Provide resources for lowest risk activities
- Abstinence over extended periods for sexually active people may not be realistic

ONLINE INTIMACY



- Proliferation of videochat vs. meeting in person
- Patients should be counseled on the risk for screenshots of conversations or videos and sexual extortion
- Minors should be counseled on the risks for online sexual predation, which has increased since the pandemic began
- Speaking with children about sexual risk online (Scientific American):
<https://www.scientificamerican.com/article/the-coronavirus-pandemic-puts-children-at-risk-of-online-sexual-exploitation/>

CONSIDERATIONS WITH SEX PARTNERS

- Even with monogamous partners, their social distancing and masking outside of the pod is relevant
- Substantial SARS-CoV-2 transmission with asymptomatic/pre-symptomatic partners
- Risk reduction
 - monogamy
 - limiting number of partners
 - masking, avoiding kissing
 - avoid contact with other bodily fluids
 - showering before and after sex
 - careful environmental cleaning
- Provide useful resources



Sexual Health During COVID-19



1 Know how COVID-19 spreads.



2 Have fun at a distance.



3 Limit sexual partners.



4 Practice safe sex.



5 Know when to skip sex.



6 Get creative for date night.



[AustinTexas.gov/COVID19](https://www.austintexas.gov/COVID19)

SEXUAL PRACTICES DURING THE SARS-CoV-2 ERA AND PATIENT RESOURCES

Table. Sexual Practices During the SARS-CoV-2 Era and Patient Resources

Sexual Approach	Summary
Sexual abstinence Masturbation	Low risk for infection, though not feasible for many Low risk for infection Safe masturbation tips (Planned Parenthood): https://www.plannedparenthood.org/learn/sex-pleasure-and-sexual-dysfunction/masturbation
Sexual activity via digital platforms, such as the phone or video chat	Patients should be counseled on the risk for screenshots of conversations or videos and sexual extortion Minors should be counseled on potential legal consequences if they are in possession of sexual images of other minors Minors should be counseled on the risks for online sexual predation, which has increased since the pandemic began Speaking with children about sexual risk online during COVID-19 (Scientific American): https://www.scientificamerican.com/article/the-coronavirus-pandemic-puts-children-at-risk-of-online-sexual-exploitation/
Sex only with those with whom one is self-quarantined	Patient is at risk for infection from sex partner if they have been exposed while outside the home Patient is at risk for infection from an asymptomatic SARS-CoV-2-infected partner
Sex with persons other than those with whom one is self-quarantined	Patient should be counseled on the risk for infection from partners, as well as risk reduction techniques that include minimizing the number of sexual partners, avoiding sex partners with symptoms consistent with SARS-CoV-2, avoiding kissing and sexual behaviors with a risk for fecal-oral transmission or that involve semen or urine, wearing a mask, showering before and after sexual intercourse, and cleaning of the physical space with soap or alcohol wipes COVID-19 and Your Sexual Health (Fenway Health): https://fenwayhealth.org/wp-content/uploads/C19MC-11_Sex-and-COVID-19-Materials_flyer2.pdf Guidance on COVID-19 and sexual health (New York City Department of Health): https://www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-sex-guidance.pdf

Additional resources Building Health Communities Online - Sex Partner Notification Platform: <https://tellyourcontacts.org/>

What to Know About HIV and COVID-19 (Centers for Disease Control and Prevention)

<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/hiv.html>

COVID-19 Command Center for STD Programs(National Coalition of STD Directors) <https://www.ncsddc.org/resource/covid-command-center-for-std-programs/>

COVID-19 = coronavirus disease 2019; SARS-CoV-2 = severe acute respiratory syndrome-coronavirus-2; STD = sexually transmitted disease.

CITY AND STATE HEALTH AUTHORITY GUIDANCE



Safer Sex and COVID-19

All New Yorkers should stay home as much as possible and minimize contact with others to reduce the spread of COVID-19.

Sex is a normal part of life and should always be with the consent of all parties. This document offers strategies to reduce the risk of spreading COVID-19 during sex. Decisions about sex and sexuality need to be balanced with personal and public health. During this extended public health emergency, people will and should have sex. Consider using harm reduction strategies to reduce the risk to yourself, your partners, and our community.

But can you have sex?

Yes! Here are some tips for how to enjoy safer sex and reduce the risk of spreading COVID-19.

1. Know how COVID-19 spreads.

- **You can get COVID-19 from a person who has it.**
 - The virus spreads through particles in the saliva, mucus or breath of people with COVID-19, even from people who do not have symptoms.
- **We still have a lot to learn about COVID-19 and sex.**
 - The virus has been found in the semen and feces (poop) of people with COVID-19.
 - We do not know if COVID-19 can be spread through vaginal or anal sex.
 - We know that other coronaviruses do not easily spread through sex. This means sex is not likely a common way that COVID-19 spreads.

2. Have sex only with people close to you.

- **You are your safest sex partner.** Masturbation will not spread COVID-19, especially if you wash your hands (and any sex toys) with soap and water for at least 20 seconds before and after sex.
- **The next safest partner is someone you live with.** Having close contact — including sex — with only a small circle of people helps prevent spreading COVID-19.
 - Have sex **only** with **consenting partners**.
 - To learn more about consent, visit on.nyc.gov/consent.
- **You should limit close contact — including sex — with anyone outside your household.**

If you do have sex with others outside of your household, have as few partners as possible and pick partners you trust. Talk about COVID-19 risk factors, just as you would discuss PrEP, condoms, and other safer sex topics. Ask them about COVID-19 **before** you hook up.

- **Do they have symptoms or have they had symptoms in the last 14 days?** Most people with COVID-19 have symptoms, but asymptomatic spread is possible. Fever, cough, sore throat, and shortness of breath are symptoms to ask about. Note that asking about symptoms is not a perfect way to know whether someone has COVID-19.
- **Have they been diagnosed with COVID-19 using a nasal swab or saliva test?** People who have recovered from COVID-19 at least 10 days from the day their symptoms started and who have not had fever for at least three days are likely no longer infectious.

FENWAY  HEALTH



COVID-19 and Your Sexual Health

IMPACT OF COVID-19 ON SEXUAL BEHAVIOR IN MEN WHO HAVE SEX WITH MEN (MSM)

- National on-line survey 2 weeks in April, 2020
- 1,051 respondents in AMIS cohort (Sanchez, AIDS and Behav)
- 51% ↓ sex; 48% stayed the same; 9% ↑.
- 68% found fewer opportunities for sex; 27% thought it was the same, and 4% found more.
- 1/10 reported reported ↑ drug use and 25% ↑ alcohol
- Younger MSM (15-24) were more likely to report more app, alcohol and drug use, and less access to condoms



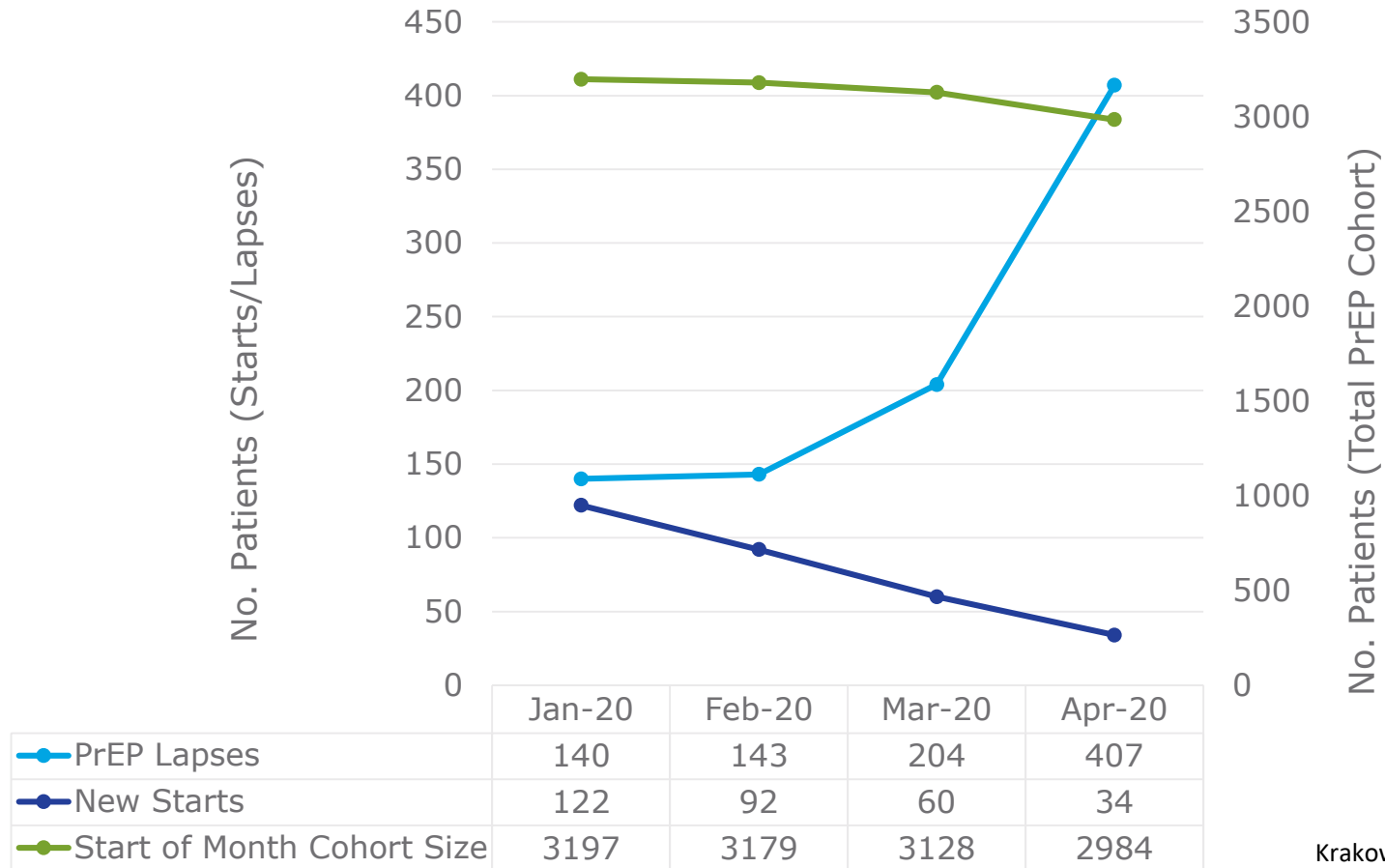
PANDEMICS ARE DYNAMIC

JULY 4TH PARTY, FIRE ISLAND, NY



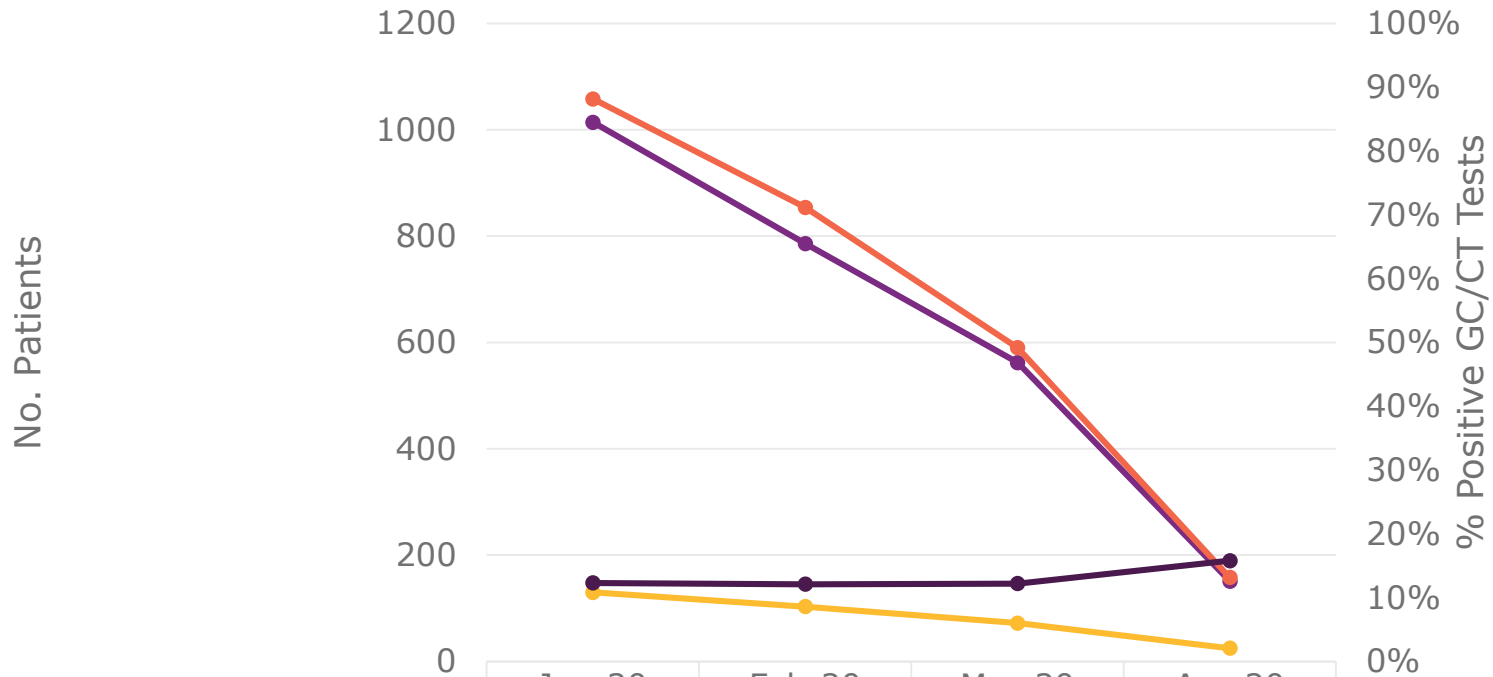
NUMBER OF PATIENTS WITH AN ACTIVE HIV PRE-EXPOSURE PROPHYLAXIS (PREP) PRESCRIPTION DECREASED BY 18%.

NUMBER OF PREP REFILL LAPSES INCREASED BY 191%; PREP STARTS DECREASED BY 72%.



Krakower et al. OACLB0104

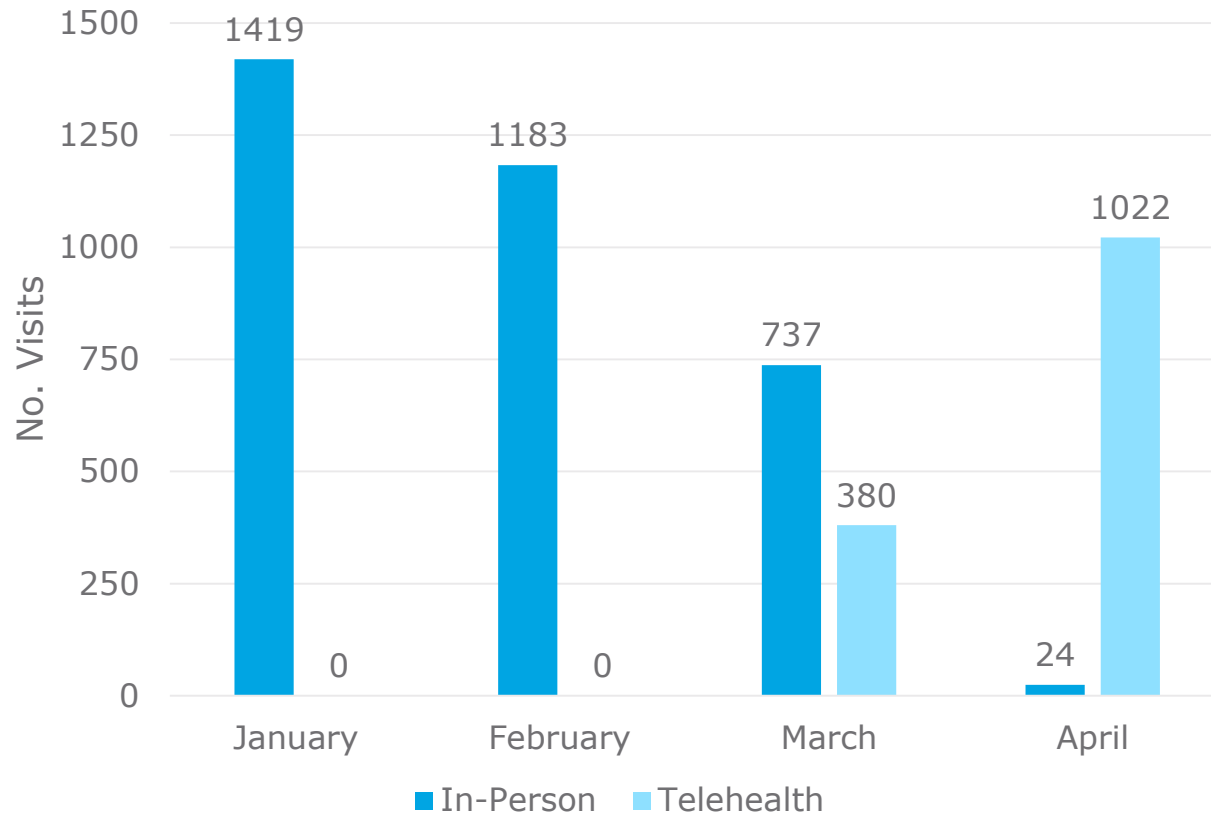
HUMAN IMMUNODEFICIENCY VIRUS (HIV), GONORRHEA (GC) AND CHLAMYDIA (CT) TESTING DECREASED BY 85.1%, BUT GC/CT TEST POSITIVITY INCREASED BY 3.5%.



	Jan-20	Feb-20	Mar-20	Apr-20
HIV Tests Performed	1014	786	562	151
GC/CT Tests Performed	1058	854	590	158
Positive GC/CT Tests	130	103	72	25
% Positive GC/CT Tests	12.3%	12.1%	12.2%	15.8%

Krakower et al. OACLB0104

A MAJOR SHIFT FROM IN-PERSON VISITS TO TELEHEALTH OCCURRED



Krakower et al. OACLB0104

PREP REFILL LAPSES WERE ASSOCIATED WITH AGE, RACE, AND ETHNICITY

	Refill lapse (N = 407) n (%)	Active prescription (N = 2611) n (%)	% Lapse	
Age, yrs				
≤ 26	87 (21.3)	395 (15.1)	18.0	} p=0.001
27+	320 (78.6)	2216 (84.8)	12.6	
Race				
White	275 (67.2)	1943 (74.4)	12.4	} p=0.001
Black/African-American	25 (6.1)	151 (5.8)	14.2	
Asian	26 (6.4)	155 (5.9)	14.4	
AI/AN + Other	33 (8.1)	205 (7.9)	13.9	
Multiracial	25 (6.1)	91 (3.5)	21.6	
Unknown/Not Reported	23 (5.6)	66 (2.5)	25.8	} p=0.04
Ethnicity				
Hispanic	68 (16.7)	324 (12.4)	17.3	
Non-Hispanic	301 (74.0)	2060 (78.9)	12.7	
Unknown/Not Reported	38 (9.3)	227 (8.7)	14.3	

Krakower et al. OACLB0104

AI/AN = American Indian, Alaska Native

PREP REFILL LAPSES WERE ALSO ASSOCIATED WITH INSURANCE TYPE

	Refill lapse (N=407) n (%)	Active prescription (N=2611) n (%)	% Lapse
Gender Identity			
Cisgender Male	376 (91.9)	2416 (92.5)	13.5
Cisgender Female	3 (0.7)	18 (0.7)	14.3
Transgender or Genderqueer	22 (5.4)	102 (3.9)	17.7
Unknown/Not Reported	6 (1.5)	75 (2.9)	7.4
Type of Insurance			
Public	71 (17.4)	294 (11.3)	19.5
Private	331 (81.4)	2286 (87.6)	12.6
Uninsured/Other	5 (1.2)	31 (1.2)	13.9

p=0.21

p=0.002

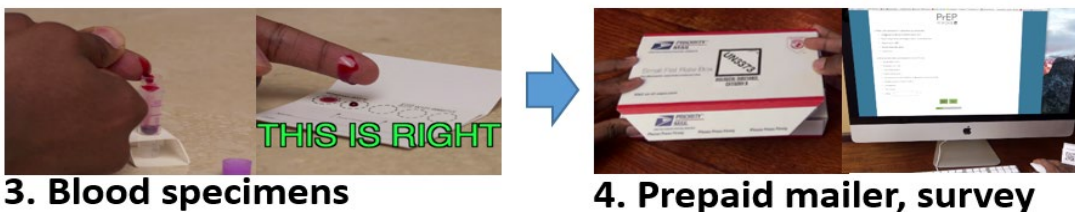
Krakower et al. OACLB0104

PROVIDING TAILORED, APPROPRIATE CARE

Home care system for PrEP could reduce clinician visits from 4/year to 1/year

<https://vimeo.com/138977095>

EMORY UNIVERSITY
PrEP
AT HOME 



Participant Test Summary Form PrEP@ Home

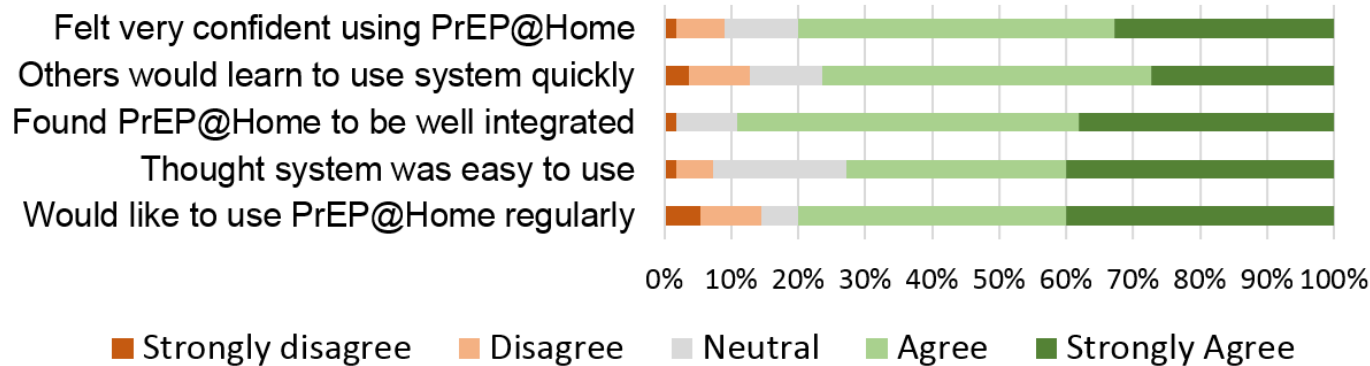
Participant Information		<input checked="" type="radio"/> Optimal <input type="radio"/> Elevated <input type="radio"/> High	
Participant Name	Doe John E	Date Specimens Collected	6/13/2016
Participant Initials	D J E	Date Specimens Tested	6/17/2016
Section 1: HIV Testing			
HIV	Oraquick	<input checked="" type="radio"/>	Interpretation: Non-Reactive HIV test
Section 2: Symptomatic Screening for Acute HIV			
Fever, Swollen Glands, Sore Throat, Muscle and Joints Aches and Pains,		<input checked="" type="radio"/>	Interpretation: No Acute HIV symptoms

5. Results report to clinician



Siegler AJ, Mayer KH, Liu AY, Patel RR, Ahlschlager LM, Kraft CS, et al. Developing and assessing the feasibility of a home-based PrEP monitoring and support program. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America. 2018;Jul 4.

PILOT RESULTS: USABILITY



87% indicated they would like to use PrEP@Home in place of their next in-person clinical visit

40% would have a greater likelihood of remaining on PrEP if PrEP@Home was available

Next step: RCT (NIMH: R01MH114692, PI Siegler and Mayer) to determine retention in care and cost-effectiveness.

Siegler AJ, Mayer KH, Liu AY, Patel RR, Ahlschlager LM, Kraft CS, et al. Developing and assessing the feasibility of a home-based PrEP monitoring and support program. *Clinical infectious diseases* : an official publication of the Infectious Diseases Society of America. 2018

Examples of Remote Collection and Monitoring

- Molecular Testing Labs can ship to all US states apart from NY, NJ, and RI
- Nurx (www.nurx.com) provides remote sexual health care

PrEP Related Assays

- HIV
- Creatinine
- HBV
- HCV
- Syphilis
- TFV-dp
- 3-site Chlamydia
- 3-site Gonorrhea

Collection Methods

- Dried Blood Spot (DBS)
- Blood Microtainer
- Serum Separator Card
- Wet Urine
- Saliva
- Buccal Swab
- 3 Site Collection for STIs

Other Capabilities

- Cholesterol & Lipids
- Thyroid Panel
- Testosterone
- AMH
- Gluten / Celiac
- HbA1C
- Flu Panel / COVID-19
- IDCompare

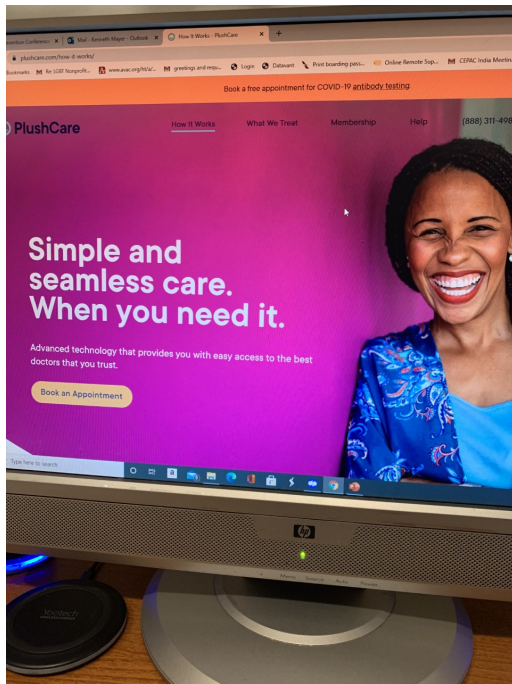
FOR MORE INFO CONTACT:

Brad Thorson, Public Health Partner

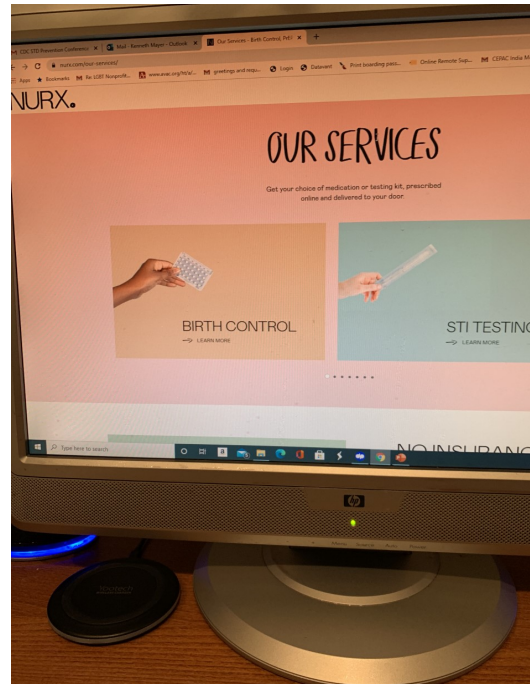
BThorson@MolecularTestingLabs.com

STI HOME SELF-MONITORING SERVICES

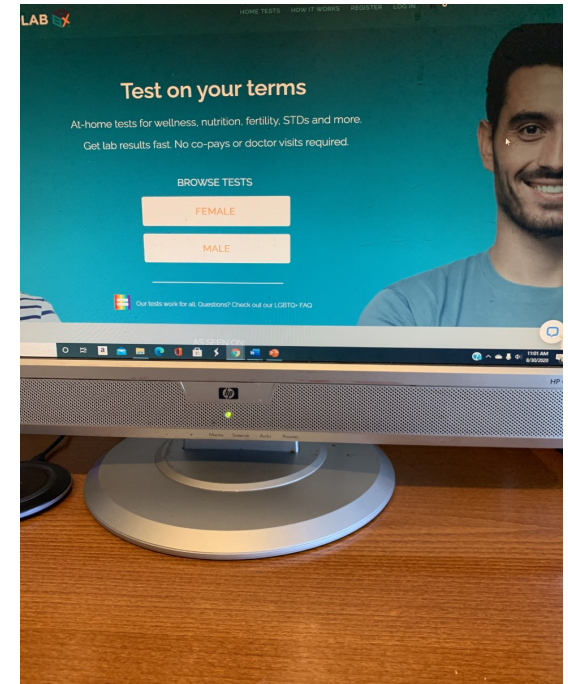
PlushCare



Nurx



MyLab Box



TELEMEDICINE AND HOME TESTING ARE NOT A PANACEA



- Digital divide: Some don't have smart phones or computers, or are challenged navigating zoom and apps
- Internet connectivity may be limited by location or plan.
- Videoconferencing about sexual health may be limited if client is not "out," is forced into constrained environment because of pandemic (e.g. homebound students)
- Home delivery of kits may not be feasible because of privacy needs (one solution: non-clinic sites for quick screening, e.g. pharmacies, CBOs)
- Costs of all components of care may not be fully covered.

REIMBURSEMENT FOR REMOTE SEXUAL HEALTH CARE



- “Can of worms”
- STI screening costs from one service ranged from \$189-369, depending on mix of tests, N mucosal sites sampled
- Tests may be provider-ordered, which will influence billing
- No single payor; states often have different regulations
- Blue Cross/Blue Shield has 35 state coverage and tends to support remote specimen collection
- Medicaid, national in theory, but states usually contract out
- NASTAD has a work group looking at billing and reimbursement for remote STI management

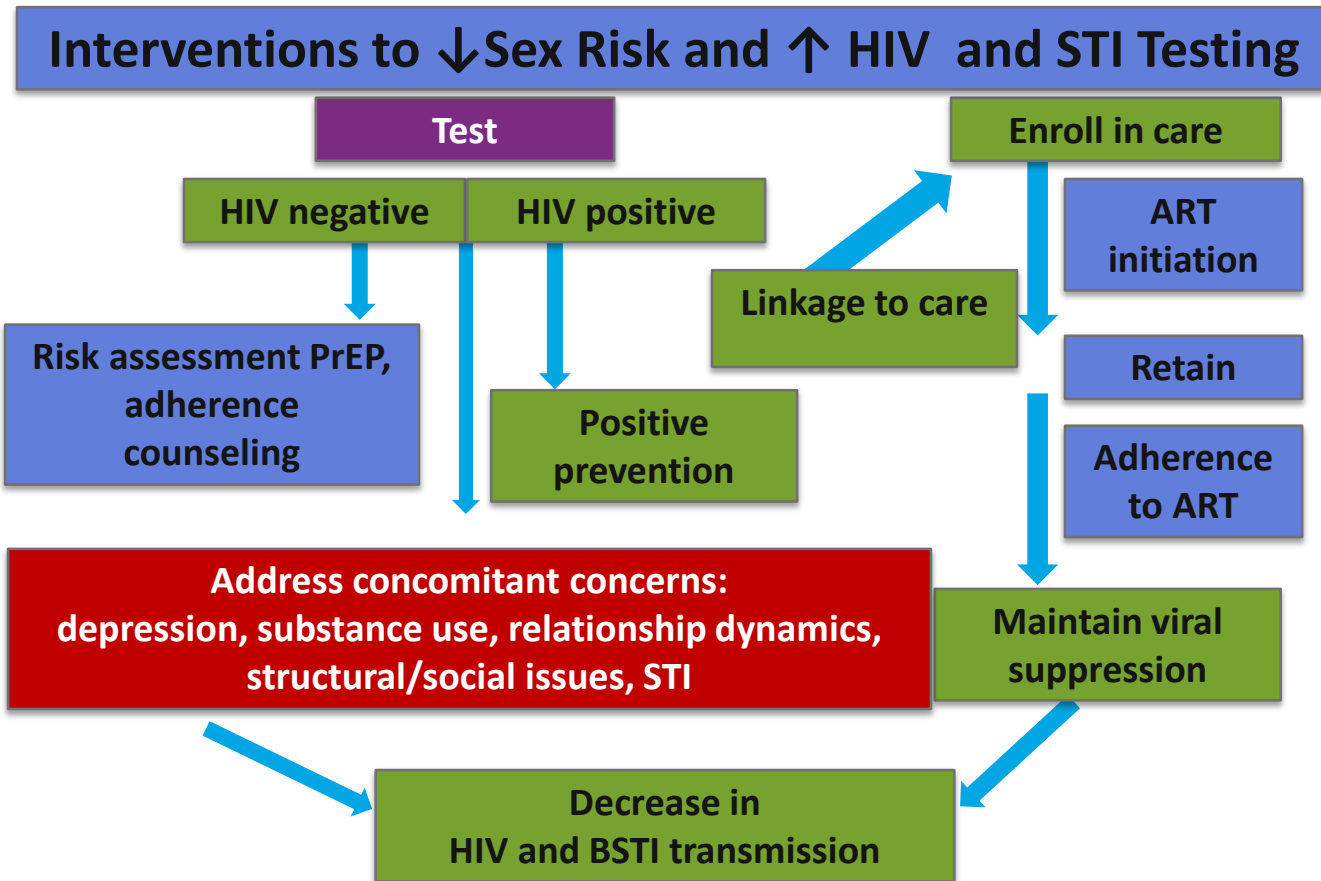


TAKEMEHOME – A NEW FREE HIV HOME TESTING PROGRAM

- Partnership between Building Healthy On Line Communities, Emory and NASTAD
- Advertising on several MSM social media sites
- Local health dept. uses grants to purchase kits which are order through the site
- Since March, 2020, have sent out more than 1500 HIV tests, started mailing bacterial STI self-collection kits in Sept.
- Working in more than a dozen states

www.bhocpartners.org/home-testing/

NEED TO THINK HOLISTICALLY



Acknowledgements

**Co-Authors: Jack Turban,
Alex Keuroghlian
Fenway Health: Douglas Krakower
Julian Dormitzer, Ken Levine, Chris Grasso**

**Aaron Siegler: Emory
Wash U: Rupa Patel
Oregon Dept of Health: Tim Menza**

**PrEP resources – National LGBTQIA+ Health Education
Center: <https://www.lgbtqiahealtheducation.org/?s=PrEP>**

**Please complete the post-event evaluation.
It will be emailed to you after the webinar.
It is required for CME credits.**

