

Home-based STI Testing: Perspectives on Privacy and Convenience Among Adolescents and Young Adults

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Disclosures

None

Background

- Adolescents and young adults (AYAs) account for half of new STIs annually¹
- Increased transmission associated with^{2,3}:
 - Inconsistent condom use
 - Concurrent sexual partners
 - Limited access to comprehensive sexual education
 - Barriers to confidential and affordable sexual healthcare
- COVID-19 pandemic accelerated telehealth innovations⁴

News Headlines: Home-based STI Testing



Will first FDA-approved at-home test for gonorrhea, chlamydia ease the epidemic?

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SEXUAL HEALTH

Will first FDA-approved at-home test for gonorrhea, chlamydia ease the epidemic?

Some sexual health advocates worry that regulation of over-the-counter STI tests could backfire as diagnoses continue to soar in the U.S.

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We Tried Some of the Best At-Home STD Tests for 2024

DECEMBER 20, 2023 | 5 MIN READ

New At-Home STI Test Could Help Stop the Spread of Infection

Experts hope a recent FDA approval for the first commercial at-home test for sexually transmitted diseases may help increase access to testing and curb rising rates

BY SARA REARDON



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FDA authorizes first home test for chlamydia and gonorrhea

By Jen Christensen, CNN

🕒 3 minute read · Published 6:21 PM EST, Wed November 15, 2023



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Home-based STI Testing Options

Company	STIs Covered	Cost	Timing of Results
<u>check my body health</u>	CT, NG, trich	\$149.99	24-48 hours after lab receives sample
<u>Countrywide Testing</u>	CT, NG, trich	\$79	2-3 days
<u>Cue Health</u>	CT, NG, trich, syphilis, HIV, herpes 1 & 2, M. gen	\$84-199; discounts with membership.	3-5 business days
<u>CVS Health</u>	CT, NG, trich, syphilis, HIV, hepatitis C, herpes 2	\$89.99 or \$71.99 with CVS Carepass™.	5-7 days
<u>Dame</u>	CT, NG, syphilis, HIV	\$70-150	Up to 7 days
<u>Everlywell</u>	CT, NG, syphilis, trich, hep C, HIV, HPV	\$49- \$169; discounts with membership.	“Within a few days”
<u>Evvy</u>	CT, NG, trich, M. gen	\$218-248!; discounts with membership.	1-3 days
<u>LetsGetChecked</u>	CT, NG, trich, syphilis, HIV, herpes 1 & 2, hepatitis B & C	\$89-199.	Within 2-5 days
<u>myLAB Box</u>	CT, NG, syphilis, trich, HPV, herpes 2, HIV, M. gen	\$79- \$399.	Within 2-5 days
<u>Nurx</u>	CT, NG, trich, syphilis, HIV, hepatitis C	\$44.50 with insurance; \$150- \$220 without insurance.	Within 7 business days
<u>TAKEMEHOME</u>	CT, NG, syphilis, HIV, hepatitis C	Free	1-6 days
<u>TBD Health Inc.</u>	CT, NG, trich	\$79-99, discounts with membership.	3-5 days
<u>The Violet Project</u>	CT, NG, trich	Free	4-14 days

Abbreviations: CT=Chlamydia trachomatis; FSA=flexible spending account; HIV= Human Immunodeficiency Virus; HPV=human papillomavirus; HSA=health savings account; M. gen=Mycoplasma genitalium; NG= Neisseria gonorrhoea; PrEP=pre-exposure prophylaxis; trich=trichomoniasis



Objectives

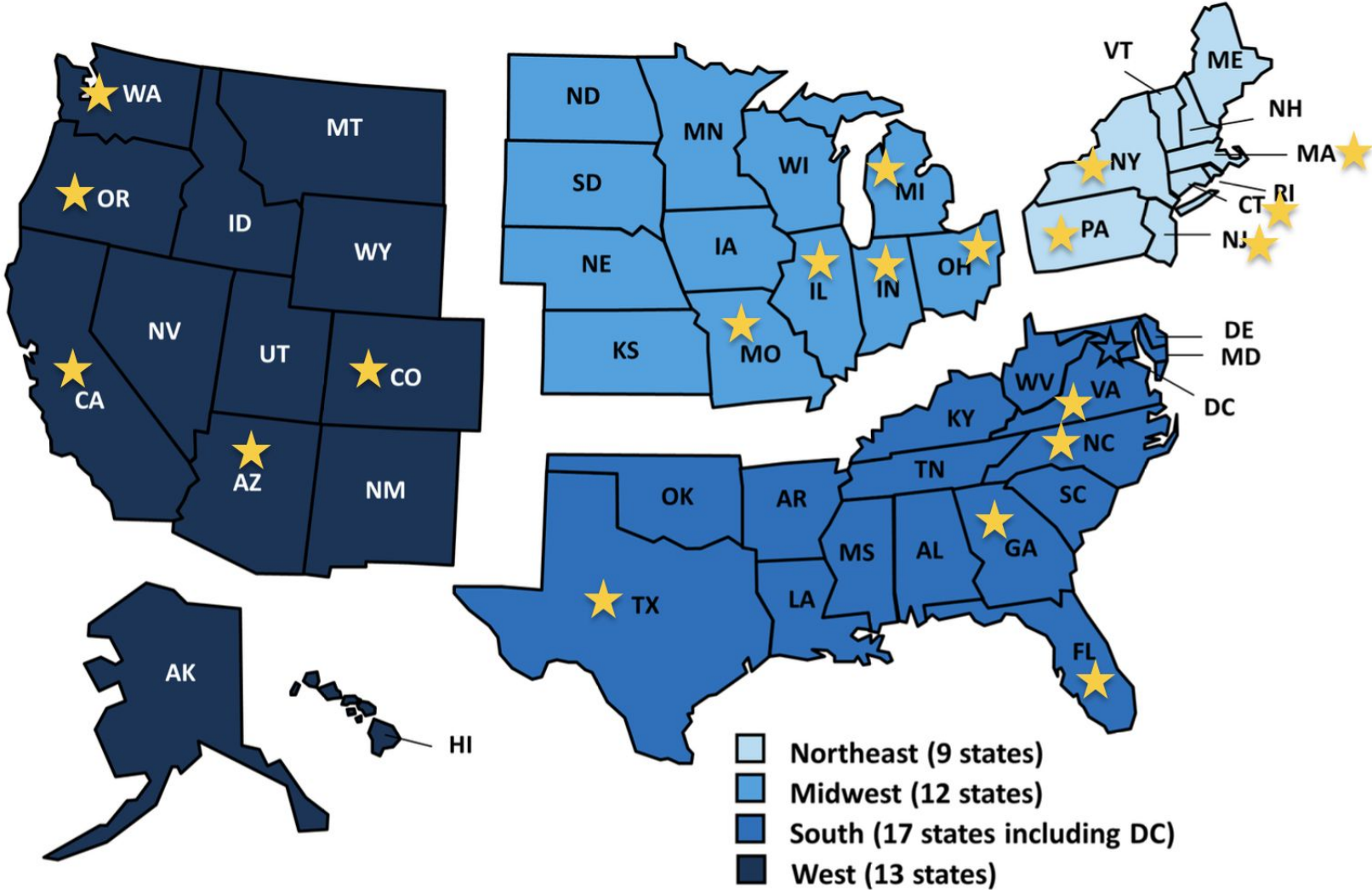
Assess AYA's perceptions with home-based STI testing

- 15-19 and 20-24 years
- Five states with the highest incidence of chlamydia and gonorrhea from four U.S. regions (2020 CDC STI prevalence⁵)
- Privacy and convenience of home-based STIs
- Accessibility of reproductive healthcare services

Hypotheses:

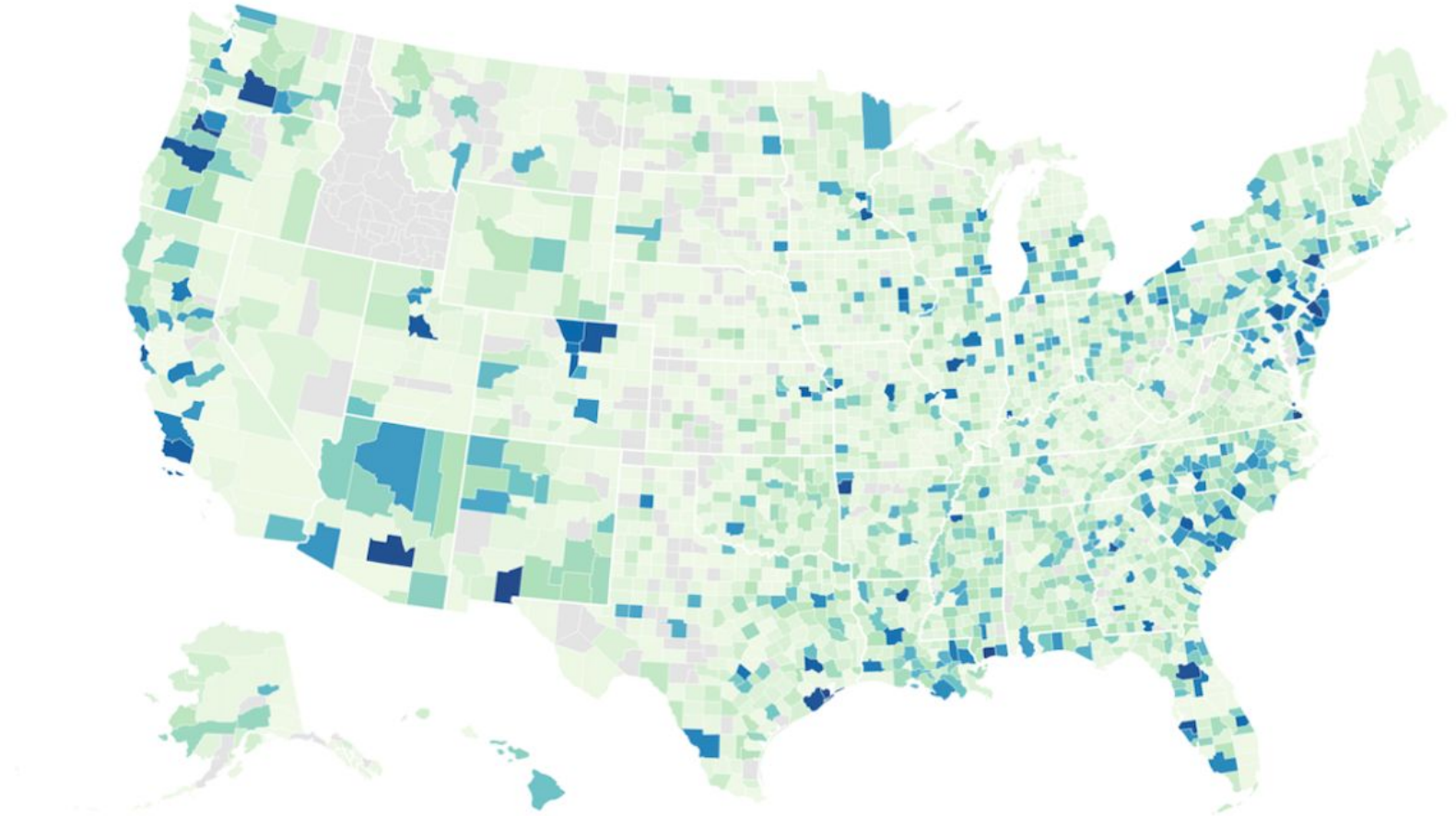
- AYAs are susceptible to STIs; limited comfort with discussing parents/guardians
- STIs are stigmatizing

Sampling



Sampling⁵

Chlamydia Incidence (15-24yo)



Source: CDC (2020) • Created with Datawrapper



Recruitment Strategy

Participants were recruited using Facebook[®], Instagram[®], and printed flyers



INTERESTED IN STI TESTING?
TELL US YOUR THOUGHTS BY TAKING OUR SURVEY!

Accessing STI testing and treatment may be difficult for you and your sexual partners, especially when access may be limited due to transportation, privacy, and cost.

Researchers want to know if you would like self-administered, home-based testing for sexually transmitted infections (STIs).

YOU MAY BE ELIGIBLE IF YOU ARE:

- 15 - 24 years old
- Sexually active in the prior 60 days
- Available to complete an online survey ~15 minutes

Participation is voluntary, and your responses will be confidential and coded to protect your identity.

As a token of appreciation, you will receive a **\$15 digital gift card** after completing all the study items.

QUESTIONS? CONTACT US!

Email us at: nationalperspectives@umich.edu
Take the survey at: bit.ly/nationalperspectives
IRB MED: HUM00225671 | MAY 25, 2023



SCAN THE QR CODE TO TAKE THE SURVEY NOW!



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Researchers would like to know if youth (15 - 24 years old) would like self-administered home-based testing for sexually transmitted infections (STI).



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Survey Design: Convenience



If it cost the same, which would you prefer for convenient STI testing?

- a. Virtual care (i.e., video or phone visit) with home-based STI testing
- b. In-person STI testing at a clinic, school, doctor's office, or pharmacy

Survey Design:

Privacy



- How comfortable would you be receiving a package to your home for STI testing?
- How would you feel if someone in your home saw that you received a home-based STI test kit?
 - a. Extremely uncomfortable
 - b. Somewhat uncomfortable
 - c. Neither comfortable nor uncomfortable
 - d. Somewhat comfortable
 - e. Extremely comfortable

Study Procedures



Inclusion Criteria: understands English, 15-24 years old, uses social media, sexually active in last 60 days



Two-step data cleaning process and participant verification



Social Media Recruitment

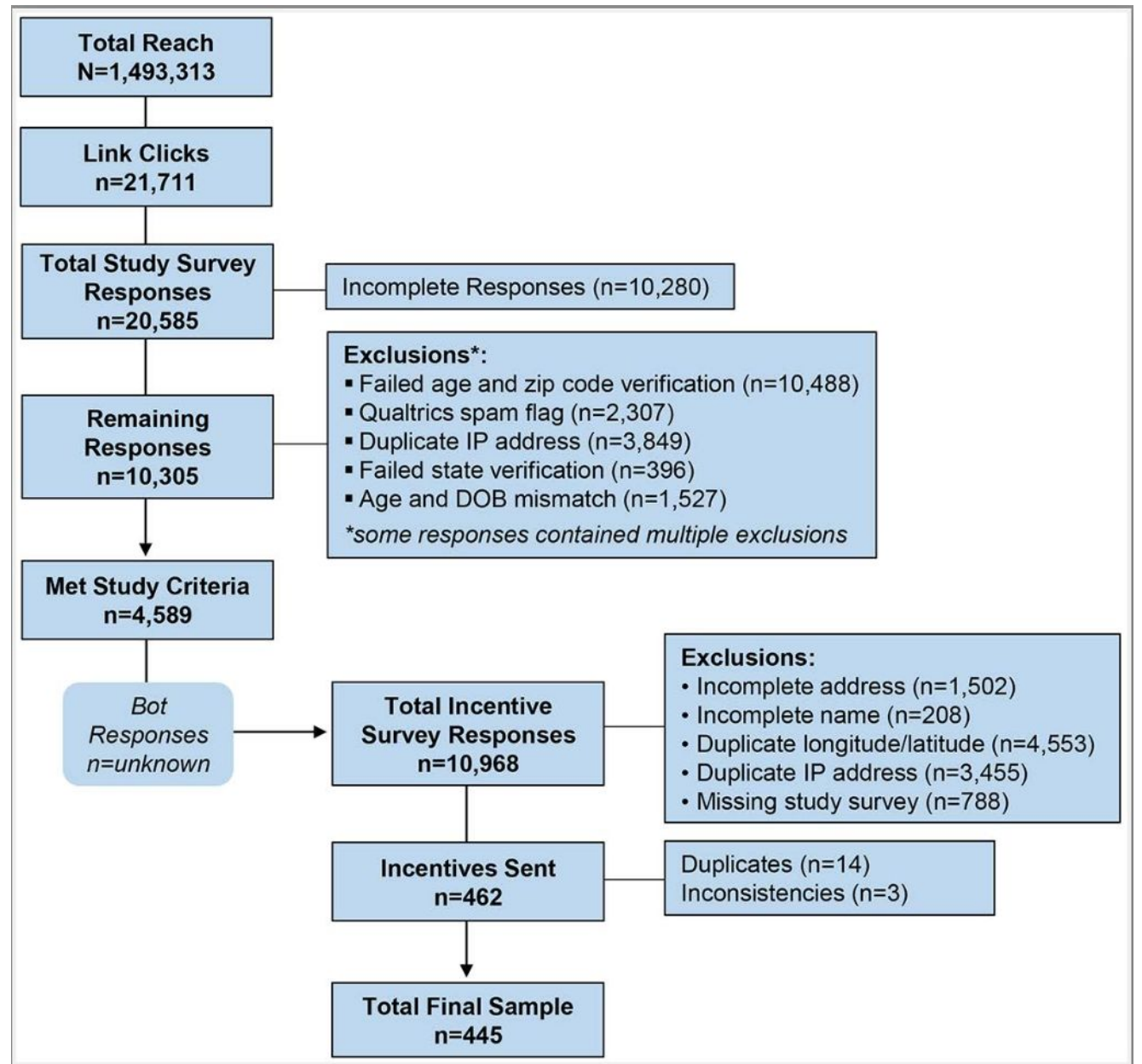


Study and Incentive Survey Completion



\$15 Gift Card

Results: Data Integrity & Validation

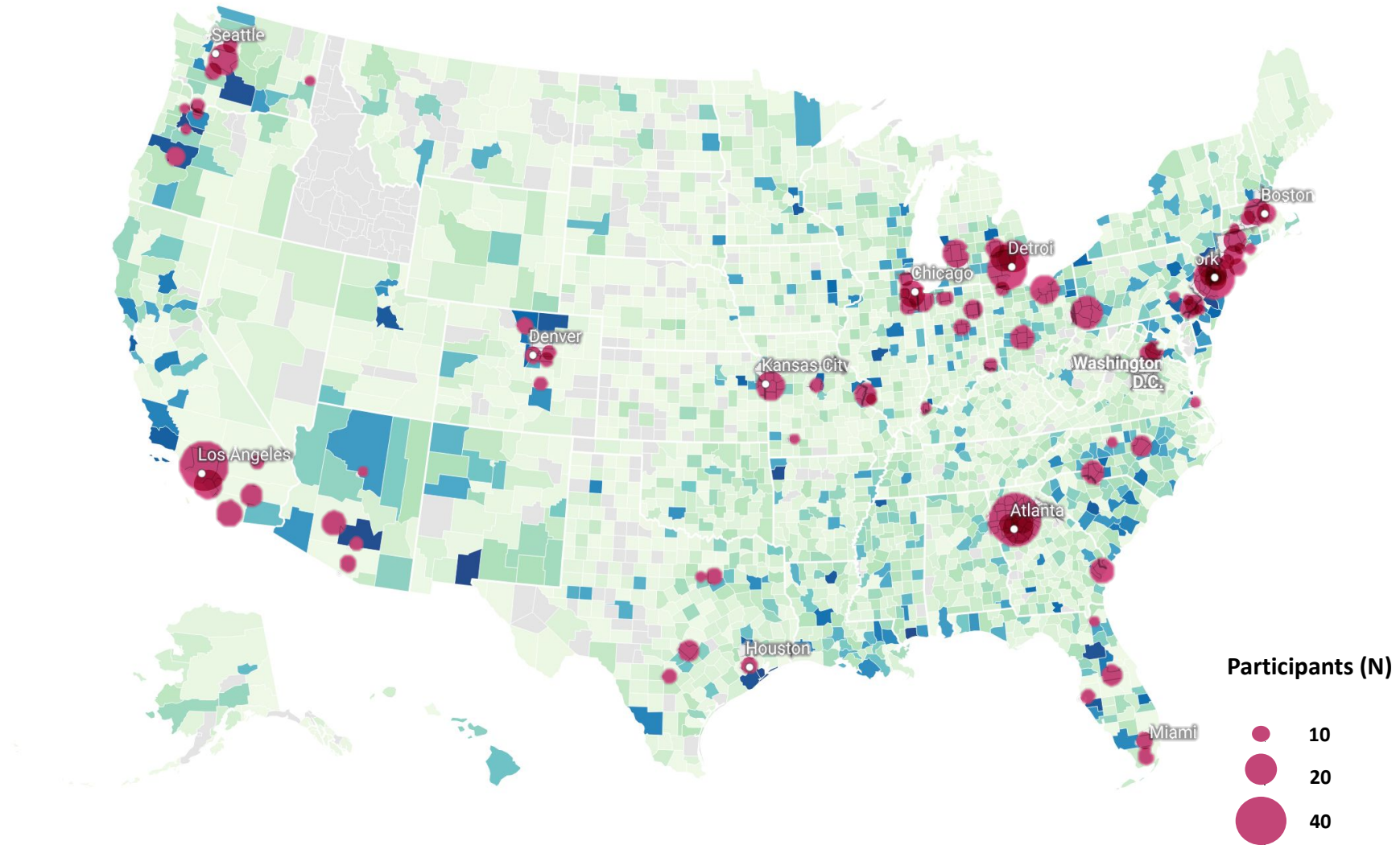


Results: Demographics

	15-19 years (N=150, 33.7%)	20-24 years (N=295, 66.3%)	Total (N=445)
Race			
White	106 (70.7%)	185 (62.7%)	291 (65.4%)
Black or African American	17 (11.3%)	69 (23.4%)	86 (19.3%)
Other ¹	27 (18.0%)	41 (13.8%)	68 (15.3%)
Ethnicity			
Hispanic/Latinx	34 (22.7%)	37 (12.5%)	71 (16.0%)
Not Hispanic/Latinx	115 (76.7%)	256 (86.8%)	371 (83.4%)
Gender			
Cis woman	75 (50%)	126 (42.7%)	201 (45.2%)
Cis man	52 (34.7%)	123 (41.7%)	175 (39.3%)
Transgender	3 (2.0%)	10 (3.4%)	13 (2.9%)
GQ ² /GNC ³ /NB ⁴	16 (10.7%)	21 (7.1%)	37 (8.3%)
Sexual Orientation			
Straight/Heterosexual	75 (50%)	194 (65.8%)	269 (60.4%)
Bisexual	45 (30.0%)	45 (15.3%)	90 (20.2%)
Lesbian	5 (3.3%)	13 (4.4%)	19 (4.3%)
Gay	6 (4.0%)	19 (6.4%)	25 (5.6%)
Queer/Pan ⁵ /SGL ⁶	16 (10.7%)	16 (5.4%)	32 (7.2%)
Asexual/Aromantic	2 (1.3%)	7 (2.4%)	9 (2.0%)
Education			
Less than HS ⁷ diploma	57 (38.0%)	10 (3.4%)	67 (14.5%)
HS diploma/Cert ⁸ /GED ⁹	47 (31.3%)	47 (15.9%)	94 (21.1%)
Greater than HS diploma	46 (30.1%)	239 (81.0%)	294 (63.8%)

¹American Indian/Alaskan Native, Middle Eastern/North African, Asian, Pacific Islander/Native Hawaiian, and Multiracial; ²Genderqueer; ³Gender Non-conforming; ⁴Non-binary; ⁵Pansexual; ⁶Same Gender Loving; ⁷High School; ⁸High School Certificate; ⁹General Educational Development

Results: Participant Geographic Distribution



Results: Convenience

	Virtual Care (N=281, 64%)	In-Person (N=159, 36%)	Total (N=440)
Race			
White	184 (64%)	105 (36%)	289 (67%)
Black or African American	59 (71%)	24 (29%)	83 (19%)
Other ¹	33 (54%)	28 (46%)	61 (14%)
Age (years)			
15-19	78 (52%)	71 (48%)	149 (34%)
20-24	203 (70%)	88 (30%)	291 (66%)
Education			
<HS diploma	38 (54%)	32 (46%)	70 (16%)
HS diploma/cert/GED	53 (56%)	41 (44%)	94 (21%)
>HS diploma	190 (69%)	86 (31%)	276 (63%)
Geographic Region			
West	63 (59%)	44 (41%)	107 (24%)
South	66 (59%)	45 (41%)	111 (25%)
Midwest	86 (69%)	39 (31%)	125 (28%)
Northeast	66 (68%)	31 (32%)	97 (22%)
Gender Identity			
Cis woman	130 (65%)	71 (35%)	201 (47%)
Cis man	115 (67%)	56 (33%)	171 (40%)
TGD ²	32 (53%)	28 (47%)	60 (14%)
Sexual Identity			
Heterosexual	170 (64%)	96 (36%)	266 (61%)
MSM	18 (72%)	7 (28%)	25 (6%)
WSW	9 (50%)	9 (50%)	18 (4%)
Other ³	83 (64%)	46 (36%)	129 (29%)

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Results: Privacy

	Receiving Package		Others Seeing Package	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Race				
White	<i>Reference</i>		<i>Reference</i>	
Black	1.21 (0.55-2.67)	0.63	1.08 (0.59-1.96)	0.81
Other ¹	0.87 (0.42-1.82)	0.71	0.74 (0.34-1.62)	0.34
Age (years)				
15-19	<i>Reference</i>		<i>Reference</i>	
20-24	1.59 (0.83-3.06)	0.16	1.72 (0.92-3.22)	0.09
Education				
Less than HS ² diploma	0.36 (0.15-0.82)	0.01**	0.38 (0.16-0.93)	0.03*
HS diploma/Cert ³ /GED ⁴	<i>Reference</i>		<i>Reference</i>	
Greater than HS diploma	1.08 (0.52-2.24)	0.84	0.51 (0.27-0.96)	0.04*
Geographic Region				
West	<i>Reference</i>		<i>Reference</i>	
South	1.54 (0.68-3.48)	0.30	2.06 (1.02-4.14)	0.04*
Northeast	0.82 (0.38-1.77)	0.61	0.90 (0.44-1.84)	0.77
Midwest	0.68 (0.33-1.41)	0.30	0.73 (0.37-1.46)	0.37
Gender Identity				
Cis Men	<i>Reference</i>		<i>Reference</i>	
Cis Women	0.61 (0.32-1.17)	0.13	0.33 (0.18-0.60)	<0.01**
TGD ⁵	1.73 (0.53-5.69)	0.36	0.75 (0.33-1.74)	0.50
Sexual Identity				
Heterosexual	<i>Reference</i>		<i>Reference</i>	
MSM ⁶	1.22 (0.44-3.39)	0.70	0.66 (0.30-1.47)	0.31
WSW ⁷	0.92 (0.44-1.89)	0.81	0.93 (0.44-1.94)	0.84
Other ⁸	0.98 (0.34-2.79)	0.97	0.52 (0.20-1.36)	0.18

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Limitations

- Sampling used chlamydia case numbers rather than case rates
- Age and level of education are confounders
- Data integrity may have been compromised by internet bots

Conclusions

- Need for tailored interventions considering diverse demographic characteristics in STI testing privacy
- Future efforts should focus on normalizing the use of home-based STI test kits to improve comfort, ensure privacy, and promote sexual and reproductive health amongst AYAs

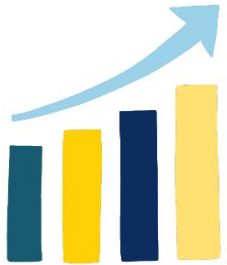


Future Directions

Develop targeted interventions



- Educational materials
- Support services
- Outreach strategies



Enhance education and awareness via social media campaign

- Sexual health
- Reducing stigma
- Promotions of home-based STI testing

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