



Optimal Strategies to Improve Pre-Exposure Prophylaxis Uptake among Youth at Risk for HIV: A Randomized Controlled Trial (ATN 149)

Dallas Swendeman, PhD, MPH. • UCLA CHIPTS
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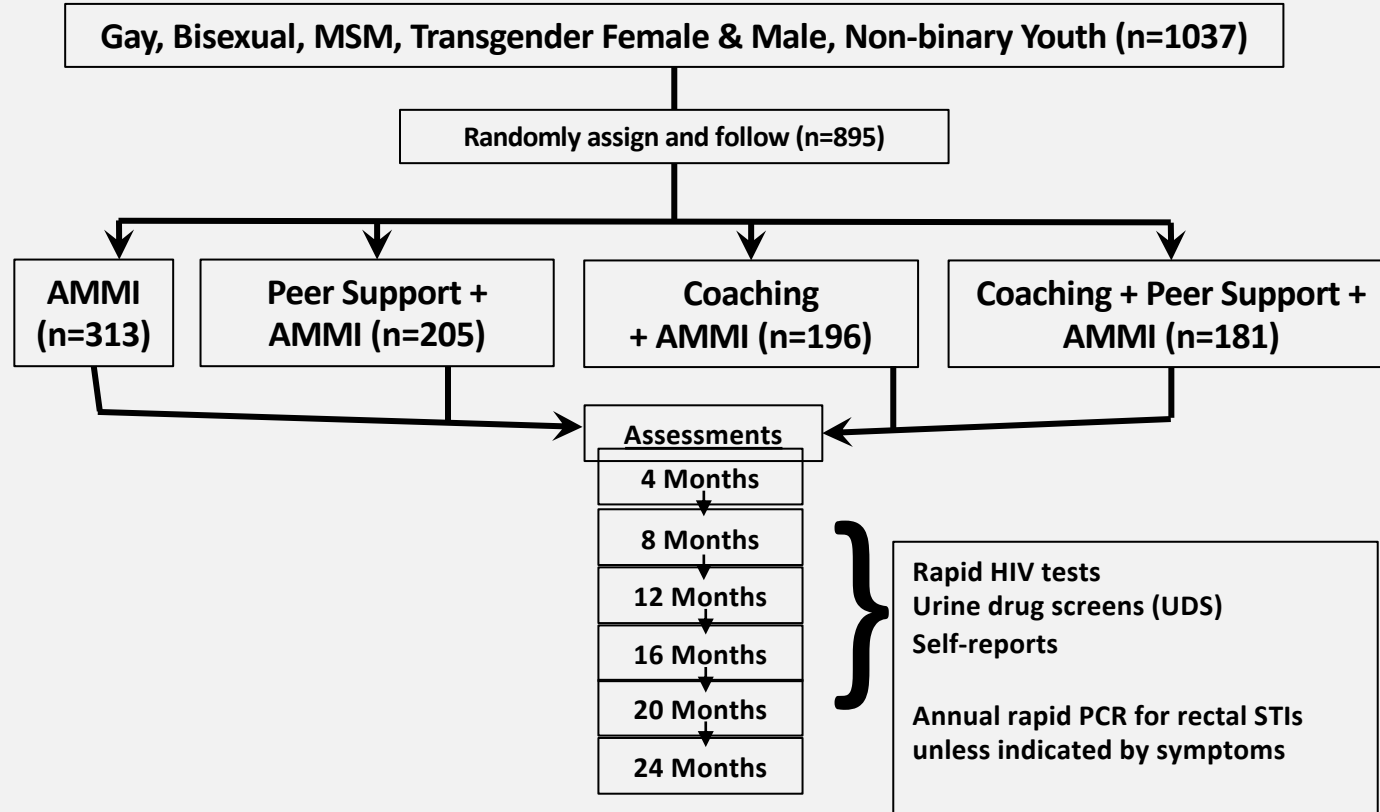
We declare no conflicts of interest, financial or other

Objective, Aim & Hypothesis

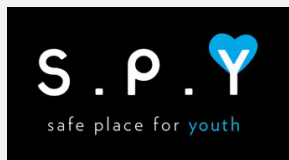


- **Objective:** Test efficacy of 3 “Disruptive Innovation” intervention modalities to support HIV prevention and related outcomes in a 4-arm factorial RCT:
 - Automated text-Messaging and Monitoring (AMMI)
 - Peer Support - on private social media space
 - Coaching – strengths-based, telehealth delivered by near peers, no manuals
- **Aim:** Evaluate independent and synergistic intervention effects:
 - Primary HIV prevention choices – PrEP, condoms, partners, PEP
 - Secondary - mental health, substance use, housing/economic security
- **Hypothesis:** Combination of 3 interventions will have largest impacts

ATN 149 Study Design



Community-Based Recruitment in L.A. & New Orleans



Getting to Zero HIV Among Youth: Moving Beyond Medical Sites

Mary Jane Rotheram-Borus, PhD; Sung-Jae Lee, PhD; Dallas Swendeman, PhD

[Abstract](#) | [Full Text](#)

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Participant Characteristics

	No.	Col %
Age categories		
12-18	151	15
19-21	421	41
22-24	465	45
Sex assigned at birth		
Male	969	93
Gender identity		
Cis-gender	839	81
Transgender	124	12
Gender diverse/Non-binary	72	7
Sexual orientation		
Gay/Homosexual/Same Gender Loving/Downe	572	55
Bisexual	287	28
Pansexual	76	7
Heterosexual	50	5
Queer	39	4
Asexual/Other	8	1
Unsure/questioning/DK	4	0

	No.	Col %
Race / Ethnicity		
Black/African American	387	37
Latino	333	32
White	211	20
Asian/HPI/NA/AN/Other	106	10
Education level		
Below high school	191	19
High school / equivalent	239	24
Some higher education	462	45
Completed Higher ed.	125	12
Employment status		
Employed	488	48
Unemployed	240	24
Student	285	28
Insurance status		
Insured	773	75
Uninsured	190	18
Unsure	71	7
Income <poverty level	692	67

	No.	Col %
HIV Prevention Program Experience	215	21
Consistent Condom Use	499	48
Lifetime PEP Use	61	6
Lifetime PrEP Use	190	18
Current PrEP Use	111	11
Lifetime Sex Exchange	257	25
Recent Sex Exchange	127	12
Lifetime sexual partners		
No partners	81	8
1-2 partners	111	11
3-10 partners	374	36
11 or more partners	465	45
Recent sexual partners		
No partners	157	15
1-2 partners	406	39
3-10 partners	397	38
11 or more partners	73	7
Condomless anal sex (12 m)	691	67



3 Adaptable and Flexible Interventions



**Automated Text Messaging
& Monitoring**



Online Peer Support



**Strengths-Based Telehealth
Coaching**



Automated Text Messaging & Monitoring

Daily Messaging

- 3 daily content streams: healthcare, wellness, medication/PrEP adherence
- 2 weekend content streams: sexual health, substance use

Weekly Monitoring

- Check-in surveys: STI symptoms, condom use, adherence, mental health
- Monitoring and follow-up by coaches



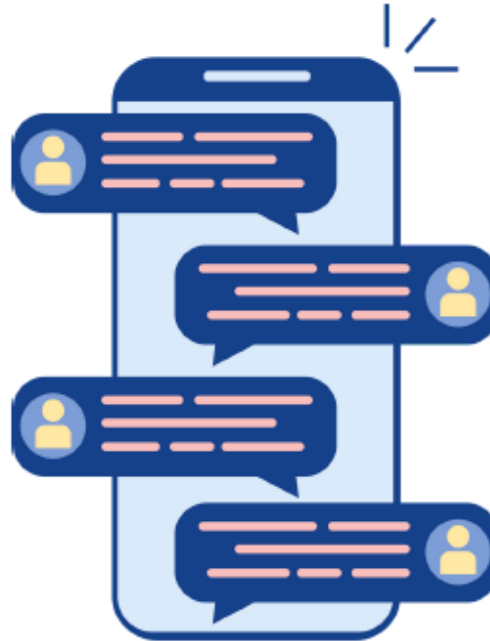
Peer Support: Private, Online Community

Private Space

- Anonymous posts on online chat space
- Social norming and de-mystifying sexual health (ex: PrEP experiences, side effects)



Discord



Monitoring & Responses

- Coaches moderate posts and provide accurate information
- \$10 incentives for youth to post 3x per week to support each other



Coaching: Strengths-Based and Youth-Centered

Core Elements

- Evidence-based practice training
- Assess strengths
- Hierarchies of needs
- Youth priorities+HIV/STI
- Link to services in cmt.
- Goal-setting, problem solving, follow-up



Flexible / Adaptable

- Coaches: near-peer CHWs or others
- Phone, video, text, in-person
- Weekly to monthly follow-ups
- Ongoing support for "seasons of risk"



Coaching: Strengths-Based and Youth-Centered

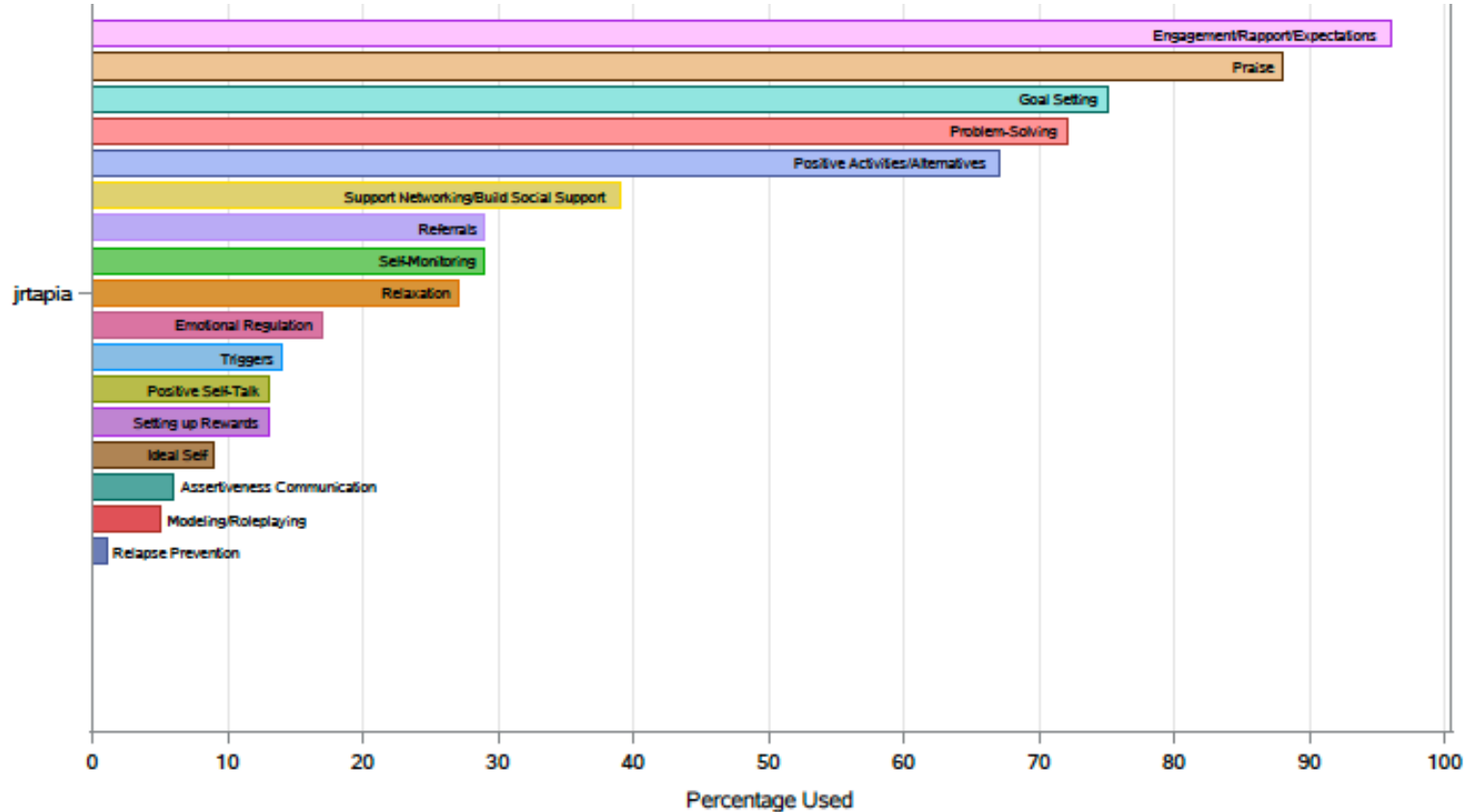
Goal-Setting

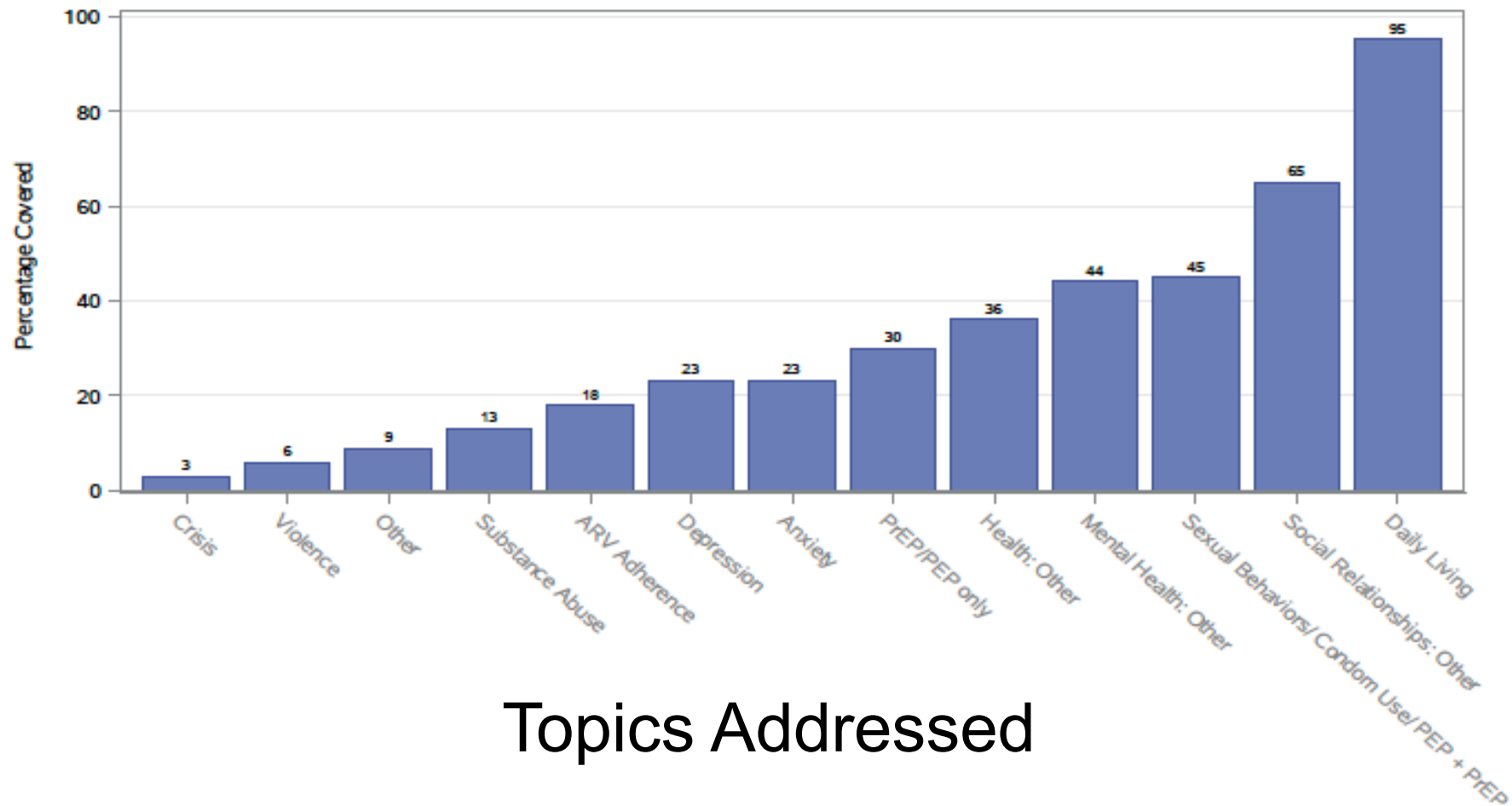
- Identify long and short-term goals
- Support on 3 goals, always sexual health
- Problem-solve SMART goals
- Follow-up on goal progress
- Ongoing supportive accountability



- ✓ Daily Living
- ✓ Social Relationships
- ✓ Physical Health
- ✓ Healthcare
- ✓ Mental Health
- ✓ Sexual Health

Case Management Monitoring: Practice Elements





Topics Addressed



Community Engagement: Youth Advisory Board

YAB Discussion Topics

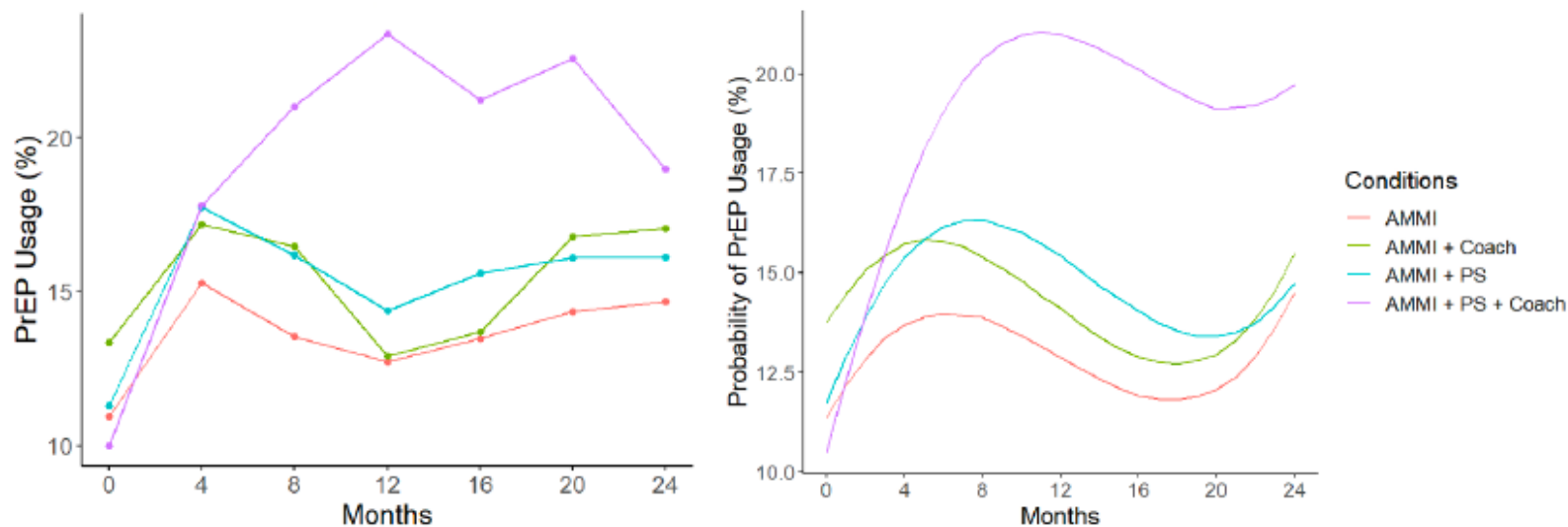
- Intervention feedback
- PrEP barriers and opportunities
- Sharing study results
- LGBTQ+ labels, terms, and inclusion in research
- Trusted health information sources

"I really needed someone to keep me accountable to myself at that time in my life, and [my coach] was like my rock those first two years of being homeless...It was really important for me to feel like I had value, and [she] really grounded me and a lot of feelings I was having, experiences I was having...[She] became super important in my life because I didn't have anybody at that point" (P4, YAB4)

Feedback on coaching intervention, hierarchy of needs



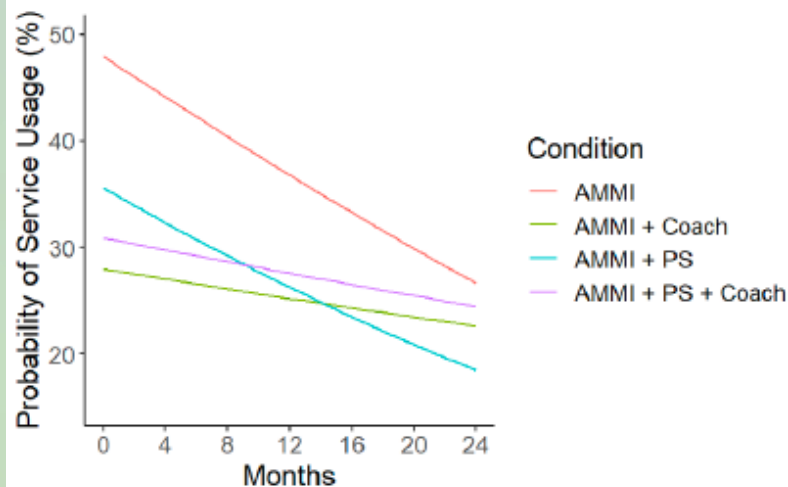
Intervention Effects: PrEP Use



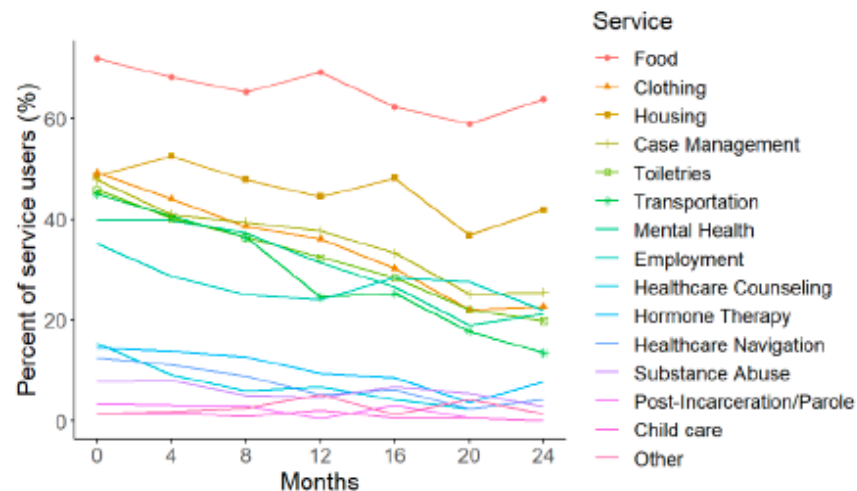
(OR 2.35; 95% CI:1.27-4.39 vs. AMMI control)



Intervention Effects: Services Use



(OR=1.23, 95% CI 1.12-1.35)





Conclusions & Next Steps

Need to address youths' diverse needs and priorities with complementary interventions to support HIV prevention

Rapidly adaptable and implementable “disruptive innovation” interventions can be efficacious

Cost-effectiveness and post-hoc sub-group analyses in progress

Implementation science needed to support scale-up and sustainment

Chatbot exploration to support coaches' caseload bottlenecks and more interactive automated messaging

Thank you!

To our team, youth & many more

#ADHERENCE2023

