Pilot Test of a PrEP Telemedicine System for Young, Black MSM in the Rural US South

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Introduction and Methods

- HIV pre-exposure prophylaxis (PrEP) with tenofovir/emtricitabine (TDF/FTC) is highly effective in preventing HIV
- PrEP prescriptions have substantially increased since 2012, with an estimated 118,000 persons on PrEP in the US in 2017
- PrEP use among young MSM is lower than among other groups, and younger persons are less likely to persist in PrEP care at both one- and two-years follow-up
- Despite accounting for 4x% of new HIV infections, Black MSM account for only about 10% of PrEP users.
- In rural areas, geographic barriers to accessing PrEP care may exacerbate access for Black MSM
- (cite location paper)
- Home PrEP care could increase access to PrEP care, addressing barriers posed by geography and stigma.
- We develop and pilot tested an intervention to provide home-based PrEP care

Participant Eligibility

Young (18-30), Black MSM (YBMSM) were recruited through social media ads in rural and small town areas of Georgia and Mississippi

- Eligible participants were HIV negative and had at least one male partner in the last 3 months
- National Center for Health Statistics urban-rural classification scheme to determine eligible areas: rural (<50,000 population) or small town (<250,000 population)
- Results from behavioral screening and laboratory tests on home self-collected specimens were provided to a study clinician
- Individuals determined to be eligible for PrEP were enrolled in the analytic sample

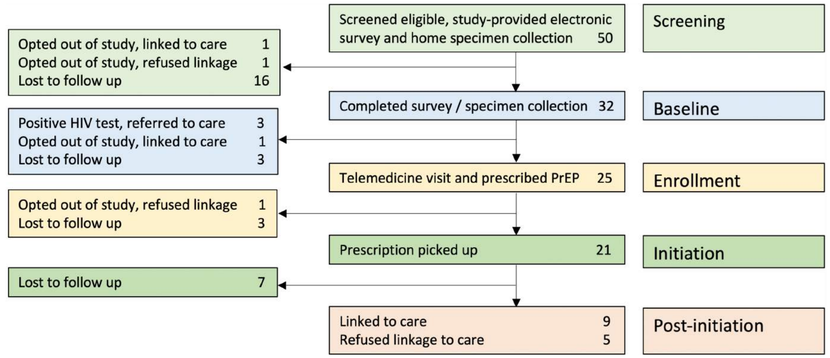
Telemedicine

Telemedicine visits conducted with secure video platform
PrEP navigation to assist with securing access to medication



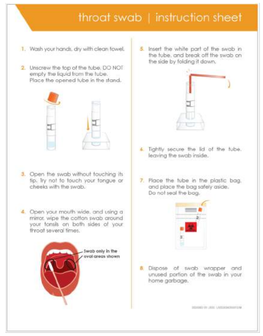
Results

Study Flow Chart



Home specimen self-collection kits (SSC)

- Urine, rectal swab, pharyngeal swab: PCR for GC/CT
- Finger prick blood in gravity microtube: POC creatinine analyzer, 3rd gen rapid HIV 1/2 antibody, RPR for syphilis at 1:4 dilution
- Prepaid overnight return mailer
- Detailed written and video instructions





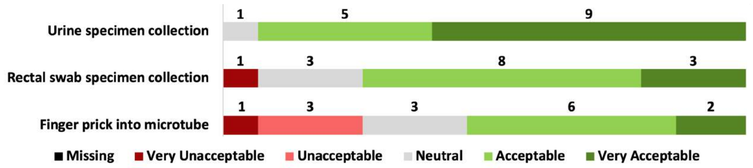
Baseline Data, n=25

Demographics	*n (%)*
Age, in years	
21 and under	7 (28)
22 - 25	11 (44)
25-30	7 (28)
Education	
High school or less	3 (12)
Some college / associate	9 (36)
College graduate or higher	13 (52)
Annual income	
$0 to $9,999	9 (36)
$10,000 to $19,999	8 (32)
$20,000 or more	7 (28)
Don't know	1 (4)
Insurance Type	
Private insurance or HMO	10 (40)
Medicaid	3 (12)
Not Insured/other	12 (48)

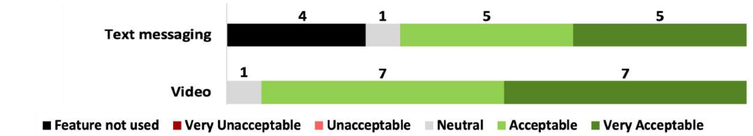
Behavioral Characteristics	*n (%)*
Ever Tested for HIV	
Yes	23 (92)
No	2 (8)
Tested for HIV in past 12 months	
Yes	20 (80)
No/missing	5 (20)
Heard of PrEP prior to study	
Yes	21 (84)
No	4 (16)
Ever taken PrEP to prevent HIV	
Yes	2 (8)
No	23 (92)

Acceptability of Intervention

Rated experience with specimen self-collection, n=15



Rated experience with telemedicine portal, n=15



Most (n=14, 93%) willing to use ePrEP in place of a standard provider visit

Majority (n=10, 67%) more likely to remain on PrEP if ePrEP was available

Conclusions

- Telemedicine PrEP is feasible for YBMSM in rural areas, with 21/50 initiating PrEP care
- PrEP uptake in this pilot study is higher than national uptake estimates, but in a population self-selected for interest in PrEP
- Further investigation is needed to determine the impact of ePrEP on uptake
- The ePrEP system was acceptable for YBMSM, with all components having a majority of participant ratings be acceptable or very acceptable
- Considerable loss to follow-up and refusal of linkage to care observed after prescription pick-up; this may be due in part to dissatisfaction with PrEP referral options
- The ePrEP intervention is currently being tested in a RCT design in ATN 159 among young MSM in rural Georgia, Mississippi, and North Carolina, with outcomes of uptake and biomarker-determined maintenance in PrEP care

Research reported in this poster was supported by a NIAID supplement to the Emory Center for AIDS Research, P30AI050409 and by the Eunice Kennedy Shriver National Institute of Child Health & Human Development of the National Institutes of Health under Award Number U19HD089881, ATN protocol 159. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.