Intentions to initiate PrEP among gay and bisexual men are driven by demographic factors, sexual risk, and perceptions of providers: Results from a nationally representative sample

H. Jonathon Rendina, PhD, MPH
Christian Grov, PhD, Thomas H. F. Whitfield, BA,
Ana Ventuneac, PhD, & Jeffrey T. Parsons, PhD

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Background

- PrEP has been shown in numerous studies to be efficacious
- Numerous community-based studies show PrEP to be acceptable to gay, bisexual, and other MSM and indicate high willingness to take PrEP
  - Fewer data are available that examine intentions to begin PrEP
  - Few studies have looked at these issues in large, national U.S. samples
- Despite high acceptability, uptake remains slow
Aims

Utilizing data from a large sample of gay/bisexual men across the United States:

• Examine correspondence between PrEP willingness and PrEP intentions
• Examine timeline to begin PrEP among those who intend to
• Examine demographic, behavioral, and psychological variables associated with PrEP intentions
Method
**One Thousand Strong:**
Syndemics & Resilience for HIV Transmission in a National Sample of Vulnerable Men

Principal Investigators: Jeffrey T. Parsons, PhD  
Christian Grov, PhD, MPH

Co-I & Senior Research Scientist: Ana Ventuneac, PhD  
Tyrel J. Starks, PhD

Co-I & Clinical Supervisor: H. Jonathon Rendina, PhD, MPH  
Demetria Cain, MPH

Senior Data Analyst: Mark Pawson, MA

Research Scientist: Michael Castro, MPH

Project Director: Ruben Jimenez

Project Coordinator: Chris Hietikko, MFA

Graphic Designer:  

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Participants & Procedures

- Recruited by Community Marketing & Insights (CMI) Inc. Panel
- Eligible if:
  - 18 years of age or older
  - Reside in U.S. with permanent mailing address
  - Biologically male and identified as male
  - Identified as gay/bisexual
  - Internet access and device for taking digital pictures
  - HIV-negative and willing to complete at-home HIV/STI testing
  - Sexually active with men in the past year
- Completed at-home surveys (screening, baseline, 6-month PrEP) and at-home HIV/STI testing
PrEP Use at 6M Survey

- Of those who completed the 6M survey (n = 950, 89%):

  - Currently Prescribed PrEP, 5.9%
  - Previously Prescribed PrEP, 1.3%
  - Never Prescribed PrEP, 92.8%
Participant Demographics \((n = 879)\)

- **Race/Ethnicity**
  - Black
  - Latino
  - White
  - Other

- **Sexual Orientation**
  - Gay
  - Bi

- **Income**
  - $20K or less
  - $20K – $49K
  - $50K or more

- **Education**
  - HS or less
  - Some College
  - BA or more

- **Region**
  - NE
  - MW
  - South
  - West

- **Relationship Status**
  - Single
  - Partnered

Age = 40.6, SD = 13.9
Measures

- Demographic characteristics (age, race/ethnicity, education, relationship status, zip code → region of country)
- Medical provision (insured status, having a PCP, MSM disclosure to PCP)
  - Recent STI-positive result from at-home testing
- Sexual behavior (frequencies among serodiscordant/seroconcordant partners)
- Willingness and intentions to initiate PrEP and timeline for beginning
  - Suppose that PrEP is at least 90% effective in preventing HIV when taken daily. How likely would you be to take PrEP if it were available for free?
  - PrEP is currently available with a prescription from your doctor, and research has shown that a majority of insurance companies cover most or all of the costs of PrEP. Do you plan to begin PrEP?
Measures (cont’d)

- Barriers to PrEP (adapted from Golub et al., 2013)

**Health Consequences**
- Long-term health effects
- Potential side effects
- Developing resistance if infected
- Incomplete protection against HIV

**Provider Stigma**
- Bringing up PrEP to a doctor
- Talking to a doctor about your sex life

**Social Stigma**
- Friends finding out
- Family finding out
- Sexual partners finding out
- Way men on PrEP are portrayed in media
- Way other gay/bi men talk about guys on PrEP
Results
PrEP Initiation Willingness & Intentions

### Willingness
- Definitely: 6%
- Probably: 14%
- Might: 23%
- Probably not: 20%
- Definitely not: 37%

### Intentions
- Definitely: 5%
- Probably: 11%
- Might: 12%
- Probably not: 40%
- Definitely not: 32%
PrEP Willingness & Intentions (cont’d)

<table>
<thead>
<tr>
<th></th>
<th>Intentions</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Maybe</td>
<td>Yes</td>
<td>No</td>
<td>Maybe</td>
</tr>
<tr>
<td>No</td>
<td>172</td>
<td>3</td>
<td>0</td>
<td>172</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>19.6%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>19.6%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Maybe</td>
<td>122</td>
<td>78</td>
<td>3</td>
<td>122</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>13.9%</td>
<td>8.9%</td>
<td>0.3%</td>
<td>13.9%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Yes</td>
<td>96</td>
<td>268</td>
<td>137</td>
<td>96</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>10.9%</td>
<td>30.5%</td>
<td>15.6%</td>
<td>10.9%</td>
<td>30.5%</td>
</tr>
</tbody>
</table>

$\chi^2(4) = 380.91, p < 0.001$
Planning to begin PrEP

Among those who intended to begin PrEP, they indicated they would do so in...

- 21% within 1 mo.
- 38% 2-3 mo.
- 10% 4-6 mo.
- 11% 7-12 mo.
- 11% > 1 year
## Predicting PrEP Intentions

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<thead>
<tr>
<th>Race/ethnicity (ref = Black)</th>
<th>AOR</th>
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<tbody>
<tr>
<td>Latino</td>
<td>0.31**</td>
</tr>
<tr>
<td>White</td>
<td>0.44*</td>
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<tr>
<td>Other</td>
<td>0.96</td>
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<table>
<thead>
<tr>
<th>Region (ref = Northeast)</th>
<th>AOR</th>
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<tbody>
<tr>
<td>West</td>
<td>0.92</td>
</tr>
<tr>
<td>South</td>
<td>1.20</td>
</tr>
<tr>
<td>Midwest</td>
<td>0.63</td>
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<thead>
<tr>
<th>Education (ref = HS or less)</th>
<th>AOR</th>
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</thead>
<tbody>
<tr>
<td>Some college/associate’s</td>
<td>0.36**</td>
</tr>
<tr>
<td>Bachelor’s or more</td>
<td>0.33**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>AOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income (ref = less than $20k/yr)</td>
<td></td>
</tr>
<tr>
<td>$20k to $49k/yr</td>
<td>0.85</td>
</tr>
<tr>
<td>$50k or more/yr</td>
<td>0.79</td>
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<thead>
<tr>
<th>Partnered (1 = yes)</th>
<th>AOR</th>
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<tbody>
<tr>
<td>Insured (1 = yes)</td>
<td>1.23</td>
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<thead>
<tr>
<th>PCP disclosure (ref = no PCP)</th>
<th>AOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not “out” to PCP</td>
<td>0.95</td>
</tr>
<tr>
<td>“Out to PCP</td>
<td>1.67*</td>
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<table>
<thead>
<tr>
<th>Baseline STI diagnosis (1 = yes)</th>
<th>AOR</th>
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</thead>
<tbody>
<tr>
<td>Recent CAS (1 = yes)</td>
<td>2.02***</td>
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Predicting PrEP Intentions (cont’d)

<table>
<thead>
<tr>
<th>Barriers to PrEP –</th>
<th>AOR</th>
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<tbody>
<tr>
<td>Social Stigma</td>
<td>0.84</td>
</tr>
<tr>
<td>Health Consequences</td>
<td>0.64**</td>
</tr>
<tr>
<td>Provider Stigma</td>
<td>1.32*</td>
</tr>
</tbody>
</table>
Discussion
Summary of Findings

- Overall, likelihood of taking PrEP if it’s provided for free and 90% efficacious (i.e., “willingness”) is higher than actual plans (i.e., “intentions”) to begin PrEP
  - The difference primarily occurs with individuals who say they are or might be likely to take it but do not plan to take it (i.e., imagined vs. real)

- Of those who definitely or probably intended to begin PrEP, more than half planned to do so within 3 months
  - Nearly 80% said within 6 months
Summary of findings (cont’d)

- Several demographic and behavioral factors influenced PrEP intentions
  - Younger men, Black men, and men with a high school education or less all had higher intentions to begin PrEP; partnered men had lower intentions
  - Men who recently engaged in CAS (casual or main) had higher intentions
  - Men who had a PCP and were out to her or him had higher intentions
  - Neither income nor insurance status seemed to deter intentions
With regards to concerns about various aspects of PrEP...

- Societal stigmas did not seem to influence intentions
- Having greater concerns about the health effects decreased intentions
- Having greater concerns about talking with a doctor about PrEP and sexual behavior increased intentions
  - Men not thinking about PrEP may not have imagined this conversation in the same way
Limitations

- Data are cross-sectional – over time, we will be able to see how many do ultimately begin a PrEP regimen
- Large national sample that is approx. representative of census data on same-sex households
  - Over-represents experiences of White, educated, and higher income men
- Work is needed to continue developing measures of PrEP stigma
Implications & Conclusions

- Interventions that move people from contemplating initiating a health behavior like PrEP to planning to do so may increase uptake
  - Could Motivational Interviewing do the trick?
- The groups at highest risk for HIV (e.g., younger, Black men, those engaged in CAS) seem to be most interested in starting PrEP
  - Programs are needed to improve access
- Greater education about what is and is not known about PrEP’s health effects is needed
  - Important to note that stigma had unexpected associations here, but this was just one way of measuring it and others are needed
Acknowledgements

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  - Developing a mobile emotion regulation intervention for HIV-positive men (K01-DA039030; PI: Rendina; Will Aklin, Project Officer)
- Our participants who volunteered their time
Thank you!

For further questions or a copy of these slides, please email me:

jrendina@chestnyc.org

Or visit:

www.chestnyc.org