

M-CUBED (MOBILE MESSAGING FOR MEN)

Evidence-Based for the Pre-Exposure Prophylaxis Chapter
Best Evidence for the Risk Reduction Chapter



POPULATION

- Gay, bisexual, and other men who have sex with men (GBMSM)

KEY INTERVENTION EFFECTS

- Increased PrEP use
- Increased HIV testing

BRIEF DESCRIPTION

M-CUBED (Mobile Messaging for Men) is an individual-level digital health intervention that uses a status neutral approach via a mobile app to address multiple HIV prevention and care needs for GBMSM with and without HIV. Participants must own a smartphone.

- For GBMSM without HIV, the app delivers tailored prevention messaging through content and videos depending on whether participants have higher risk factors for HIV (i.e., any anal sex not protected by condoms or not taking PrEP as prescribed in the past 3 months) or lower risk factors (i.e., anal sex protected by condoms in the past 3 months or taking PrEP as prescribed in the past 3 months).
- For GBMSM with and without HIV, M-Cubed offers a suite of prevention and care services, including:
 - Self-screening for HIV and sexually transmitted infection (STI) risk factors
 - Scheduling and reminder system for routine HIV and STI testing
 - PrEP eligibility screener
 - Non-occupational post-exposure prophylaxis (nPEP) risk factor assessment tool
 - Ordering platform for delivery of at-home HIV- and STI-screening kits, condoms, and lubricants
 - Service locators for HIV and STI testing, PrEP, nPEP, and HIV treatment and care

DURATION: One message every other day and a one-minute video weekly for 3 months

SETTING: Mobile app, Android, or iOS smartphone in 3 cities (Atlanta, GA; Detroit, MI; and New York City, NY)

STUDY YEARS: 2018 – 2019

STUDY DESIGN: Randomized open-label study

DELIVERERS: Mobile message, Videos

DELIVERY METHODS: In-app content, Risk reduction supplies, Videos

STUDY SAMPLE

The analytic study sample of N = 1,220 GBMSM is characterized by the following:

- 58% MSM of color
- 42% White persons
- 37% 18-29 years old, 63% 30 or more years old

STRUCTURAL COMPONENTS

There are no reported structural components reported for this study.

KEY INTERVENTION EFFECTS (see **Primary Study** for all outcomes)

- The study participants in the intervention arm had higher odds of using PrEP in the 3 months after the intervention period than those in the control arm (adjusted odds ratio [aOR]: 2.41, 95% CI: 1.00 - 5.76).*
- In subset analyses of HIV negative GBMSM who have high risk factors for HIV, participants in the intervention arm were more likely to report HIV testing than participants in the control arm immediately post-intervention (aOR = 2.02, 95% CI: 1.11 – 3.66).*

*Adjusted for intervention vs control change from baseline.

CONSIDERATIONS

- In subset analyses of GBMSM with HIV, STI testing was significantly lower in the immediate post-intervention period in participants in the intervention arm compared to participants in the control arm.

ADVERSE EVENTS

- The author did not report adverse events.

FUNDING

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PRIMARY STUDY

Sullivan, P. S., Stephenson, R., Hirshfield, S., Mehta, C. C., Zahn, R., Bauermeister, J. A., Horvath, K., Chiasson, M. A., Gelaude, D., Mullin, S., Downing, M. J., Olansky, E. J., Wiatrek, S., Rogers, E. Q., Rosenberg, E., Siegler, A. J., & Mansergh, G. (2022). [Behavioral efficacy of a sexual health mobile app for men who have sex with men: Randomized controlled trial of Mobile Messaging for Men](#). *Journal of Medical Internet Research*, 24(2), e34574. doi: 10.2196/34574

PLEASE CONTACT STUDY AUTHOR FOR TRAINING AND INTERVENTION MATERIALS.

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