

STUDY PROTOCOL

Title: Exploring Use of a Real-time, Remote Monitoring and Follow-up System for Home-based, HIV Self-testing Among High-risk Men Who Have Sex With Men (MSM)

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Analysis plan. Monthly survey responses were first aggregated across the entire study period for each of the study's key outcomes: HIV testing rates, STI testing rates, receipt of risk reduction counseling, receiving prevention supplies, PrEP referrals, and being prescribed PrEP. Linear or Poisson regression models with planned contrasts were then used to explore differences in these outcomes between the study groups across the entire 7-month study period. Next, we used survey completion dates to examine rates of each outcome across the 3-month study intervals (baseline, 3-months, and 6-months), which align with current CDC recommendations for HIV testing every 3-6 months among high-risk MSM. Repeat testing was defined as having tested at least twice in at least two of these intervals over the course of the study period. To explore the effect of condition outcomes over time, we used generalized estimating equations (GEE) with binomial distributions and logit-link functions for binary outcomes, and Poisson distributions and with log-link functions for count outcomes. All models were analyzed using an intent-to-treat (ITT) approach that involved retaining participants who withdrew from the study and assuming that they did not engage in any key outcome. Significance was defined as p -values ≤ 0.05 . All analyses were conducted in Stata 14.