EVALUATION ABSTRACT:
THE EVALUATION OF A COMPUTER-ASSISTED MOTIVATIONAL INTERVIEWING INTERVENTION FOR TEEN PREGNANCY PREVENTION IN NEW YORK CITY

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Intervention Name
Computer-Assisted Motivational Interviewing Intervention for Teen Pregnancy Prevention (CAMI-TPP)

Intervention Description
The intervention includes two key components: (1) motivational interviewing (MI) coaching sessions (in person and via telephone) with a trained health coach; and (2) a mobile application (app) that enables the participant to record health behaviors, identify values and future plans, and set and track goals for their health behaviors. Coaches will use MI style to collaboratively identify areas for behavior change and facilitate the development of a specific plan for each young man to consider and implement. When a participant expresses readiness to create a behavior change plan, the coach will work with him to create a plan that identifies specific steps he plans to take toward change, his reasons for making change, potential barriers to the plan, potential solutions to each barrier, and who will support him in his plan.

Personalized feedback generated by the app will guide the MI coaching sessions, which aim to increase young men’s condom use, support of their female partners’ contraceptive use, and their use of reproductive health services including sexually transmitted infection (STI) testing. Each participant will receive, if he chooses, clear advice to (1) avoid pregnancy until he desires it; (2) avoid getting STIs by using condoms correctly and consistently; (3) support his female sexual partners in using moderately and highly effective, reversible contraceptive methods (MERC/HERC); and (4) get STI testing. Coaches will offer and encourage referrals for reproductive health care (including STI testing). Participants in the intervention arm will receive four 30- to 45-minute sessions of one-on-one MI coaching: at enrollment or within the first week of enrollment, at 2 to 4 weeks, at 8 weeks, and at 12 weeks.

The first coaching session will occur face-to-face at the recruitment site or over the telephone, and all subsequent coaching sessions take place over the telephone. Coaches will be people hired from the community who have a minimum of a high school diploma and speak English and Spanish. Coaches will undergo rigorous MI training and supervision. All CAMI coaching sessions will be audio recorded. The CAMI supervisor and an independent fidelity reviewer will code CAMI session recordings using a CAMI adherence checklist developed for the study (to assess adherence to session content) and the Motivational Interviewing Treatment Integrity scale (to assess adherence to MI principles).

Comparison Condition
CAMI-Fitness

Comparison Condition Description
Participants in the CAMI-Fitness arm will also receive four 30- to 45-minute sessions of one-on-one MI coaching: at enrollment or within the first week of enrollment, at 2 to 4 weeks, at 8 weeks, and at 12 weeks. Computer-generated, personalized feedback will guide the sessions, which encourage participants to adopt a healthy diet, avoid tobacco and marijuana, moderate age-appropriate (none if younger than 21 years old) alcohol consumption, and initiate or maintain national recommendations for moderate or vigorous physical activity. Each participant will receive, if he chooses, clear advice to maintain a healthy weight and body mass index, eat healthfully, avoid tobacco and marijuana, consume only moderate or no (if younger than
21 years old) alcohol, and participate in nationally recommended levels of physical activity. The coach will offer to direct the participant to detailed information about these topics according to the young man's requirements and requests. Coaches will offer and encourage referrals for an athletic training visit. The content covered in CAMI-Fitness will not include topics related to teen pregnancy prevention.

**Behavioral Outcomes**

Changes in risky sex (sexual intercourse without a condom at last sex during the last three months); female sexual partner’s use of contraception at last intercourse (asked separately for each sexual partner in last three months); number of acts of sexual intercourse in the assessment period that were unprotected by partner use of MERC/HERC; number of acts of sexual intercourse in the assessment period that were unprotected by condoms; consistent condom use; having a visit for sexual or reproductive health care since the last assessment period; receiving a test for gonorrhea, chlamydia, or HIV since the last assessment period.

**Non-behavioral Outcomes**

Intention to use condoms and intention for partner to use contraception.

**Sample and Setting**

The study plans to recruit and enroll 945 men ages 15 to 24 years old who are sexually active with female partners, from three clinic sites in New York City. Sites include two of New York City’s school-based health centers at George Washington Educational Campus in Washington Heights and John F. Kennedy campus in the Bronx, and the Young Men’s Clinic (YMC) in Washington Heights. The clinics’ populations are predominantly Hispanic and Black young men, and the majority are on Medicaid managed care insurance. Coaches will recruit young men in the waiting areas at the school-based health centers and YMC through flyers at the school campuses and YMC, and by referral of YMC, school-based health center, and school staff.

To be eligible, participants must (1) be male and 15 to 24 years old at time of enrollment, (2) have had sexual intercourse in the past 90 days with a female partner, (3) be able to sign informed consent or assent (parental consent will be waived for those younger than 18), (4) be able to participate for 15 months, and (5) own an app compatible smartphone (iPhone or Android).

**Research Design and Data Collection**

The study will use a two-arm randomized controlled trial design. Participants in both arms will engage in the same recruitment, enrollment, consent, and data collection procedures. Coaches will recruit eligible candidates from the three sites. The project coordinator will complete a brief questionnaire with interested candidates to assess and finalize eligibility. Using a block permutation randomization algorithm, the project coordinator will use a computer application to randomly assign participants to one of two study arms: CAMI-TPP or CAMI-Fitness. The app documents the consent and collects all the data.

Data collection assessments using the app will be conducted at baseline (enrollment); immediately post-intervention; and at 12, 24, and 48 weeks post-intervention. Assessments will include questions about sociodemographic characteristics, relationship status and pregnancy intentions, reproductive and sexual health history, health care utilization, contraceptive knowledge and attitudes, sexual behavior, and physical fitness (including dietary behaviors, tobacco, marijuana, and alcohol use, and physical activity). To promote engagement and minimize loss of data because of attrition, participants will also complete biweekly check-ins using the app. Check-ins will ask about sexual behavior and fitness (dietary behaviors, tobacco, marijuana, and alcohol use, and physical activity) over the previous seven days. To inform a process evaluation, implementation data to be collected include app usage (logins), click-throughs to educational resources, and the number of times a health plan is created or edited.

**Schedule/Timeline**

Enrollment and baseline data collection will start in September 2017 and will end in December 2018-January 2019. Follow-up data collection will begin in September 2018 and will end by April 2020.