EVALUATION ABSTRACT:  
THE EVALUATION OF PULSE: A WEB-BASED MOBILE APP TEEN PREGNANCY PREVENTION INTERVENTION

Grantee

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Intervention Name

Pulse

Intervention Description

Pulse is a web-based mobile health application (app) developed by Healthy Teen Network and MetaMedia Training International accessible through mobile devices. The goals of Pulse are to increase birth control use and clinic use, and ultimately decrease teen pregnancy. Pulse provides comprehensive, medically accurate sexual and reproductive health information to young women, in English and Spanish, through engaging interactive and multimedia features. These features include dynamic text and graphics, self-assessments, comics that pose various scenarios, videos of racially diverse peers that model real-life scenarios, including short films promoting birth control use and clinic use. Pulse has six sections covering approximately three hours of material: (1) Know your options (birth control methods and birth control reminders); (2) Get personal (healthy relationships, sex readiness, and consent); (3) Know your body (anatomy and physiology, sexually transmitted infections); (4) Take action (find a provider, what to expect at a clinic, appointment reminder); (5) Make a plan (pregnancy and pregnancy testing); and (6) Get savvy (frequently asked questions, links to external resources).

Users can interact with Pulse as frequently or infrequently as they choose. Pulse is self-led and does not require the user to follow a specific sequence of content. Moreover, they can access the app anywhere as long as they have their mobile device and internet connection. Youth randomly assigned to the intervention condition will receive access to Pulse indefinitely and will receive regular multimedia messaging services (MMS) approximately every three days related to sexual health for six weeks. These MMS strengthen core information included in Pulse, link users to specific Pulse activities, alert them of upcoming surveys and research updates, and provide a channel of communication if they experience any technical difficulty.

Comparison Condition

Health and fitness application (also named Pulse).

Comparison Condition Description

The comparison group will be directed to Pulse “Comparison” app which has been custom-built identical to Pulse intervention, and bears the same name and branding. The intervention Pulse and comparison Pulse look and feel similar aesthetically but contain different content. The comparison Pulse has six content areas as well: (1) Feed your body (healthy eating); (2) Move your body (exercise tips); (3) Shut your eyes (importance of sleep); (4) Connect with body and mind (emotional health); (5) Strengthen your relationships (connecting with others); and (6) Get savvy (frequently asked
questions). Like the intervention group, the comparison group will receive MMS approximately every three
days containing Pulse “Comparison” app content, links to its activities, and alerts. Unlike the intervention
group, the informational MMS will be about general health and nutrition rather than sexual health.

**Behavioral Outcomes**

Unprotected sex (sex without using any method of contraception; sex without using hormonal or
long-acting methods of contraception); hormonal or long-acting reversible contraception use among those
who were sexually active at baseline; current contraceptive use; contraceptive use frequency in last six
weeks among those who were sexually active at baseline, and visited a clinic for sexual and reproductive
health services.

**Non-behavioral Outcomes**

Mediators—knowledge, attitudes, norms, perceived behavioral control, intentions and motivations;
clinic access—use of Pulse’s clinic finder tool in locating and contacting a clinic, and received family
planning services in any setting since last survey.

**Sample and Setting**

This evaluation takes place on each participant’s own time and current setting. To be eligible for this
study, sample members must: (1) be women ages 18 to 20, (2) not be pregnant at baseline or trying to
become pregnant at baseline, (3) have daily access to a smartphone, and (4) speak either English or
Spanish. Most of the sample is expected to be non-Latina Black and Latina women, though women of
other ethnic and racial backgrounds will be included in the study. The evaluation plans to enroll 1,300
participants on-going over one-year enrollment period.

**Research Design and Data Collection**

The research design is an individual-level randomized controlled trial. In total, the evaluation team will
randomly assign 1,300 women to Pulse intervention group or to Pulse comparison group over a one-year
period. To obtain this sample, the evaluation team will use multiple methods of online recruitment, including
targeted banner advertising on various social media sites. Participants will be directed to a study website
that will include information about the study. Based on that information, participants can complete an
eligibility assessment. Eligible people who provide informed consent will be directed to an online baseline
survey. Immediately after completing the baseline survey, each participant will automatically be randomly
assigned to Pulse intervention or comparison groups, and forwarded to each app’s registration page.

Participants in both the intervention and comparison groups will receive a baseline survey, an
immediate post-intervention survey (six weeks post randomization), all surveys will take place online. The
evaluation team will contact youth who have not completed the follow-up surveys via phone, email, and
text message to encourage them to complete the survey. For the implementation evaluation, the
evaluation team will collect data on adherence, quality, contextual factors, and responsiveness obtained
from reports on both apps’ usage that the evaluation team generates, and from follow-up survey
questions that ask participants about their experience and perception of Pulse intervention app.

**Schedule/Timeline**

Sample enrollment and baseline data collection began November 2016 and will end December 2017. The
immediate post-intervention data collection began January 2017 and will end March 2018.