IN Touch: Impact of and Lessons Learned from an mHealth Intervention for Overweight and Obese Youth

Minority and low-income communities are disproportionately affected by obesity, a risk factor for diabetes, heart disease, and cancer. The iN Touch pilot study was conducted to determine whether use of a mobile Observations of Daily Living (ODL) tracking application with health coaching impacted a variety of health outcomes.

The study was a mixed methods pilot using a pre-post-comparison of a single group. Minority youths age 13-24 who were overweight or obese (BMI > 85th percentile for age and gender in adolescents and BMI > 25.0 in adults) from three clinics in San Francisco were enrolled. Twenty-four of 34 participants completed the study (70.59%). Participants were provided an iPod Touch with a customized ODL application from TheCarrot.com that included exercise, food, mood and socializing. Weekly summaries were available to providers. Participants met in person with a lay health coach. Measures included BMI, waist and hip measurements, depression (PHQ-2) and modified patient activation measure (PAM) which assesses the patient’s knowledge, skills and confidence to manage health and healthcare. Barriers and facilitators to use of technology were evaluated using semi-structured interviews.

Paired t-tests revealed a significant improvement in PAM scores (M = 3.21, SD = 7.472); t(23) = 2.10, p = 0.047 and waist circumference (M = -1.21 inches, SD = 2.52); t(22) = -2.21, p = 0.038. There were no other significant changes. Participants’ use of the technology varied significantly, ranging from almost none to multiple times per day. Interviews suggested the technology was easy to use, data entry burden was minimal, and ability to record ODLs was beneficial.

We demonstrated significant preliminary success with iN Touch suggesting it is a promising tool for self-management for overweight/obese youths when used in a health coaching program. This application may also provide valuable patient-centered data that is not currently in electronic health records.