Utilizing mHealth Recruitment & Retention Strategies in an RCT with Young Children with Type 1 Diabetes

ABSTRACT

Due to an increase in cell phone and email use in recent years, mHealth strategies are commonly used in research data collection and intervention delivery and provide increased flexibility for scheduling and completing assessments and treatment sessions. Dissemination of effective mHealth strategies is vital to their successful use in future studies. The goal of the current study was to examine the use of mHealth strategies in an ongoing RCT to promote parental management of type 1 diabetes (T1D) in young children and specifically explore recruitment/data collection completion/retention rates.

Primary caregivers of children with T1D who were fluent in English and had telephone access completed an eligibility phone screener, a pretreatment phone assessment, an in-person orientation session, 5 telephone-based program sessions, and 3 post-treatment phone assessments. mHealth recruitment/retention strategies included flexible scheduling of assessments/interventions, email communication, and frequent contact according to participants’ phone/email preference.

Of 285 recruits, 16 did not meet inclusion criteria. No recruits were ineligible due to lack of telephone access. The majority of eligible recruits (82.3%) agreed to participate and completed all phone sessions (85% of intervention and 98% of control participants). Most treatment/control phone sessions were completed as scheduled (73%); only 7% needed to be rescheduled more than once. Interruptions occurred for 24% of sessions, with the most frequent interruption being child-related. Of the 127 participants in the study’s follow up portion, over 90% have been completed.

For the current RCT, mHealth strategies encouraged high recruitment/retention in program sessions and follow up and resulted in few rescheduled/interrupted sessions. This may suggest that phone contact for assessment as well as intervention is a strong medium for consistent participant contact. Continuation of flexible contact and the extension of text message reminders, Skype intervention sessions, and online questionnaires may be desirable options for encouraging higher retention rates in future projects.