

# USE OF BOOSTER CALLS IN A BEHAVIORAL INTERVENTION FOR ADOLESCENTS WITH TYPE 1 DIABETES

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## ABSTRACT

Behavioral interventions are commonly utilized to prevent declines in adherence and glycemic control among adolescents with type 1 diabetes (T1D). Mobile health strategies may maintain participant engagement and improve retention rates and outcomes in such interventions. The present study explored the use of booster calls (BCs; quick telephone check-ins), in maintaining participant engagement throughout an ongoing RCT for adolescents with T1D.

Data are available from 143 adolescent-parent dyads (Mchild age= 12.96 years) who were randomized to the treatment condition. Most adolescents were female (54%) and Caucasian (68%), and ninety-two percent of parents were mothers. Most were prescribed a basal bolus or pump regimen (75%), and average glycosolated hemoglobin (HbA1c) at baseline was 8.69%. Dyads participated in four treatment sessions designed to improve coping skills and promote medical regimen adherence. BCs were conducted one month after each session, and participants completed follow-up assessment 3 months after their final session.

Ninety-six percent of participants completed at least one BC; 29% completed all four. On average, 2.88 contact attempts were made per BC and completed calls lasted eight minutes. Adolescents on a basal bolus/pump regimen were more likely to complete BCs ( $p < .05$ ); however, child age, gender, and A1c were unrelated to BC completion. Families who completed at least one BC were more likely to participate in follow-up assessment ( $p < .05$ ). Overall, families reported that BCs were "somewhat helpful" (34%), or "pretty helpful"/ "very helpful" (46%).

Many families participated in BCs and found them helpful, and completion of BCs was related to participant retention at 3 month follow-up, suggesting that this mHealth strategy may be a promising tool for improving participant retention and treatment outcomes in behavioral interventions. Further exploration of the use of mhealth strategies among adolescents with T1D participating in behavioral RCTs and their families is warranted.