**A.SPECIFIC AIMS**

Nearly 1 in 3 children in the U.S. are already overweight or obese.3These children require intervention to preclude their tracking high weight status into adulthood and to decrease related physical and psychosocial consequences.4-6 Accumulated evidence finds initial and long-term efficacy of moderate-to-high intensity family-based treatment(FBT)for better weight management among overweight/obese elementary school-aged children (6-12 years old).7-10Such intense interventions are now recommended by the American Medical Association and other health organizations.11,12In 2010,the U.S. Preventive Services Task Force recommended screening and referral of obese children to “moderate-to high-intensity programs [that] involve > 25 hours of contact ”focusing on diet, physical activity, and behavioral counseling typically targeting parent and child dyads.7However, such treatment is expensive, due to high personnel costs, and is generally unavailable outside of research settings. Thus current FBT is limited in availability, reach, and impact. Both insurers and employers providing health insurance cite that cost and limited or unknown return on investment is the primary driver of having minimal or no coverage for pediatric weight management intervention.13Indeed, fewer than 1 in 5 states reimburse any obesity-related care for children in Medicaid.14Overall, very few overweight/obese children receive the evidence-based treatment to improve their weight status or health.

Clearly a new model is needed for FBT delivery that dramatically decreases costs and increases intervention availability, while sustaining initial (post-treatment) and long-term (aftertreatment) efficacy. One potential model is to use non-professional interventionists to deliver FBT. Peer-delivered intervention is one such approach that is commonly used in health behavior interventions(e.g., HIV prevention).15However, involving peers is rare and untested for addressing pediatric weight management. Peer involvement has only been implemented as adjunctive to professionally-delivered intervention. Our recent pilot studies suggest that peers, specifically parents, can serve as interventionists to deliver FBT to other families after they and their children have received FBT from professional interventionists and been provided training as peers. Preliminary evidence suggests that peer-treated families have similar initial child and parent weight outcomes compared to professionally-treated families. In addition, serving as a peer interventionist may also benefit the peers themselves (and their children) in better sustaining their own weight outcomes.16

We are now ready to conduct a more definitive examination of the feasibility and efficacy of peer-delivered FBT in the short-and long-term. In addition, to ultimately pursue and disseminate a peer-delivered FBT approach, it is critical to test whether subsequent generations of peers, that is peers who themselves received FBT from peers and not from professionals, can successfully deliver efficacious FBT. In addition, a more complete understanding is needed about the level of willingness of parents to serve as peer interventionists and the impact of this service has on their own and their child’s long-term weight management. Examination of peer-delivered FBT needs to be accompanied by a comprehensive evaluation of cost-effectiveness.

**The primary aims of this project are to:**

1.Examine the short-and long-term efficacy of peer- versus professionally-delivered FBT on child weight outcomes

*a.* Hypothesis*: Children provided peer-delivered FBT will have similar (non-inferior) initial and sustained (up to 1 year after treatment ends) weight outcomes to those provided professionally-delivered FBT.*

2.Examine the efficacy of 1st generation versus 2nd generation peers delivering FBT on the weight outcomes of children receiving FBT

a. Hypothesis: *2nd generation peers (those who received intervention from peers) will provide treatment that is similarly efficacious (non-inferior) to 1stgeneration peers (those who received intervention from professionals) on child outcomes.*

3.Investigate the long-term impact of being a peer interventionist on the peer’s own and their children’s weight outcomes

*a.* Hypothesis: *Delivering FBT as a peer will result in better long-term weight outcomes for the peer and the peers’ child compared to those who receive FBT but do not deliver it.*

4.Determine the costs, including peer and professional time, and cost-effectiveness of the peer- versus professionally-delivered FBT from a payer and societal perspective

a. Hypothesis: *Peer-delivered FBT will be substantially less costly than professionally-delivered FBT*.