**Title:** Addressing obesity and mental health outcomes in toddlers at risk: a pragmatic randomized controlled trial comparing usual care to group-based parenting and home visits in primary care

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## Lay Summary (from full application):

Childhood obesity is one of the most pressing issues of our time, and parents and doctors in Ontario have identified obesity prevention as one of the top 5 most important research priorities for children. Two studies have shown that intensive nurse home visits can improve young children's weight status, and one study using group parenting skills training improved obesity related eating behaviours. Many studies have shown that parenting skills training can prevent mental health problems in young children. A strategy that aims to prevent childhood obesity through primary care may have broad impact, since nearly all children in Ontario visit their doctor numerous times in the first 3 years of life. We will determine whether a highly promising primary care based intervention that combines group based parenting skills training and nurse home visits with a focus on healthy nutrition, activity and sleep, will lead to improved weight status in 18 months-3 year old children. Healthy children at risk for obesity will be identified through primary care practices participating in TARGet Kids! - which is the largest practice based research network for children in Canada. One hundred and eight children will be randomly assigned to either the intervention (group based parenting training & home visits) or receive usual care. Differences in weight, mental health, nutrition, physical activity, sleep, risk for heart disease and diabetes, and health care use will be assessed after 6 months. This study combines the best available evidence for childhood obesity prevention with existing primary healthcare and public health resources in Ontario and may lead to an effective scalable strategy for childhood obesity prevention.