Reviewer's report

Title: Taking Action Together: A YMCA-Based Protocol to Prevent Type-2 Diabetes in High-BMI Inner-City African American Children

Version: 4 Date: 29 March 2010

Reviewer: Gordon Doig

Reviewer's report:

Thank you for your initial revision however it is not sufficiently detailed. This is a non-randomised trial. You MUST control for ANY potential outcome confounders. I recommend a thorough review of the literature to identify all variables that are known to influence your outcome. All should be considered as potential confounders and evaluated for influence on outcome in your final model. Please explicitly list all variables. Furthermore, you must also control for any YMCA site specific variables that may have been associated with group allocation, outcome or motivation to participate.

Because you 'randomly' chose YMCA sites (Page 8) to be control or intervention sites, you must report more details about this 'randomisation' process. Ex. Exactly how many sites were randomised and how was randomisation performed? It is likely that outcomes will be correlated within YMCA study site. Since your randomised and stratified sampling by site, please select an analysis that is appropriate to cluster RCTs. Please reference an appropriate statistical technique that will compensate for the loss of power arising from this correlation.

In addition, you should report the provide p-value cut-offs, or other decision criteria, that will be used to determine whether a variable remains in the model.

Finally, please add a paragraph to your discussion that addresses the shortcomings associated with your non-randomised approach to the selection of individual participants. Most specifically, please address the potential influence of allocation bias and recruitment biases, whereby knowledge of the intervention may have influenced participation rates.