Author’s response to reviews

Title: BRInging the Diabetes prevention program to GEriatric populations (BRIDGE): A pilot study of feasibility

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Reviewer comments:

Josie Evans

Reviewer #1: “Interesting well-written study. However, I think the very low response rate to the initial recruitment e mail needs discussing further in the paper - along with the implications.”

Response: We thank reviewer 1 for this comment. We also agree that the low response rate from the email warrants additional discussion, and have added this to the results:

“Less than 2% (n=39) of the over 2,000 senior center members responded to the recruitment email.”

In the discussion, we now comment:

”Given that the response rate from the initial outreach email was low, it suggests alternative recruitment strategies would be necessary to achieve enrolment targets for a larger trial. At the recommendation of a senior center director, we’re using recruitment strategies by telephone for our next study.”

We have also added as a limitation:

“Similar to other behavioural interventions that engage older adults, recruitment rates were low." (33,34)


Bonny Rockette-Wagner

Reviewer #2: “I think that the underlying idea of this project is a good one. Unfortunately, the reporting of the research is where the problems begin with this manuscript. I suggest that you re-explore the value of your work (in terms of examining feasibility) and greatly revise. I agree with a previous reviewer’s comments that the indecision about whether to present this as a pre-post pilot or a feasibility study is problematic. It does not appear to be resolved in this newer version. I am not enthusiastic about the pre-post results at all for several reasons: (1) You have no power to do this correctly (2) No RCT (3) I don't know that your outcome measurement methods are valid (you don't present validation studies) (4) This is an incomplete program- the DPP was based in social cognitive theory and requires all core materials to be presented (16 DPP sessions or 12 Group Lifestyle Balance sessions) to follow that model. Your 6 sessions cannot be complete enough to follow the model, so I can't tell what this program is that you are assessing as a pre-post study. You would at least need to present which sessions you used and which components of social-cognitive theory are present and which are not to give me any idea of how to interpret your results.”

“In the end- I do not think that the pre-post results can be interpreted with any amount of certainty and suggest that they be dropped from the paper. Not to say that you could not use results for power calculations later, but they are not publication worthy. You could also mention that weight-loss was seen, but I would not make much of the actual numbers.”

Response: We have further revised our manuscript to examine feasibility. We consider the measurements reported (e.g. attendance, weight, diet, physical activity) as critical aspects for demonstrating feasibility to deliver the program rather than pre-post comparisons to demonstrate efficacy and have modified the text to underscore this point. Throughout the manuscript, we now denote these as “secondary measures” rather than “effectiveness measures” to underscore this point. We also modified the background to:

“Feasibility was defined as the proportion of responses from emailed invitations, proportion of those screened who were eligible for group meeting attendance, proportion of follow-up visits completed, and measurements obtained on body weight, diet, and physical activity.”

And in the last paragraph of the background section, we now state:

“As part of our examination of feasibility, as secondary outcomes we also compare changes in weight, diet, and physical activity after implementing the telehealth program.”
We now include the facilitator guides for the six sessions as supplementary materials and cite this in the “Design” paragraph: “(See Supplemental Material for session materials).” We also provide a brief summary of the intervention strategies in the “Design” section: “The session topics included an introduction to the program, tips about eating fewer calories and fat, components of healthy eating, the benefits of and methods for tracking physical activity, and how to manage personal and social eating triggers.”

“I think that the real paper is in the feasibility results. However, by including all of the pre-post data you are missing a lot of the details you need in this section regarding your methods. I don't see any description of the methods used for the qualitative analyses of the focus group data or any mention of software for this.”

Response: We didn’t use specific software for the qualitative analyses. Our methods are described as: Qualitative Measures. The principal investigator (JB) led focus groups discussing the program’s acceptability and relevance for all participants in attendance after sessions three (n=13) and five (n=10). Table 1 outlines the focus group questions used to structure each focus group. Two research assistants recorded responses to the facilitator’s questions. The facilitator and two research assistants independently answered any post-focus group summary questions and later met to discuss the focus group feedback. Qualitative results were summarized by condensing reports from the two research assistants.

“Again, the intervention materials used are not well described. You mention the group lifestyle balance materials, but then mention that there was a suggestion of modifying exercises for older adults. The Group Lifestyle Balance Program encourages walking as the main exercise (as does the DPP) - so this was confusing to me.”

We apologize for any confusion created by a lack of description. As now reported in the Supplemental Materials, Session 4, page 6 of the participant guide suggests the following activities:

- Aerobic dance (step aerobics)
- Bicycle riding (outdoors, or indoor stationery bike)
- Dancing (square dancing, line dancing)
- Hiking
- Rowing (canoeing, rowing machine)
- Skating (ice skating, roller skating, rollerblading)
- Skiing (cross-country, NordicTrack)
- Elliptical, StairMaster®
- Swimming (laps, snorkelling)
- Tennis
• Volleyball
• Walking (treadmill, outdoor, indoor mall or fitness center)
• Water Aerobics

“You also very briefly mention feasibility issues with bringing in centers who had everything needed to run the program. This would have been an interesting aspect of feasibility to collect and report data on.”

Response: Thank you for the suggestion. We now describe in the discussion: “Of the five senior centers we’ve partnered with in New York City, all but one had the resources available to conduct a telehealth adaptation of the DPP in their center.”

“Another interesting topic that you gloss over is the use of the ADA screener for identifying potential participants. This screener will likely include more people than the more rigorous standards used for DPP or Group Lifestyle Balance Program testing. The screener was designed for physicians to identify people who may need testing for t2d and not as a tool for referral to intervention. Although I personally agree that it has potential to be used in that way. There is little published on this use of the screener (in terms of feasibility). This could be another interesting topic of feasibility for you to explore. Also note: you have several normal weight individuals who were recruited into this primarily weight-loss focused study. This should be commented on- particularly due to the age of the population (encouraging weight-loss in normal weight elders).”

Response: We added to the discussion: “the diabetes risk screener was designed for physicians to identify people who may need testing for diabetes and not as a tool for referral to intervention. As a result, three participants in the normal weight category were considered eligible due to a strong family history.”

“All-in-all it seems that you may have some interesting data, but have chosen to focus more on your pre-post data, which is of low quality due to the nature of the study (and no fault of yours). I would strongly suggest going back and re-assessing the true value of your work and organizing a better presentation of that data, which I believe is likely to focus around aspects of feasibility.”

Response: Thank you for your thoughtful feedback. We have incorporated your suggestions and believe that our manuscript is now stronger and of greater value to the readership.