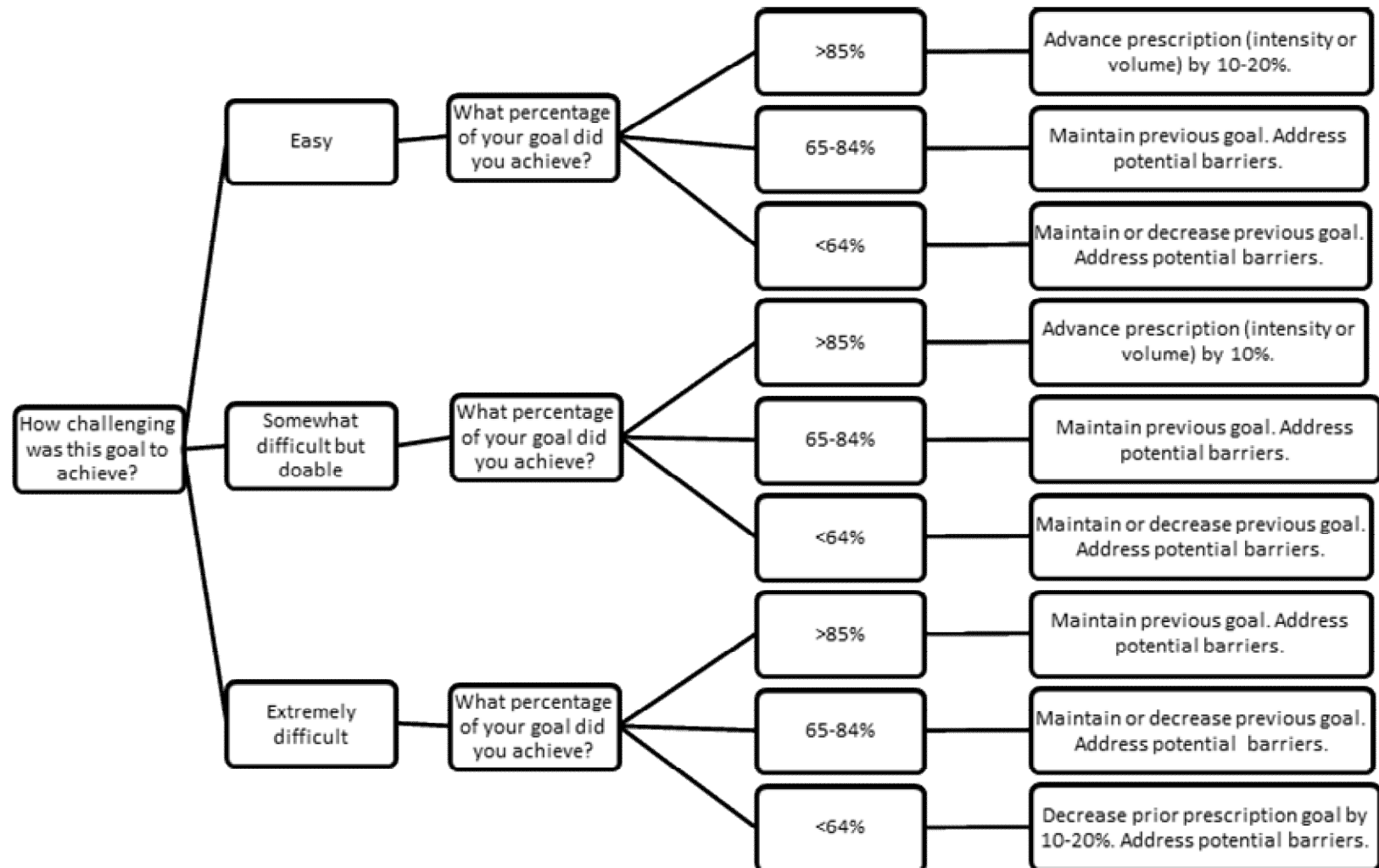


Supplementary Tables & Figures

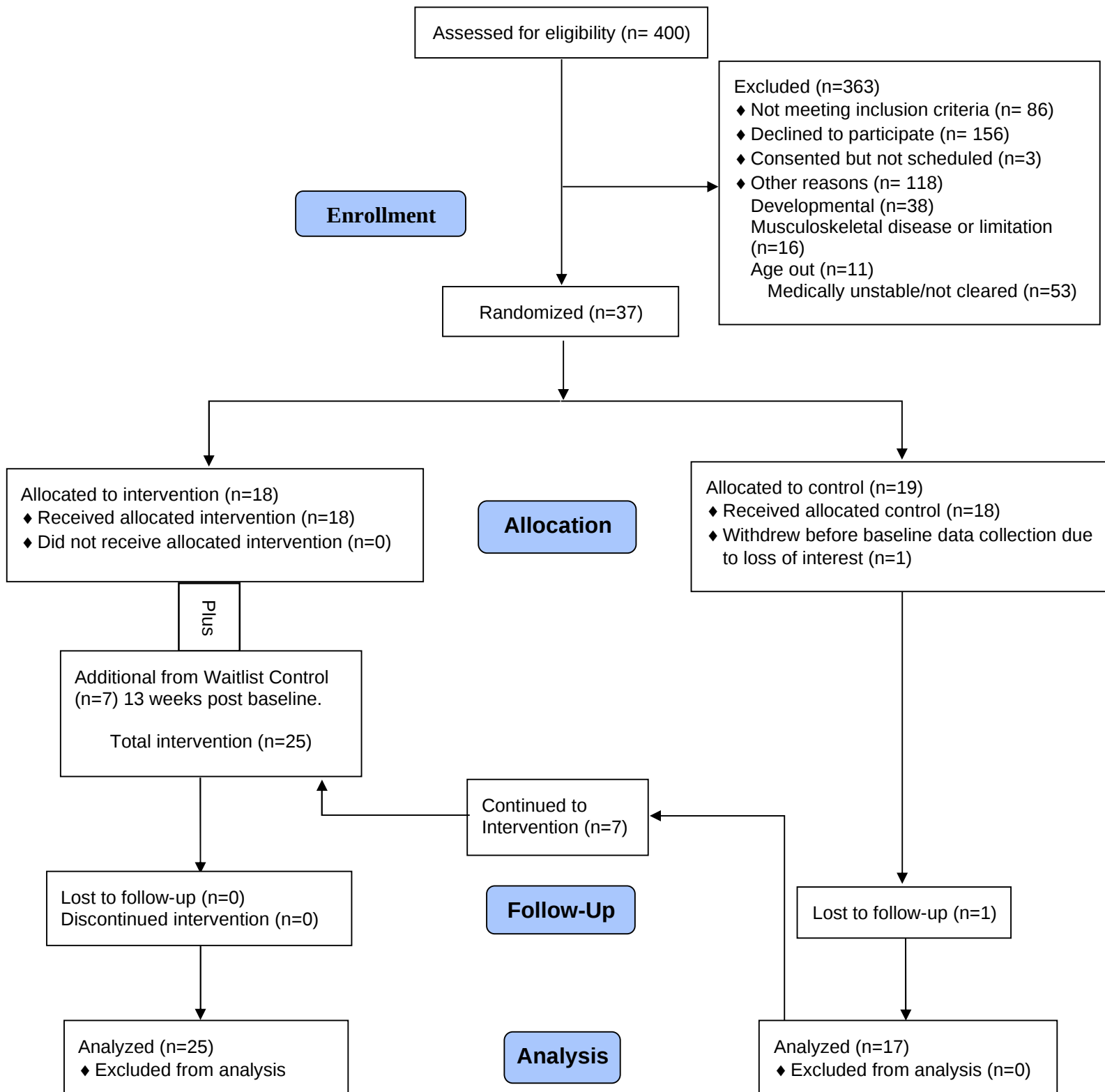
Supplementary Figure 1 Descriptive Example of Children's OMNI Scale of Perceived Exertion. This descriptive example of perceived exertion was utilized to evaluate and determine appropriateness of prescribed physical activity intervention. This scale was further utilized to advance, maintain or de-escalate exercise prescription based on participant response at biweekly telehealth visits.

10	Very, very tired
9	
8	Really tired
7	
6	Tired
5	
4	Getting more tired
3	
2	A little tired
1	
0	Not tired at all

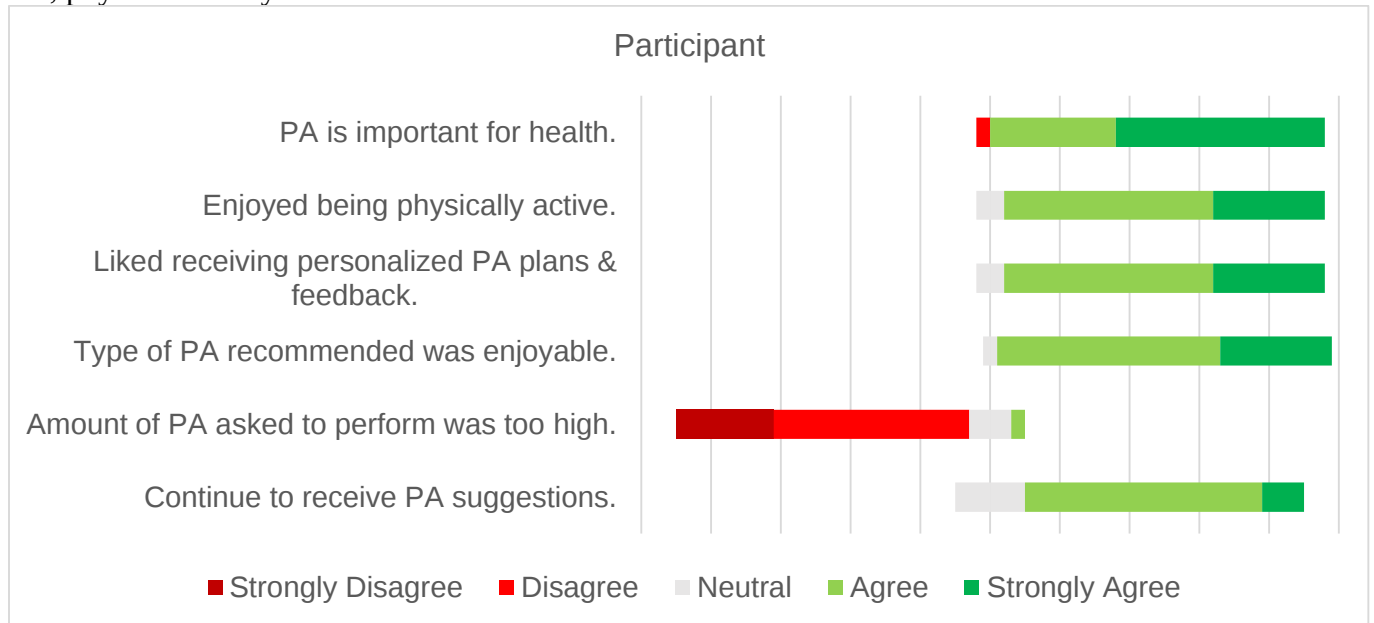
Supplementary Figure 2 Standardized Progression of Physical Activity Prescription Decision Tree. This decision tree was developed in order to standardize the progression of physical activity for participants determined by two questions to limit potential bias. These questions were asked at each telehealth visit.



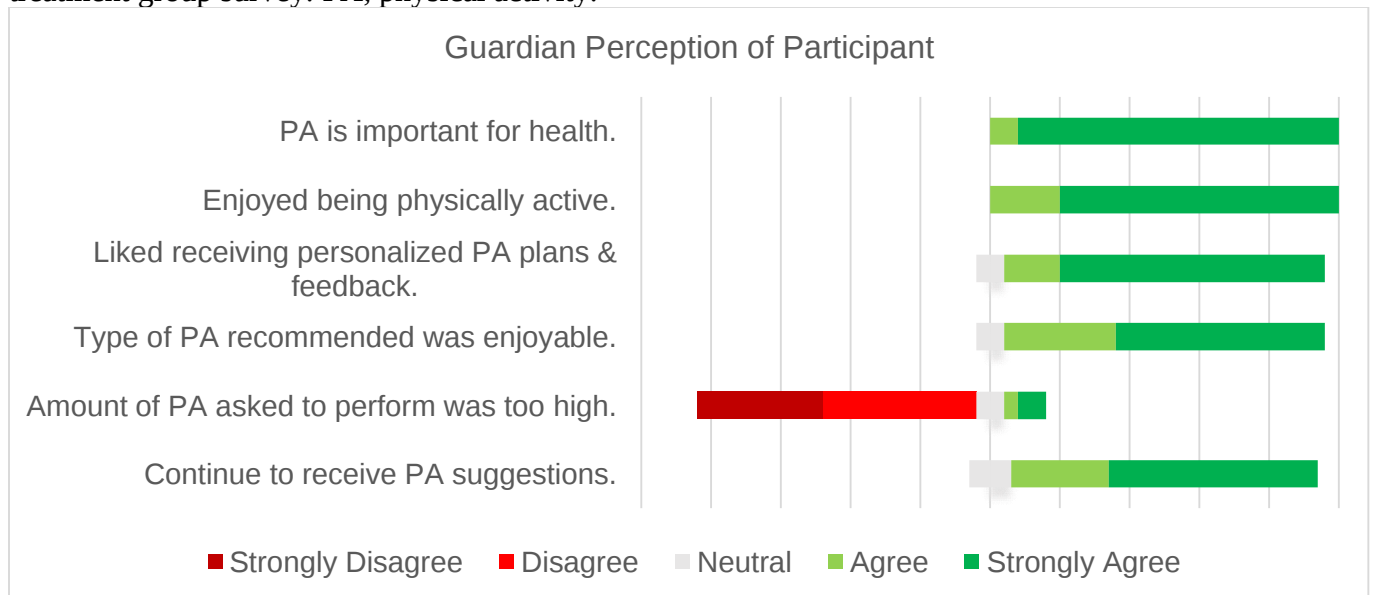
Supplementary Figure 3 CONSORT Diagram. The flowchart above is a representation of our Consolidated Standards of Reporting Trials diagram illustrating the number of subjects screened, those who were excluded, including those who declined to participate. Our flowchart identifies participants enrolled and allocated. One participant withdrew immediately after randomization, and one lost to follow up. Seven participants continued to the intervention protocol after control period completion. No participants were lost to follow up from the intervention group.



Supplementary Figure 4 Participant Likert Statement Responses. Tornado plot summarizing participant responses to agreeableness of statements provided in the post treatment group survey. PA, physical activity.



Supplementary Figure 5 Guardian Likert Statement Responses. Tornado plot summarizes guardian perception of agreeableness for the participant to statements provided in the post treatment group survey. PA, physical activity.



Supplementary Table 1 Combined Qualitative Categories with Response Counts This table summarizes the number of spontaneous citations of each category, for each dyad.

Category	Total Responses	Participant Likes	Participant Dislikes	Guardian Likes	Guardian Dislikes
Individualized Structured Plan	30	15	0	15	0
Nothing (No Dislikes Reported) [◇]	29	0	9	0	20
Watch Features	9	5	0	4	0
Response to Exercise Program	8	8	0	0	0
Whole Program (Liked Everything)	6	2	0	4	0
Motivation for Activity	6	0	0	6	0
Being More Active	4	4	0	0	0
Staying Active	4	0	0	4	0
Accountability	4	0	0	4	0
Parental Role in Accountability	4	0	0	0	4
Wearing of Watch	4	0	4	0	0
Perceived Mood/Health Improvement	4	0	0	4	0
Initial Negative Feelings	3	0	3	0	0
Plan/Program Schedule	3	0	3	0	0
Encouragement from Others	3	0	0	3	0
Virtual Component	3	0	0	3	0
Plan Readability	2	0	2	0	0
Type of Exercise	2	0	1	1	0
Social Interaction	1	1	0	0	0
Lack of Child's Enjoyment	1	0	0	0	1
Device Sync Issues	1	0	0	0	1

[◇]Note: This category represents, when asked the open-ended question "What did you not like about the program?", explicitly responded with "Nothing". These responses were categorized under "Dislikes" to accurately reflect the feedback provided for that specific interview prompt.