A Psychological-Behavioral Intervention to Improve Physical Activity in Midlife Adults With Low Baseline Physical Activity

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ABSTRACT

Background: Many midlife adults (aged 45–64 years) struggle to become physically active in the context of diminished psychological well-being and multiple concurrent stressors, despite the clear association of low physical activity with the development of chronic medical conditions.

Objectives: To assess the feasibility (rates of session completion) and acceptability (participant 0–10 ratings of weekly session ease and utility) of a novel 12-week, phone-delivered, midlife-adapted positive psychology–motivational interviewing (PP-MI) intervention to promote physical activity. Secondary aims were pre-post changes in accelerometer-measured physical activity and self-reported psychological and functional measures.

Methods: A single-arm proof-of-concept trial of the PP-MI intervention was conducted among 11 inactive midlife adults enrolled from the primary care practices of an urban academic medical center. Descriptive statistics were used to assess feasibility and acceptability outcomes, and mixed effects models were used to examine pre-post changes in psychological, functional, and physical activity outcomes from baseline to 12 weeks.

Results: The intervention exceeded a priori thresholds for feasibility and acceptability, with 80.3% session completion across all participants and mean session ratings of 8.3/10 (SD = 2.1). Participants also had medium effect size magnitude improvements in physical activity and psychological outcomes.

Conclusions: This remotely delivered, midlife-specific PP-MI intervention was feasible and well-accepted among inactive midlife adults, supporting next-step testing of this program in a randomized trial.

Trial Registration: ClinicalTrials.gov identifier: NCT04745182

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Midlife is a critical time in the prevention of heart disease and other chronic medical conditions. Midlife adults (aged 45–64 years) make up more than one-quarter of the US population and represent its fastest growing age group.[1] The median age at onset of multiple cardiac risk conditions (eg, hypertension,[2] type 2 diabetes[3]) is during midlife, with the subsequent onset of heart disease immediately after this stage.[4]

Health behaviors, especially physical activity, play a major role in midlife cardiac health, yet many midlife persons struggle to initiate or maintain adequate physical activity. Physical activity in midlife is independently associated with prevention of heart disease, lower rates of cardiac events, and superior survival,[5] but fewer than 20% of midlife adults meet recommended levels of activity.[6]

The daily challenges faced by midlife adults can interfere with efforts to maintain health.[7] Many midlife adults experience substantial time pressure and competing demands related to increased job responsibilities, caregiving of family members, and financial burden.[7] These factors conspire to increase stress and lead to limited time for self-care.[7,8] Relatedly, psychological well-being, which is prospectively associated with greater physical activity and lower rates of heart disease,[9] is lowest during midlife.[10]

Accordingly, we have developed a multipronged, midlife-targeted program that promotes psychological well-being, facilitates goal setting, and addresses midlife barriers to activity. The program was adapted from an existing physical activity program that combines positive psychology (PP) activities and motivational interviewing (MI) principles[11] using qualitative data from midlife adults at cardiac risk[8] and existing stress reduction programs.[12] In this article, we describe an initial test of the feasibility, acceptability, and impact of the 12-week intervention (The Midlife Activity, Stress Reduction, Time Efficiency, Resilience, and Youthfulness [MASTERY] program) among midlife adults with low baseline physical activity. We hypothesized that the program would surpass a priori metrics for feasibility (sessions completed) and acceptability (participant session ratings) and show pre-post improvements in well-being and objectively measured physical activity.

METHODS

Overview

This was a single-arm proof-of-concept trial of a phone-delivered PP-MI intervention, with content adapted to midlife adults (ClinicalTrials.gov identifier: NCT04745182). Participants were primary care patients enrolled from an urban academic

medical center between October 2019 and January 2020. The study was approved by the medical center's institutional review board prior to completion of any study procedures, and all participants provided written informed consent. The primary goal of the study was to assess intervention feasibility and acceptability, with a secondary goal of exploring the impact of the intervention on physical activity and other outcomes as assessed by effect size differences.

Sample

Study criteria. We included midlife adults (aged 45–64 years at the time of enrollment), with low self-reported baseline physical activity. We defined low physical activity, based on consensus recommendations,[13] as < 150 minutes/week of moderate to vigorous physical activity (MVPA), measured using a brief version of the well-validated International Physical Activity Questionnaire[14] regarding their activity in the past week (or a typical week if the past 7 days were atypical).

Exclusion criteria included (1) inability to speak English; (2) cognitive impairment precluding participation or informed consent, assessed via a 6-item cognitive screen;[15] (3) lack of phone access; (4) a condition precluding completion of MVPA (eg, arthritis, chronic obstructive pulmonary disease); (5) current participation in similar programs (eg, mind-body interventions); and (6) existing coronary artery disease (CAD). Individuals with CAD were excluded given that an ultimate goal of this program was to prevent heart disease and because CAD patients may in some cases have greater restrictions on activity. Existing CAD was defined as a prior acute coronary syndrome (unstable angina or myocardial infarction) or CAD identified via cardiac catheterization (ie, 50% stenosis of the left main artery or 70% stenosis of another coronary artery), derived via patient report and medical record review. We did not exclude patients who had high baseline psychological well-being, as we have found that high baseline well-being does not impede improvement in physical activity in our prior work utilizing PP-based physical activity interventions.[11,16] Likewise, to maximize generalizability, we did not require participants to have multiple life stressors, as the stress reduction component was felt likely to help all persons and because other intervention elements (eg, PP and physical activity goal setting) may still provide benefit to those with fewer specific stressors.

Patients were identified via searches of electronic medical records of all 20 primary care practices affiliated with the academic medical center. Patients who were approved by their primary care providers to be approached for the study were sent an opt-out letter, with a subsequent screening phone call for those who did not opt out of contact. During these calls, study staff described the project to potential participants and screened them for study criteria (eg, low MVPA, cognitive impairment). Patients who were interested and eligible then attended a baseline in-person study visit, at which time they provided written informed consent, received an accelerometer to wear for 1 week, and completed baseline self-report assessments. We aimed to enroll 1 participant per week for this initial small proof-of-concept study.

At a second study visit the following week, participants returned the accelerometer (for baseline activity data) and met with a study interventionist, who reviewed the treatment manual and MASTERY program rationale with the participant. The remainder of the intervention was delivered by phone, with weekly calls for 12 weeks. Following the intervention, participants completed a follow-up assessment by phone and received accelerometers by mail, wore them for 1 week, and then returned them by mail.

Intervention

Participants independently completed assigned intervention activities (eg, PP exercises and physical activity goals), then attended 30-minute phone sessions with a trained psychologist study interventionist each week. During these sessions, they reviewed the prior week's work, considered how to use well-being and physical activity–promoting skills in daily life, and discussed the next week's assigned activities and rationale (Supplementary Figure 1). The psychologists, who had previously delivered PP and MI–based programs, were trained by the study's principal investigator (J.C.H.) and project director (C.M.C.) via didactic teaching, manual review, discussion of intervention elements, and role play.

The intervention consisted of 2 components: a PP intervention component that focused on the promotion of well-being and an MI component that focused on applying MI principles and goal setting to promote physical activity. The PP program was composed of 3 4-week thematic modules (gratitude/positive affect, personal strengths, and optimism/meaning), with participants completing distinct exercises (see below) in the given domain during the first 3 weeks. In the fourth ("integration") week of the module, participants identified the most useful skills from that module and practiced using them in daily life to gain experience and encourage their sustained future practice.

The PP exercises were as follows: gratitude for positive events (week 1), expressing gratitude (week 2), capitalizing on positive events (week 3), using gratitude in daily life (week 4), recalling past success (week 5), using personal strengths (week 6), using perseverance (week 7), using strengths in daily life (week 8), enjoyable and meaningful activities (week 9), performing acts of kindness (week 10), the "good life" (week 11), and using skills in the future (week 12). These exercises were designed to take 10–15 minutes to complete each week. Details of each exercise (and pages from the PP component of the manual) are provided in Supplementary Table 1 and Appendix 1. The PP component of the intervention was adapted to midlife persons by providing examples and context common in midlife (eg, juggling numerous responsibilities, caring for family) and including content specific to midlife (eg, performing meaningful activities, as many adults in midlife begin to focus on meaning, purpose, and legacy more distinctly during this life stage[17]).

The midlife-focused MI portion of all calls (15 minutes) assessed participant motivation to increase physical activity

and then planned action steps or used cognitive work to boost motivation. Interventionists used an overall "5As" strategy (ask, advise, assess, assist, arrange) from behavior change theory with participants.[18] In all weeks, there was a focus on reviewing the prior week's goal, tracking physical activity, assessing stage of change, and problem-solving barriers. In addition, each week a specific topic (eg, finding new walking routes, problem-solving midlife-specific barriers) was discussed in detail with participants (Supplementary Table 2). Participants set a physical activity goal each week; they also received an Omron pedometer to assist with measuring activity.

The first 4 weeks of the MI component represented a "core MI" module based on our original PP-MI intervention. This module introduced general skills for increasing physical activity used throughout the program, including considering importance and confidence in change, tracking activity, setting goals via a "SMART" framework, and addressing barriers (eg, by identifying new walking routes). The rest of the MI component was created specifically for this intervention. We used midlife-specific modules that focused on common midlife stressors that were identified as barriers to physical activity in our prior interviews of midlife adults.[8] First, in weeks 5–7, given the major emphasis on time management as a barrier to activity in our qualitative work, all participants completed a time management module adapted from published programs[19–21] that focused on breaking tasks into smaller chunks, using organizational tools, and other strategies. Next, following a week 8 session reviewing overall physical activity progress, participants chose 1 of 3 modules focused on a midlife-specific barrier (occupational, financial, or caregiving) to complete for weeks 9–11, all adapted from published programs,[22–24] given that these were identified as important barriers in midlife persons that inhibited their physical activity. In all modules, the initial session focused on identifying the barrier's relationship to low activity (with a focus on problem solving), the second session discussed implementing changes and reducing stress, and the final session centered on using social resources to manage the barrier and optimize physical activity. See Supplementary Table 2 and Appendix 2 for detail about the weekly MI-based topics and midlife-specific modules, along with pages from the MI component of the manual.

All interventionists were trained by the study principal investigator (J.C.H.) and intervention supervisors (C.M.C., C.N.M.) using our established protocol for psychological-behavioral interventions. All phone sessions were recorded, and sessions were played/reviewed at weekly meetings between the supervisors and interventionists to ensure that all elements were delivered with high fidelity.

Outcomes

The primary aims of the study were feasibility and acceptability. As in prior projects, we calculated the rate of phone sessions fully completed (completing the phone call, completion of the prior week's PP activity, and setting a new physical activity goal) as our metric for feasibility.

Table 1. Participant Characteristics[a]

Characteristic	Overall
Sociodemographic	
Age, mean (SD), y	58.1 (4.6)
Female sex	7 (63.6)
Non-Hispanic White	9 (81.8)
Education level	
High school graduate or GED	1 (9.1)
Associate's degree or some college	4 (36.4)
College graduate	5 (45.5)
Graduate degree	1 (9.1)
Medical	
Diabetes	3 (27.3)
Hyperlipidemia	5 (45.5)
Hypertension	6 (54.6)
Current smoking	2 (18.2)
Baseline self-report and physical activity measures, mean (SD)	
Positive affect (PANAS), range, 10–50	27.9 (5.8)
Dispositional optimism (LOT-R), range, 6–30	13.8 (4.8)
Depression (HADS-Depression), range, 0–21	9.0 (2.7)
Anxiety (HADS-Anxiety), range, 0–21	9.0 (2.8)
Mental HRQoL (SF-12 mental component), range, 20–80	38.9 (11.6)
Physical HRQoL (SF-12 physical component), range, 20–80	44.7 (13.1)
Physical function (PROMIS PF-20), range, 20–100	90.5 (10.4)
Adherence (MOS SAS), range, 3–18	10.8 (3.1)
MVPA, min/d (GT3X+)	15.6 (10.9)
Total daily steps (GT3X+)	5887.5 (1468.8)

[a]Values are presented as n (%) unless otherwise specified.
Abbreviations: HADS = Hospital Anxiety and Depression Scale; HRQoL = health-related quality of life; LOT-R = Life Orientation Test-Revised; MOS SAS = Medical Outcomes Study Specific Adherence Scale; MVPA = moderate to vigorous physical activity; PANAS = Positive and Negative Affect Schedule; PF-20 = 20-item PROMIS physical function scale; SF-12 = Medical Outcomes Study 12-item Short-Form Health Survey.

A priori, we set 70% completion of sessions across all participants and a majority of participants completing more than half of the sessions as our thresholds for success based on prior work.[11,25] For acceptability, participants provided 0–10 ratings of the ease and utility (ease: 0 = very difficult, 10 = very easy; utility: 0 = not at all useful, 10 = very useful) of the PP and MI intervention activities/content each week during intervention calls for a total of 4 weekly ratings. We calculated mean ratings of sessions across all participants and denoted mean scores > 7.0/10 for both ease and utility as our threshold for success based on prior work using similar ratings for phone-based behavioral interventions.[11,25]

As secondary outcomes, we assessed accelerometer-measured physical activity (main secondary outcome) and self-report measures. Specifically, we measured physical activity (MVPA and steps) via the well-validated and reliable Actigraph GT3×+ accelerometer,[26] using 1,952 counts/minute as the threshold for MVPA as per the traditional Freedson cutpoint for accelerometer-measured MVPA,[27] and requiring at least 4 days of ≥ 8 hours of wear per measurement.

For self-report psychological and functional measures, we assessed positive affect via the Positive and Negative Affect Schedule positive affect items,[28] optimism via the Life Orientation Test-Revised,[29] depression and anxiety with the Hospital Anxiety and Depression Scale,[30] physical function via the 20-item PROMIS physical function scale,[31]

Table 2. Secondary Outcomes: Pre-Post Changes in Study Outcome Measures

	12 Weeks				
Measure	Estimated Mean Difference	SE	z	*P*	Effect Size
Accelerometer-measured physical activity outcomes					
MVPA, min/d	9.53	8.09	1.18	.24	0.87
Total daily steps	844.30	841.4	1.00	.32	0.57
Psychological outcomes					
Positive affect (PANAS)	7.93	2.53	3.13	.002*	1.37
Dispositional optimism (LOT-R)	1.93	2.52	0.77	.44	0.40
Depression (HADS-Depression)	−3.66	0.89	−4.11	< .001*	1.35
Anxiety (HADS-Anxiety)	−1.37	1.34	−1.02	.31	0.49
Additional functional/behavioral measures					
Mental HRQoL (SF-12 mental component)	5.69	4.11	1.39	.17	0.49
Physical HRQoL (SF-12 physical component)	3.41	2.47	1.38	.17	0.26
Physical function (PROMIS PF-20)	0.78	1.89	0.41	.68	0.07
Total daily self-reported steps (pedometer)	1842.40	858.50	2.15	.032*	0.69
Self-reported adherence (MOS SAS)	2.96	0.91	3.25	.001*	0.95

*$P < .05$.

Abbreviations: HADS = Hospital Anxiety and Depression Scale; HRQoL = health-related quality of life; LOT-R = Life Orientation Test-Revised; MOS SAS = Medical Outcomes Study Specific Adherence Scale; MVPA = moderate to vigorous physical activity; PANAS = Positive and Negative Affect Schedule; PF-20 = 20-item PROMIS physical function scale; SF-12 = Medical Outcomes Study 12-item Short-Form Health Survey.

and health-related quality of life (HRQoL) using the Medical Outcomes Study 12-item Short-Form Health Survey.[32] Finally, throughout the study, interventionists informally recorded participant feedback on intervention modality, feasibility of phone sessions, burden and applicability of intervention content, utility of the midlife modules, and overall impact of the program.

Analysis

For our feasibility and acceptability outcomes, we used descriptive statistics (means, SDs, proportions) to calculate rates of session completion and mean ease/utility scores. We also used these basic statistics to account for numbers of patients approached, enrolled, and retained. Feedback from participants was discussed among interventionists and the principal investigator (J.C.H.) during intervention review sessions during and after the study.

For pre-post changes, we utilized mixed regression models, with a categorical effect of time and an unstructured covariance matrix, to assess changes in self-report and physical activity metrics. We utilized these models because they allow for inclusion of all participants, even those with some missing data, to generate an estimated mean difference in outcomes. We focused on effect size (calculated as the time coefficient outcome divided by the standard deviation of the residual for the measure) rather than statistical significance ($P < .05$) given the small sample and secondary nature of these outcomes. All statistical tests were 2-tailed, and all analyses were conducted via Stata version 15.2 (Statacorp, College Station, Texas).

RESULTS

Overall, 11 participants were enrolled in the trial (participant characteristics are presented in Table 1 and Supplementary Figure 2 provides a CONSORT flow diagram), of whom 10 (91%) provided follow-up data. Regarding the midlife modules, 4 chose to complete the occupational stress module, 4 chose to complete the financial stress module, and 3 chose to complete the module on caregiving stress.

Regarding feasibility, 80.3% of all possible phone sessions (106/132) were fully completed, and 8 participants (72.7%) completed at least half of the sessions. For acceptability, participants' mean rating of the ease and utility of the PP and MI intervention components was 8.3/10 (SD = 2.1) across all 4 rating types, with both PP and MI components being rated as easy to complete (PP ease: 7.9, SD = 2.2; MI ease: 8.1, SD = 2.2) and useful (PP utility: 8.9, SD = 2.0; MI utility: 8.5, SD = 2.0).

Regarding secondary outcomes (Table 2), for the main secondary outcome of objectively measured physical activity, participants increased their physical activity with medium to large effect size magnitude changes (MVPA: estimated mean difference = 9.53 minutes, SE = 8.09, effect size = 0.87; total steps: estimated mean difference = 844.3 steps, SE = 841.4, effect size = 0.57). For steps measured via pedometer, we also observed large effect size magnitude changes in steps (effect size = 0.69). Finally, we observed medium to large effect size magnitude improvements in positive affect, depression, anxiety, and mental HRQoL (effect size = 0.49–1.37), with smaller changes in dispositional optimism and physical function.

Participant feedback noted that the intervention was experienced as feasible and enjoyable by most participants, though in several cases the 12-week duration of the phone sessions felt burdensome to participants, who felt that a shorter phone-based intervention with shorter booster content (eg, text messages) would be efficient and more feasible. The midlife modules were experienced as a good fit, and, overall, the majority of participants reported learning skills that would assist them in being physically active beyond the intervention period.

DISCUSSION

In this initial proof-of-concept trial of a multipronged, phone-delivered, midlife-specific physical activity intervention for adults aged 45–64 years with low baseline physical activity, we found that the intervention was feasible and well-accepted, exceeding thresholds on all feasibility and acceptability metrics. We also reached our enrollment target of approximately 1 participant enrolled per week. Over 80% of all possible sessions were completed, and participants reported the PP and MI components to be easy and useful. They also found the midlife-specific content relevant to their circumstances, with participants selecting a range of different modules based on their specific situation. These findings are consistent with prior work[11,25] finding similar rates of session completion and participant ratings in patients with cardiovascular disease.

The intervention was associated with substantial improvements in objectively measured physical activity in this group of low-active midlife adults. Physical activity is strongly linked with lower rates of cardiac disease, other chronic medical conditions, and mortality.[33] Increasing physical activity during midlife—when most chronic conditions appear—is a key public health issue, and data suggest that it is difficult for initially inactive persons to increase their activity in the context of managing multiple sources of stress and responsibility. This program—specifically adapted to midlife persons and allowing some tailoring of intervention content to fit their sources of stress—may therefore represent a promising approach in this age group.

We also found that the intervention was associated with improvements in psychological measures, including positive affect, depression, and anxiety, with generally medium effect size magnitude improvements over 12 weeks. These findings are consistent with the impact of combined PP and MI programs in other high-risk populations, such as those with diabetes or a recent cardiac event.[11,25] Such findings may be important given that greater positive affect has been independently linked to lower rates of mortality,[9] and lower depression is likewise linked to lower rates of heart disease and death.[34]

This initial study had important limitations. It examined a systematically delivered intervention with trained interventionists and ongoing assessments for fidelity, and it utilized objective measures of activity via research-grade accelerometry. At the same time, this was a small, 1-arm initial proof-of-concept trial. The sample size was small, recruitment was from a single academic medical center, follow-up was limited to 12 weeks, and there was no control condition. We had no data on socioeconomic status, and the sample was limited in educational and racial/ethnic diversity and did not include members of the youngest (aged 45–50 years) component of midlife adults. Feedback from participants was systematically recorded and discussed, but it was not obtained, synthesized, and analyzed via formal qualitative methods. Much additional work is needed before any claims can be made about the effectiveness of the MASTERY program in real-world clinical settings.

In conclusion, this proof-of-concept trial found a phone-delivered, midlife-adapted PP-MI intervention to be feasible, well-accepted, and associated with pre-post improvements in physical activity, psychological measures, and HRQoL. Larger, longer, and well-controlled studies, in more diverse samples, are needed to better assess the impact of this intervention.

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Supplementary material: Supplementary material follows this article.

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Supplementary material follows this article.

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Supplementary Material

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List of Supplementary Material for the article

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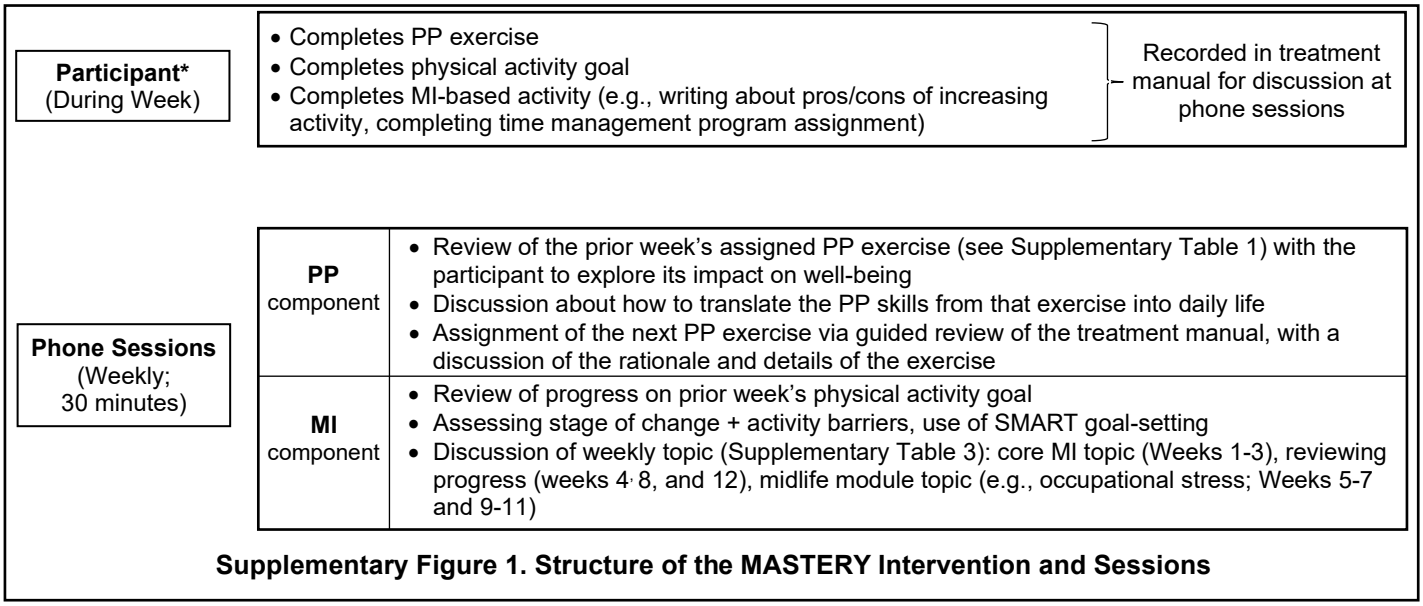
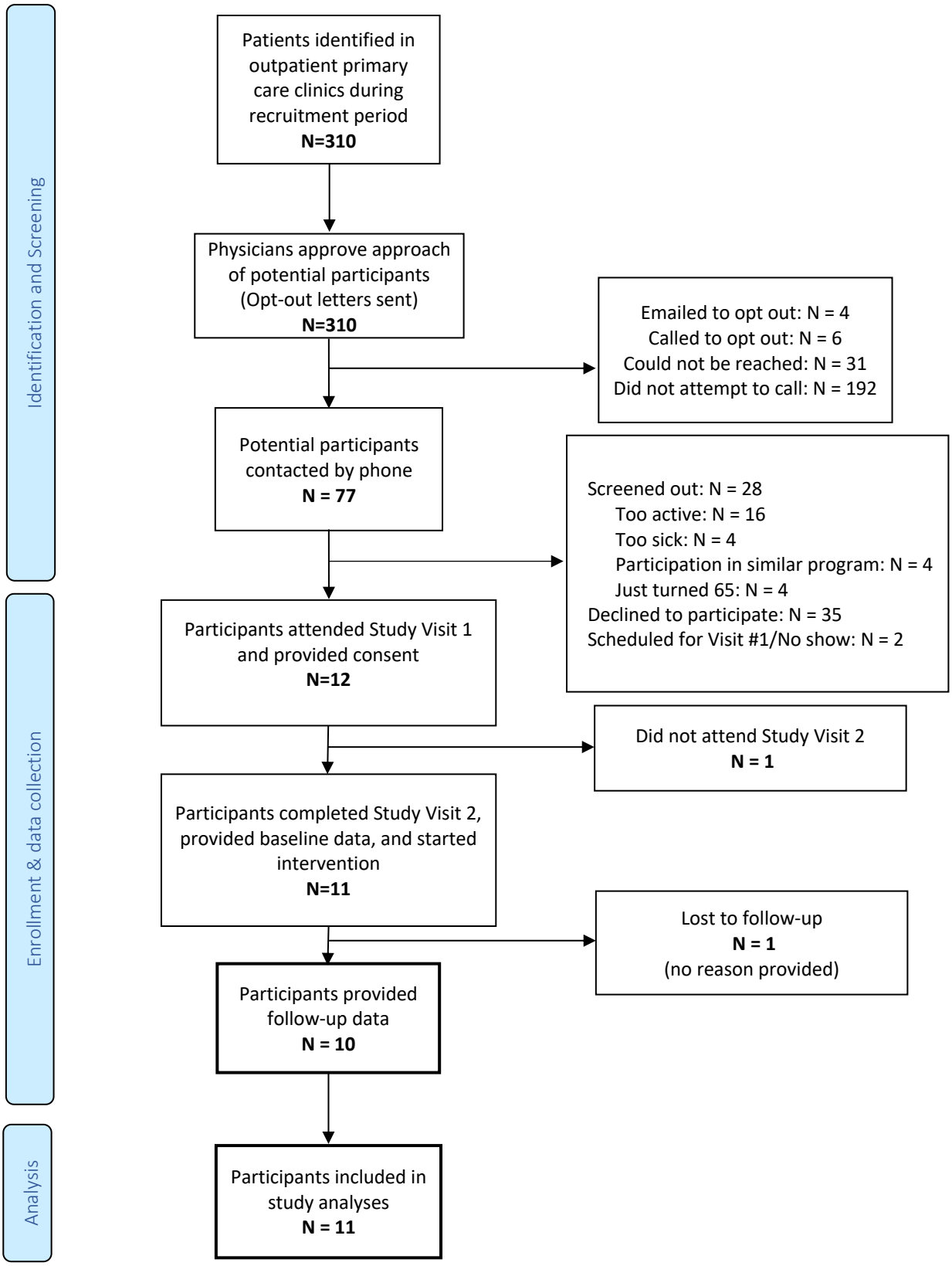
Disclaimer

This Supplementary Material has been provided by the author(s) as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.



Supplementary Figure 1. Structure of the MASTERY Intervention and Sessions



Supplementary Figure 2. Study Flow Diagram

Supplementary Table 1. PP Intervention Component: Modules and Exercises		
Module 1: Gratitude/positive affect-based exercises		
Week 1	*Gratitude for positive events*	Participants identify three positive events that have occurred in the past week and reflect on their feelings as they recall and describe these events.
2	*Expressing gratitude*	Participants write a letter of gratitude thanking a person for their support or kindness.
3	*Capitalizing on positive events*	Participants identify a positive life event after it has just occurred and then magnify its effect by reflecting on it, writing about it, or sharing the event with others.
4	Gratitude skills application	Participants select a useful PP skill from the prior three weeks, consider how to adapt the skill to daily life, and develop a plan to utilize this skill regularly.
Module 2: Strengths-based exercises		
Week 5	*Remembering past success*	Participants recall an event in which they experienced success, then write about the event, their contribution to the success, and positive feelings elicited by recalling it.
6	*Using personal strengths*	Participants undergo a brief assessment of personal strengths, then find a specific new way to use one of their 'signature strengths' in the next 7 days.
7	*Using perseverance*	Participants plan and then use perseverance to complete a specific goal that week.
8	Strength-based skills application	Participants select a useful PP skill from the prior three weeks, consider how to adapt the skill to daily life, and develop a plan to utilize this skill regularly.
Module 3: Optimism and meaning-based exercises		
Week 9	*Enjoyable and meaningful activities*	Participants complete three activities: an enjoyable activity alone, an enjoyable activity with another person, and a meaningful activity completed alone or with others.
10	*Performing acts of kindness*	Participants perform three acts of kindness to others over a 1-2 day period.
11	*The good life*	Participants imagine and write in detail about a best possible (realistic) future one year from now and consider small short-term steps to take toward such a future.
12	Skills application + future planning	Participants select a PP skill from this module and develop a plan to utilize this skill—and additional skills from the program—this week and beyond (see **C10d**).

MASTERY

Midlife Activity, Stress Reduction, Time Efficiency, Resilience, and Youthfulness Project

Treatment Manual

A Massachusetts General Hospital Research Study

Table of Contents

Table of Contents

Study Appointments

Note: At each call you will review the previous week's exercise with your Study Trainer

Session 1 (in person) _____

Session 2 (phone) _____

Session 3 (phone) _____

Session 4 (phone) _____

Session 5 (phone) _____

Session 6 (phone) _____

Session 7 (phone _____

Session 8 (phone) _____

Session 9 (phone) _____

Session 10 (phone) _____

Session 11 (phone) _____

Session 12 (phone) _____

Follow-up Session (phone) _____

If you need to change your appointment,
call us at 617-724-9142.

Introduction

What is the goal of this project?

Many people who are between the ages of 45 and 65 experience stress related to juggling multiple responsibilities, including their health. It is likely that you have received recommendations from your doctor that include exercising regularly to maintain health and prevent future complications. Even if you are already physically active, it is not always easy to maintain an adequate level of physical activity given the many directions you are pulled in your everyday life. And, if these recommendations require making big changes in your life, it can seem overwhelming.

One of the best things that people of any age can do is increase their physical activity. Being active can help your mood and your health in many ways, yet it can be a challenge. Many people in midlife find that they sometimes struggle with low energy and low mood, that they already have a lot to keep up with, and that setting and reaching goals can be tough.

We believe that finding ways to increase positive thoughts and feelings can really help people to become more physically active. Research shows that people who experience more positive feelings (such as feeling more hopeful or more grateful) exercise more and have better overall health. This makes sense: when you are feeling happier and more confident, it can be easy to start (and stick to) healthier habits!

What will happen in this project?

In this project, you will complete "positive psychology" exercises designed to increase your mood and self-confidence. These exercises will teach you skills that you can use every day to help you feel more energetic, motivated, and hopeful. In our studies, people who have completed these positive psychology exercises typically find them easy, fun, and helpful. We think having more of these good feelings will make it a lot easier to become more active and to accomplish all of your health goals!

We will combine these positive psychology activities with a specific goal-setting program that will help you set and reach goals related to physical activity, like walking more often. We will help you to track your physical activity, identify places and times to exercise, monitor your progress, and use your resources to most effectively reach your goals each week.

Our goal by the end of this program is that you feel happier about your life and that you have become more active. We think this will have all sorts of benefits for your stress level, your overall health, and the quality of your life.

What is my role?

We believe that this program will help people in midlife – but we need your assistance to find out for sure! Based on our experience with these exercises and interviews with patients, we have created this treatment program to safely improve physical activity.

Your participation and feedback will help us to determine whether this program helps you to feel more positive and become more active. If it works well, we may someday make this program available to others in midlife who are expressing concerns about stress level and health. Your participation will help us figure out how we might do that.

So what is this 'positive psychology' anyway?

Positive psychology is an area of psychology that focuses on helping people to experience greater life satisfaction through specific activities. These include identifying and using your personal strengths, appreciating pleasant events during your day, performing kind acts for others, and using past successes to accomplish your goals in the future

Is it really possible for a person to experience more positive emotions?

Yes. It appears that almost 50% of a person's happiness is directly under their own control, and specific activities focused on good feelings can improve well-being. The activities in this program aim to do just that!

This does not mean that it is always easy. Like other activities that can benefit health, positive psychology exercises take practice. Of course, taking specific actions to generate and pay attention to good feelings is not always natural, but these activities get easier and more effective the more you do them. Some exercises will really be a great match for you, while others might be a less perfect fit. With some effort, we believe that you will discover positive psychology activities that you will enjoy and that will provide you with lasting benefit.

In many ways, experiencing more positive emotions is a lot like gaining any new skill, like learning to speak a foreign language. Some people learn how to pronounce new words and acquire foreign accents easily. But with effort and practice, anyone can learn a new language. Similarly, some people have found it a great struggle to experience the positive, but with deliberate and consistent effort it is possible to feel stronger, happier, and more hopeful.

Introduction

How will the program work?

Each week, you will talk with your trainer on the phone for about 30 minutes. Those calls will be divided into two main sections:

1. First, your trainer will review the positive psychology exercise you completed last week. You will discuss how the exercise went and how you can use the positive psychology skill from that week in your daily life. Then, your trainer will introduce the next week's positive psychology skill and make a concrete plan with you to complete the exercise in the next week.

2. Then, your trainer will discuss your physical activity. You will review the previous week's goal, think of ways to help you successfully complete your physical activity goals, and then set a new goal for the upcoming week. Your trainer also will introduce a new topic, like identifying resources to help you get active, or finding new walking routes, to help you continue to be active. An emphasis will be placed on identifying stressors and barriers common in midlife such as difficulties with times management, financial stressors, occupational stressors, and caregiver stressors, all of which can interfere with physical activity. Once these are identified, we will help you figure out ways to overcome these barriers so that you can find the time and energy to be active.

Our hope is that the first part of the calls will help you to feel more motivated, energized, and hopeful about yourself, which will put in you in the best possible frame of mind to think about setting and reaching a physical activity goal.

By the end of the study, we hope that you will:

- ❑ Be more aware of positive events in your life.
- ❑ Be more able to use your personal strengths and qualities to accomplish goals and feel good about yourself.
- ❑ Learn simple but powerful new skills that you can use in your daily life to increase your positive thoughts and feelings.
- ❑ Be able to regularly use these skills to develop a habit of happiness.
- ❑ Find it easier to make healthy lifestyle choices because you are feeling more positive.
- ❑ Learn how to set realistic, specific physical activity goals.
- ❑ Develop skills to overcome barriers and challenges in getting and staying active.
- ❑ Sit less, move more, feel better, and thrive!

Values Assessment

What is important to you?

As we strive to help you become happier, healthier, and more active in the MASTERY program, one of the most important things that we can know about you (and that you can know about yourself) is **what really matters to you** and **what keeps you going through difficult days**.

For some people, it is family—getting to spend time with them, being healthy enough to go on vacation or to play with children, or being well enough to help family members in need. For others, it is other social networks and activities—being able to visit friends, play tennis with a social group, host parties at one's home, or engage in meaningful volunteer activities. And for some, it is continuing to take part in meaningful and engaging work or a great hobby, or being able to keep working long enough to financially support a family.

Knowing what is truly important to you can help motivate you to get more active, do a really great job taking care of your health, and manage your stress. And taking care of your health ultimately may help you to continue to do what really matters to you in your life, for the longest possible time. That can be very powerful, and very motivating. Take a moment to think about the three simple, important questions listed below. We will discuss them now and refer back to them throughout the program.

What are some of the things you care most about in life?

What are some of the things that bring you joy or satisfaction in life?

What are your reasons for getting more healthy and being more active?

Tips for Using Positive Psychology

1. Focus on the present and be nonjudgmental.

During some of these exercises, it may be easy for negative or anxious thoughts creep in. This is completely natural! An important skill is to **return your focus to the moment** and to the positive exercise that you are completing. If you notice yourself "heading negative," it can be very helpful to nonjudgmentally "turn your mind" back to the moment and the exercise.

2. Try something new.

When performing these exercises, thinking about or doing something **out of the ordinary** can be more powerful than something routine. For example, if you write a letter of gratitude, you may get more out of it by thanking someone you have not thanked before. Doing something **new** and **different** can give you a burst of positive feeling and feel more deeply meaningful.

3. Name positive emotions.

We will help you **develop a greater vocabulary** for positive emotions. Instead of just feeling "good," we think that understanding and labeling your good feelings more specifically (like "satisfaction" or "joy" or "pride") will allow you to more fully recognize and savor the positive events and feelings in your life.

4. Develop new skills.

Over the course of this program, we will help you to **develop useful skills**, such as becoming more aware of positive things in your life, expressing gratitude more regularly, or identifying new ways to use your strengths. You will use these skills as part of the study exercises, and we hope that you will be able to start using these skills in your everyday life too. You can also make a list (**page 154**) of **My Favorite Skills** and how you will use them.

5. Be willing to give them a try!

You still may feel skeptical. **Give the exercises a try!** You may surprise yourself by getting more of a boost than you expected. It will also help to hear what worked or did not work for you, so we can continue to refine the program to be most effective for people like you.

6. Consider how to use your new skills in daily life.

We hope that feeling **happier**, more **confident**, and more **optimistic** will give you the boost you need to get more active. As we mentioned, research shows that people who experience more positive feelings exercise more and have better health. We encourage you to **see if your positive feelings help you feel more motivated** to get and stay active, and to do an even better job managing your heart problems.

Twelve Positive Thoughts and Emotions

Gratitude: Feeling thankful about something—a person, event, or place—or just being happy to be alive.

Love: An all-encompassing positive feeling—whether romantic, friendship-based, or a more general fondness—that can be directed at another being or oneself.

Hope: A feeling that things can turn out for the best, and that possibilities for positive outcomes exist.

Determination: A feeling of commitment to accomplish a goal, even in the face of obstacles. This can be a really important quality for those in midlife who face numerous challenges every day!

Acceptance: A willingness to live with a difficult or unpleasant situation in a positive manner.

Pride: A sense of satisfaction or pleasure resulting from something a person has done or created.

Relief: A feeling of reassurance and relaxation following decreases in anxiety or stress.

Serenity: A more relaxed and sustained version of joy—feeling a deeper sense of peace and contentment.

Interest: A positive feeling arising from being engaged in, or curious about, something or someone.

Connectedness: The state of being close to another person or other people with mutual trust and support.

Inspiration: A feeling that comes when a person or event leads someone to feel a deep desire to do something positive.

Joy: An intense feeling of great happiness, delight, or elation.

Positive Psychology

Part One: Gratitude-based Activities

Part Two: Strength-based Activities

Part Three: Meaning-based Activities

Part One: Enhancing Gratitude

Session One: Gratitude for Positive Events

Session Two: Expressing Gratitude

Session Three: Capitalizing on Positive Events

Session Four: Using Gratitude in Daily Life

Session One

Positive Psychology

Gratitude for Positive Events

Gratitude for Positive Events

Introduction

In this part of the MASTERY program, we will focus on three different positive concepts: gratitude, strengths, and meaning. For the first three weeks of the program, we will focus on developing skills related to gratitude—feeling thankful for people, places, or things. We will help you find ways to be more aware of (and grateful for) positive things in life, express gratitude to others, and then integrate these skills into your everyday life. Over the next four weeks, you will complete the activities in the box below.

Enhancing Gratitude

- ❑ *Gratitude for positive events* → Developing awareness for positive events.
- ❑ *Expressing gratitude* → Developing a habit of expressing gratitude to others.
- ❑ *Capitalizing on positive events*→ Boosting positive feelings from positive events by reflecting on them or celebrating them in some way.
- ❑ *Using gratitude in daily life* → Focusing on gratitude in your everyday activities.

In the first part of this session, we will focus on *identifying* and *savoring* positive events that occur in your life. It can often be easy to focus on the negative events going on in life. This makes sense to some degree: focusing on challenges or negative events can help you to learn from them and avoid them in the future. However, a single-minded focus on the negative can lead you to miss out on the positive things in life and can affect your health and well-being.

Most of us are not *nearly* as good at savoring and appreciating positive events as we are at analyzing bad events, so this is a skill that needs practice. The good news is that as you become better at focusing on the good in your life, it will become easier to feel even more grateful for what you have and more hopeful about the future.

We know that having to manage your various responsibilities might sometimes make it hard to feel grateful or to remember good things on a regular basis. Our team will work to help you develop an ability to more easily think about the good in life, even with multiple responsibilities and a busy schedule!

Gratitude for Positive Events

Instructions

This week, we will focus on being more aware of—and grateful for—the positive events in life. For this exercise, please think about three positive things that happened over the past week. Then, use the space on the next pages to write about the events. The things you list can be relatively small in importance ("I enjoyed my lunch today") or relatively large in importance ("My daughter came to visit"). They can be related to physical activity or be entirely separate.

Please follow these instructions:

- ❑ Give the event a title. (e.g., "my sister remembered my birthday")
- ❑ Write down exactly what happened in as much detail as possible, including what you did or said, and if other people were involved, what they did or said.
- ❑ Record how this event made you feel at the time. Use the most specific positive emotional words that you can think of to describe how you felt: Joy? Satisfaction?

Tips for completing the exercise:

- ❑ The goal of the exercise is to remember the good event and then enjoy the positive emotions that come with it. Focus your energy on this goal!
- ❑ If you are having trouble thinking of specific positive emotions, please refer to the list of positive emotions (page 10).
- ❑ You may find yourself wanting to write something like "I felt less stressed." It's good to note this, but try to describe the feeling or thought using positive emotions and words. So, for example, instead of writing "I felt less stressed," you might write "I felt a little bit of relief."
- ❑ Focus on the positive. If you find yourself focusing on negative feelings or emotions, turn your mind from the negative feeling and refocus yourself on the good event and the positive feelings that came along with it. This can take effort, but it gets easier with practice and can make a real difference in how you feel.

Exercise

Positive event #1:

1. Event title: _____

2. What happened? What did you do or say, and if other people were involved, what did they do or say?

3. What positive thoughts and emotions did you experience at the time of the event? (Be as specific as possible and give as much detail as you can).

4. What specific positive thoughts and emotions do you have now as you look back on the event?

Positive event #2:

1. Event title:_____

2. What happened? What did you do or say, and if other people were involved, what did they do or say?

3. What positive thoughts and emotions did you experience at the time of the event? (Be as specific as possible and give as much detail as you can).

4. What specific positive thoughts and emotions do you have now as you look back on the event?

Gratitude for Positive Events

Positive event #3:

1. Event title:_____

2. What happened? What did you do or say, and if other people were involved, what did they do or say?

3. What positive thoughts and emotions did you experience at the time of the event? (Be as specific as possible and give as much detail as you can).

4. What specific positive thoughts and emotions do you have now as you look back on the event?

Please think about how you can use this skill
(being more aware of positive things) in your daily life.

Supplementary Table 2. MI Intervention Component: Modules and Exercises	
5A's model (all sessions)	Interventionists will: (a) Ask about progress on the prior cognitive (e.g., pros/cons of becoming active) or physical activity goal, (b) Advise about the benefits of physical activity on health and function, (c) Assess the participant's stage of change and barriers/facilitators to change, (d) Assist with setting a goal, and (e) Arrange the next phone session. **All sessions (including midlife modules) include this content.**
Core MI Module	*Week 1*: Introduce *Moving for Better Health*: importance & confidence and activity tracking
	Week 2: Outline '*SMART*' (Specific, Measurable, Attainable, Relevant, Time-bound) goals
	Week 3: Discuss physical activity barriers and problem-solving tips
	Week 4: *Reflect on initial progress and complete walkability audit to identify new routes*
Midlife Time Management Module	Week 5: Barriers: Time management 1 (breaking down physical activity into smaller chunks)
	Week 6: Barriers: Time management 2 (scheduling physical activity with organizational tools)
	Week 7: Barriers: Time management 3 (prioritizing activity and minimizing distractions)
	Week 8: *Review/reflect on progress and consider realistic post-intervention goals*
Midlife Module Chosen by Participant	Week 9: Barriers: Midlife module (occupational, financial, or caregiving stress, or stress reduction)
	Week 10: Barriers: Midlife module (session 2 of selected module)
	Week 11: Barriers: Midlife module (session 3 of selected module)
	Week 12: *Review/reflect on progress and develop a plan for activity over the next 3-6 months*

Session One

Goal Setting

Moving for Better Health

Setting Goals to Get Moving

In the Goal Setting part of the MASTERY program, we will work together to help you set and reach goals for walking and other forms of physical activity. Being active is one of the best things that you can do for your overall health.

Did you know that physical activity can…

- ✓ Improve your mood and reduce stress levels
- ✓ Help you sleep better and boost your energy
- ✓ Improve your immune system
- ✓ Grow new brain cells and improve your focus and memory
- ✓ Increase your muscle mass
- ✓ Strengthen your bones
- ✓ Strengthen your heart
- ✓ Improve your blood sugar regulation
- ✓ Help you lose weight
- ✓ Possibly decrease the amount of medication you will need for your heart problems
- ✓ Help you look younger
- ✓ Lower your blood pressure
- ✓ Help you live longer

In this program, we will provide you specific skills in setting physical activity goals that are right for you—reachable, realistic, and safe. We will work to:

- ✓ **Keep track of your progress**.
- ✓ **Set reachable and specific activity goals** and adjust them based on your own experience and symptoms.
- ✓ Identify barriers to being active, and **help you find ways to overcome challenges to getting and staying active**.
- ✓ **Help you identify resources** (people, equipment, new routes, and education) that can help you to become a more active person.

We will work with you **at your pace** to help you set goals that make sense for you and then work to achieve them. **You will always set your own goals in this program**. We are just here to help, and will help you every step of the way.

We think that by working together, you will be able to set and achieve your goal of being more physically active. We believe that this will help you to be healthier and feel better!

Moving for Better Health: Worksheet

As a first step towards becoming more active, we would like you to think about what you already do to be active and what you would like to accomplish during the program.

1. Which kinds of physical activity did you like to do earlier in your life, and what do you like to do now?

2. What physical activity goal would you like to set for the MASTERY program?

My overall activity goal:

- ✓ **Type** (for example, walking):
- ✓ **Frequency** (for example, 5 times a week):
- ✓ **Duration** (for example, 30 minutes):
- ✓ **Intensity** (for example, medium effort):

3. Importance and confidence ratings:

   On a scale of 0-10 (0=not important, 10=very important) how **important** is it that you increase your physical activity? _____

   On a scale of 0-10 (0=not confident, 10=very confident) how **confident** are you that you can increase your physical activity? _____

Tracking Your Activity

One way to help you monitor your progress towards reaching your physical activity goal is to track your physical activity on a regular basis. Tracking helps give people a real and clear sense of how and what they are doing with their physical activity. This information will really help you (and help us help you) to make physical activity progress!

Ways to track your activity:

- ✓ Keep a journal of when you are active over the course of the week. You can write down the type of activity you perform, as well as the amount of time you spend performing the activity.
- ✓ Use a step counter, or pedometer. These devices keep track of the number of steps you take over the course of a day. Step counters can be worn on your belt or pocket, or on your wrist.
- ✓ Download an "app" on your smartphone. These apps can use the sensors in your phone to keep track of the number of steps you are taking.
- ✓ Use a smart watch. This can also keep track of your activity over the course of the day.

This week, we will ask you to write down your activity at the end of each day or week on the sheet provided in this manual. You can track your activity pretty easily, especially if you use a step counter or other device. For example, you can track by taking a few minutes each day to write down how many steps you took, or what physical activities you performed that day.

When you write down your activity, think about patterns related to when you are active, when it is hard or easy to be active, and how it feels to be active.

We have provided you with an Omron pedometer (see following page for instructions) to aid in your activity tracking.

Your Omron Pedometer

As part of this program, you have received an Omron pedometer, and we will ask that you use it (or another pedometer, if you already have one) throughout this program. Here are some tips for how to use it:

This button lets you look through the past seven days to see how many steps you took each day.

This button lets you change what the top number means. You can choose steps, miles, kilocalories, or aerobic steps. For our program, it is probably best to just keep it on "steps."

The home button brings you back to today, so you can see the time and the number of steps you have taken today.

Tips for using your pedometer:

- ✓ When you haven't touched the pedometer for a while, the screen shuts off. Don't worry, it is still counting your steps! Just press any button to turn the screen on again.
- ✓ The pedometer will probably work best if you clip it to a belt, waistband, or pocket.
- ✓ Please do not wear this into the shower or pool, and please do not put it in the laundry. It is not waterproof!
- ✓ If you have any problems with your pedometer, please feel free to call us at 617-724-9142. We are happy to help sort out any problems you are having! And if you lose it, or it gets damaged, we can get you another one!

Tracking Your Activity: Tracking Sheet

Date	What activity did you do? How much time did you spend performing the activity?	# of Steps
Total		

Did you notice any patterns to your physical activity?

What made it easier for you to be active?

What made it more difficult to be active?

Session Two

Goal Setting

Setting a SMART Physical Activity Goal

Setting a SMART Activity Goal

This week, we will talk about a great way to set physical activity goals. Maybe you are already making good progress on getting more active, or maybe you have had some challenges. Either way, we will work with you to help figure out a goal that best fits your circumstances.

One tool we will use for setting physical activity goals is the "SMART" goal-setting system. Setting a goal using the SMART system will give you the best chance of reaching your goal by making it specific and realistic. You are probably already accustomed to having specific goals for things like your blood pressure, and we can use the SMART system to help set great specific activity goals.

This Week's Goal:

- ✓ Learn about the five-step SMART system of developing a goal.
- ✓ Set a goal related to your physical activity, and review whether it is a SMART goal.

Setting a SMART goal	
S = Specific	It is easier to reach a goal when you know exactly what you want to do. Your goal should answer: What, Where, When, and How?
M = Measurable	Choose a goal with measurable progress (like a number of steps), so you can see the change occur. How will you know when you reach your goal?
A = Attainable	Identify goals that are within your reach. Taking small steps is a good way to set attainable goals.
R = Relevant	The goal needs to be something you are willing to work towards. If it means something to you, you will be more likely to stick with it!
T = Time-based	Set a timeframe for the goal: for next week, in three months, in one year. Putting an end point on a goal gives you a clear target to work toward. We'll pick one week today.

Examples of SMART goals:

- ✓ Good goal: *I plan to start walking twice per week.*
- ✓ Better goal: *I plan to start walking twice per week in my neighborhood with my close friends.*
- ✓ **SMART** goal: *I plan to take two 30-minute walks around my block this week on Monday and Wednesday mornings.*

Setting a SMART Activity Goal: Tracking Sheet

Goal for this week:

Is your goal SMART?

☐ Specific ☐ Measureable ☐ Attainable ☐ Relevant ☐ Time-based

Explain:

Date	What activity did you do? How much time did you spend performing the activity?	# of Steps
Total		

Did you meet your SMART goal this week?

Session Nine

Goal Setting

Caregiver Stress 1

Caregiver Stress Part 1

This week we will start discussing a specific area of stress in your life, caregiver stress. Caregiver stress can be a barrier to many different activities, including physical activity. This week, we will discuss the ways in which caregiver stress may be interfering with your ability to be active or stay active.

Caregiver stress can feel overwhelming at times, particularly since you may be the caregiver to multiple people. Take a look at the list below with examples of common caregiving situations that can be stressful. Which ones are relevant to you? Do you have caregiving duties that are not listed?

Examples of common caregiver situations:

- ✓ Elderly relative with dementia
- ✓ Family member with medical problems
- ✓ Adult family member with mental health issues
- ✓ Child with behavioral issues
- ✓ Child involved in bullying
- ✓ Child with mental health issues

Research has shown that high levels of stress can negatively affect physical and mental functioning. For examples, stress can result in **psychological strain** (e.g., feeling dissatisfied or even depressed), **physiological strain** (e.g., increasing blood pressure), and/or **behavioral strain** (e.g., sleep difficulties, using substances more than normal). Research shows that this strain can actually lead to increased risk for cardiac problems. Therefore, it is not something to be ignored!

Given the amount of strain that can result from caregiver stress, it can be quite difficult for people experiencing such strain to imagine having the time and energy to be physically active! Consider the questions on the following page.

Goals for this week:

- ✓ **Brainstorm** specific caregiving stressors that you are experiencing.
- ✓ **Specify** ones that interfere with physical activity and ones that do not.

Caregiver Stress Part 1: Worksheet

Please answer the following questions.

1. What specific caregiver stressors did you identify?

2. How are these stressors affecting you psychologically, physiologically, or behaviorally?

3. Which of these stressors are specifically interfering with your ability to be physically active or to increase your level of activity?

Caregiver Stress Part 1: Worksheet

Physical activity goal for this week:

Is your goal SMART?				
☐ Specific	☐ Measureable	☐ Attainable	☐ Relevant	☐ Time-based

Date	What activity did you do? How much time did you spend performing the activity?	# of Steps
Total		

Did you meet your goal this week?

Session Ten

Goal Setting

Caregiver Stress 2

Caregiver Stress Part 2

This week we will discuss active coping strategies for your caregiver stressors. Often when stressors feel overwhelming, it can be easy to avoid them in an effort to reduce your immediate stress level. However, research indicates that more active forms of coping are more effective in the long-term.

The good news is if you struggle with juggling your caregiving duties and finding time for physical activity, you have already learned some Time Management strategies that may be helpful for you in overcoming this barrier (e.g., scheduling, exercising in smaller chunks throughout the day, etc.).

With respect to the specific occupational stressors that you identified for this week, have you tried any active coping strategies?

Much like we did several weeks ago for more general barriers to physical activity, let's think about ways of active problem-solving for your specific stressors. Here are some examples of websites that may provide you with helpful hints for methods of active coping with respect to common caregiver stressors:

- Caring for someone with dementia: https://www.alz.org/help-support/caregiving
- Caring for someone with an illness/medical condition: https://www.cancer.org/treatment/caregivers.html
- Caring for a child with behavioral issues: https://chadd.org/for-parents/overview/; https://chadd.org/understanding-adhd/adhd-fact-sheets/
- Caring for a child who is being bullied: http://www.thebullyproject.com/parents
- Caring for a child with depression, anxiety, or other mental health concerns: http://www.worrywisekids.org/node/36; https://www.helpguide.org/articles/depression/parents-guide-to-teen-depression.htm/

Caregiver Stressor	Active Coping Methods How can you reduce stress related to caregiving?

Caregiver Stress Part 2

We also acknowledge that it's not possible to remove all stress related to caregiving in a few short weeks. For that reason, this week we will talk about ways to take care of yourself that can help reduce stress levels in general. These strategies can help you better manage the challenges that inevitably will arise and can help you feel more relaxed and in control of your emotions in general.

Reactions	Tips for changing your stress reactions
Thoughts	Identify the thought patterns that can make stress worse, and ask yourself: - Are you deciding right away that it is going to turn out really badly? - Are you looking only at the bad parts and not seeing the good? - Are you worrying about problems that are really not yours?
Emotions	Figure out your emotional reactions to stress and talk about them.
Body	Try deep breathing and relaxation exercises.
Behaviors	Decide what you can change about the stressor and take action: - Can you change your job or work schedule? - Can you avoid difficult people or unpleasant situations? - Can you spend more time with friends and family?

We hope to help you start making changes in how you react to stress, and to learn ways to help you relax. Here are some general ideas concerning how you can start to practice relaxation and reduce the stress levels in your life.

Tips on relaxation…

- ✓ Make sure you have enough rest.
- ✓ Exercise to de-stress and give yourself more energy.
- ✓ Take time for relaxation and vacations.
- ✓ Practice deep breathing and relaxation exercises, meditation, or yoga.
- ✓ Laugh and use your sense of humor or another personal strength.
- ✓ Use a gratitude exercise to increase motivation and positive emotions.
- ✓ Have fun by doing things that you enjoy with your family and friends.
- ✓ Consider your limits and take on one task or project at a time.
- ✓ Research and learn more about your specific caregiver stressors.
- ✓ Learn to ask for help.
- ✓ Talk about your needs and emotions to somebody you trust.

Goals for this week:

- ✓ **Continue to brainstorm** active coping methods for your stressors.
- ✓ **Choose one** relaxation/stress-reducing technique and try it.

Caregiver Stress Part 2: Worksheet

Please answer the following questions.

1. If you needed more room than the table presented on page 132, what additional stressors and active coping strategies did you identify?

2. What relaxation technique did you try did you try this week?

3. Did you find the relaxation technique helpful? Will you continue to use it?

Caregiver Stress Part 2: Worksheet

Physical activity goal for this week:

Is your goal SMART?				
☐ Specific	☐ Measureable	☐ Attainable	☐ Relevant	☐ Time-based

Date	What activity did you do? How much time did you spend performing the activity?	# of Steps
Total		

Did you meet your goal this week?

Session Eleven

Goal Setting

Caregiver Stress 3

Caregiver Stress Part 3

This week will be the final week that we introduce a new topic related to caregiver stress. Research has identified social resources as being particularly important in reducing stress levels, and especially stress related to midlife (e.g., financial, occupational, caregiving). Social support can also make a huge difference in how successful you are in getting active and staying active. We will explore social resources for both physical activity and caregiver stress.

Social Resources for physical activity come in many different forms:

- ✓ **Exercise partners**. Having someone with whom you can walk outside, go to the mall, go to the gym, or go for a bike ride with can make a huge difference. Having a partner can make the activity more enjoyable. Having a scheduled time to be active can keep you from putting off the activity and keep you on a regular schedule. In addition, as you become more and more active, you and your partner can see your progress together!
- ✓ **Supportive family and friends**. Even if they do not exercise with you, having friends and family who encourage you in your efforts to get more active and take great care of your health can be a real plus. They can provide encouragement when you are wavering in your resolve to go for a walk after a stressful day, they can celebrate your success in becoming a more active person, and they can support other parts of your healthy lifestyle plan, like healthy eating.
- ✓ **Other groups**. Support groups to help promote exercise can be helpful. And group exercise classes—at the gym, the YMCA, or elsewhere—can not only be a "neighborhood" resource, but also a source of support and togetherness.
- ✓ **Your medical treatment providers**. Your doctors and other care providers can serve as an important resource as you work toward becoming a more active person. They can provide you with information about safe and healthy activities, education about the benefits of exercise, and resources at the clinic or hospital. Because they know you personally and know your personal medical situation, they will be able to give you specific and useful advice. Plus, they will be some of your biggest cheerleaders when you succeed!

In terms of social resources for caregiver stress, these, too, can come in many different forms.

Social Resources for caregiver stress can include:

- ✓ **Friends and family members**. Being open with family and trusted friends about your caregiving stressors can be helpful in a number of different ways. Firstly, friends and family can offer emotional support, which can help you cope with this type of stress. Secondly, family and friends may be experiencing (or may have experienced) a similar type of stress and may be able to offer you helpful advice on what to do. Thirdly, family and friends might also be able to relieve some of your burden by helping with caregiving directly.
- ✓ **Therapists/Counselors**. While it may not be immediately apparent how therapists or counselors can help you with your caregiving stress, research has shown that various relaxation techniques can be quite helpful in reducing overall stress levels. Skills-based psychological treatment also can help you employ problem-solving strategies to use for your caregiving difficulties and target negative thinking that might be getting in the way of you meeting your goals or even reaching out for more help. Lastly, therapists or counselors can help you improve your communication skills so that you feel confident in voicing your problems and asking for what you need in an effective way.
- ✓ **Support groups/online forums**. Similar to the resources already discussed, support groups or online forums can provide emotional support and a chance to connect with others who are experiencing similar types of stress. If attending a support group in person is either not feasible or not desirable, there are online forums where you can interact with others in chat rooms and discussion threads.
- ✓ **Refer to Appendices 1-6 for more detailed information on resources for caregiver stress, including social resources!**

You may already be aware of some of these social resources in your life and how they can help you to be active and reduce stress. Sometimes, they may already be there, but you never thought to reach out to these people for help. In other cases, it may take some figuring out—like finding an exercise partner or reaching out to a counselor/therapist. Let's look together at your current and potential social resources on the next page.

Caregiver Stress Part 3

First, consider people (or groups of people) in your life who already are, or could potentially be, resources for either physical activity or caregiver stress (or both!). Then think about how you can use these resources and make a specific plan to achieve this.

Use the table below to help you brainstorm people or groups whom you can contact to feel more connected, more motivated, and more supported. At the end of the week, use the bottom half of the table to report how you utilized your social resources.

Social Resources
How I used my resources this week:

Caregiver Stress Part 3: Worksheet

Physical activity goal for this week:

Is your goal SMART?				
☐ Specific	☐ Measureable	☐ Attainable	☐ Relevant	☐ Time-based

Date	What activity did you do? How much time did you spend performing the activity?	# of Steps
Total		

Did you meet your goal this week?