

GUIDELINES FOR INTERIM AND FINAL GRANT REPORTS

Project Summary

Please restate the project's goals and objectives, as stated in your proposal.

In 2015, VISIONS implemented a new evidence-based exercise program for blind older adults at VISIONS Center on Aging (VCA). The exercise program is one component of VISIONS Healthy Aging Initiative for all participants in VISIONS programs.

For this grant through the Lavelle Fund, VISIONS proposed to select two Evidence-Based Exercise Programs (EBPs) to determine whether these tested and documented programs to improve chronic health conditions for older adults are equally effective for blind older adults.

There is evidence that following the prescribed course of activities associated with the exercise programs has resulted in overall improvement in the health conditions of blind older adults, but several substantial modifications were necessary to adapt the general model for a blind and disabled population.

Progress Toward Objectives

A. Implementation and Results

1. For each objective listed above, summarize your accomplishments, including project outcomes and (if known) project impacts. Describe the nature and size of the population served and how this population was affected. Please discuss progress made as defined by the self-assessment criteria and measures indicated in your proposal.

Note: "**Outcome**" is used here to mean the result(s) of the project, as observed and documented by the project staff. For example, two outcomes might be that: (1) 20 people complete a training program for vision para-professionals and (2) 16 of these 20 obtain vision rehabilitation jobs in schools and community-based agencies. The word "**impact**" is used here to mean a change in the target population that is directly attributable to the project (over and above any change(s) that would have been expected even without the project).

Program Goals

1) VISIONS will introduce two new evidence-based programs for participants at VISIONS Center on Aging (VCA). Each Program will be offered for 12 weeks, at least twice over the period of the project. The two programs are "Walk with Ease" (WALK) and "Active Living Every Day" (ALED).

2) At the conclusion of two years, there will have been four 12-week sessions that will have included over 100 participants and fully completed by 50-60 seniors. This is the interim report for the first year, for 25 registered participants for each program, and completed by 12 to 15 seniors for each program. Up to 30 seniors will be recruited to

participate in the WALK program, of which half are expected to complete the full program.

3) Lifestyle changes will include increased physical activity and balanced eating, to forestall obesity, heart disease, depression and other chronic ailments.

Goal 1 - VISIONS will introduce two new evidence-based programs for participants at VISIONS Center on Aging (VCA). Each Program will be offered for 12 weeks, at least twice over the period of the project. At the conclusion of two years, there will have been four 12-week sessions that will have included over 100 participants and fully completed by 50-60 seniors. The two programs are “Walk with Ease” (WWE) and “Active Living Every Day” (ALED).

In 2015, two full sessions of the WWE program were completed, but the ALED program was postponed until the beginning of 2016. In 2016, two sessions of ALED were held, and a third WWE program was added to the schedule.

Goal 2 - Up to 60 seniors will be recruited to participate in the WWE program, of which half are expected to complete the full program, and up to 50 seniors will participate in the ALED program, of which half will complete the program.

For 2015, 44 Walking Warriors began the WWE program with 41 completing the Program: 90% completion. In 2016, 56 seniors participated at least once and 41 completed the program, for a total of 110 participating and 82 completing the program, 75% completion rate.

The ALED program was not begun until 2016, in which two sessions were offered. For the two sessions, 61 participated at least once, while 25 completed the program.

By the end of the two years, 171 seniors participated at least once in one or the other exercise programs, and 107 completed the programs, a 63% completion rate.

Interestingly, the more physically challenging exercise program – WWE, proved to be more popular than the discussion based ALED program which required more workbook study and home life implementation than the WWE program. It was also more difficult to encourage home practice of ALED than WWE. People just like to walk, including blind seniors.

Goal 3 - Lifestyle changes will include increased physical activity and balanced eating, to forestall obesity, heart disease, depression and other chronic ailments

WWE

At the end of the 2x-weekly, 6-week program, the multi-challenged, visually-impaired participants enthusiastically expressed their gratitude for the opportunity to increase walking endurance, joint mobility, cardiovascular health, general sense of well-being, and breathing capacity. They reported a positive impact on their ability to tolerate stretching, strengthening and walking activities at home, decreased depression and

sense of isolation, reduced physical pain from cardio-respiratory and other physical limitations. This positive outcome for these challenged seniors can be attributed to the accommodations implemented during the WWE program. They each received a talking pedometer to take home.

After 6 weeks of program, 17% have increased their walking to 1-2 days per week, 50% have increased their walking to 3-4 days per week, and 33% have increased their walking to more than 4 days per week

75% of participants stated that on the days they walked, they walked more than 20 minutes, and 25% said 16-30 minutes

100% report that walking has improved their overall fitness

ALED

ALED was measured by assessing the stage of change for each participant. Participants are asked to complete an Assessing My Stage of Change form during session 1, 7 and 12. This form determines what stage of readiness to change is for each participant. The stages are as follows:

Precontemplation: Not even thinking about a new habit

Contemplation: Giving it a thought now and then, but not doing it. Doing it irregularly

Preparation: People in the preparation stage have decided to change their habits.

Action: Doing the new habit consistently but for less than six months

Maintenance: Maintaining the new habit for six months or more

78% of the participants were at the maintenance stage during the first session, as they were already engaged in some type of fitness program with VISIONS, 11% were at the action phase and 11% at the preparation phase.

After completing the course, 100% of the participants stayed or progressed up to the maintenance phase. The program has helped participants maintain healthy habits.

Based on the evaluations completed by the participants, 100% of the participants felt like they benefited from the course and 100% of the participants stated that they were more physically active now after completing the course. 100% felt that they have fewer barriers to physical activities and see more benefits to physical activity.

On average, participants increased physical activity by 30 minutes-1 hour each week by the end of the program.

Analysis of the Walk with Ease program

The Walk with Ease (WWE) program is a group and self-directed program designed for seniors to achieve reduction in pain and discomfort resulting from conditions such as

Arthritis; receive necessary cardiovascular exercise; and increase walking skills, endurance and stamina. The program developed by the Project Director at VISIONS was adapted for individuals who are visually impaired and/or blind, and in many cases also physically challenged, and was carried out in two separate sessions in 2016. Both sessions were conducted at VISIONS at Selis Manor in New York City. VISIONS paramount goals were increasing walking endurance and stamina, safety, group and social interactions and sharing, and individual success.

In addition to reducing pain from Arthritis, this unique program (unlike standard WWE programs for sighted seniors), addressed several other physical and medical challenges including: general standing tolerance, balance and gait inefficiencies, cardio-respiratory impact and breathing disturbances, the mobility effects of Parkinson's disease, Diabetes, Hypertension, Hearing Loss, Chronic Obstructive Pulmonary Disease (COPD), Coronary Artery Disease and other heart/cardiac ailments, Metatarsal Morton's Toe Syndrome, Sciatica, and other Peripheral Neuropathies, all of which are positively affected by an increase in physical activity, and particularly mobility endurance.

In addition, many psychological issues were addressed: decreasing reported depression related to aging and immobility; motivating participants to become more active physically and to share their personal concerns with other group members; building confidence and self-esteem in the ability to be physically active; and improving their overall health and attitude.

Many participants reported/demonstrated that they learned to increase their balance, strength, and endurance, and experienced reduced physical pain during the twice-a-week course of the 6-week program; increased their walking distance and speed; benefited from shared enthusiasm and support of the group; reduced their reported depression and feelings of isolation; gained the opportunity to share concerns and perceived obstacles with other group members and leaders; and enjoyed the rewards of "teamwork," new friendships, and motivation and encouragement from group leaders, trained staff guides and several specially-trained volunteer-guides.

Each WWE class session included:

- Group sharing of experiences and needs
- 3-min walking warm-up, indoors, to music for motivation
- 10-min designated indoor, guided stretches to prepare for walking
- 30-min (depending on ability) of closely supervised/guided outdoor walking
- 5-min Cool down, and follow-up supervised stretches, indoors
- A brief daily lecture, following the WWE protocols

These six-week lecture programs were designed by the Arthritis Foundation to educate participants in various health topics, and were led by Tressa Kern, OTR, the Project Director/ Licensed Occupational Therapist. They covered: awareness of physical challenges, and ways to reduce pain related to Arthritis; improving balance and gait stability, alignment and posture; increasing joint mobility; strengthening the heart and

lungs, and the knowledge of how to increase endurance, burn calories and control weight; reducing the risk of falls; increasing energy; and creating a plan for maintaining a self-directed walking program at home.

In addition, several psychological issues were addressed, such as depression, reducing stress and anxiety, emotional coping with vision loss, developing and improving self-esteem, addressing the fear of further vision loss, and adjusting to reduced access and freedom.

Analysis of Active Living Every Day (ALED)

The Active Living Every Day “ALED” Program is an evidence-based intervention that encourages life style changes to address physical inactivity and unbalanced eating, which often lead to obesity, heart disease, depression and other chronic ailments. This EBP incorporates weekly lectures and group discussions, and enables participants to choose activities and plans with which they are comfortable and able to perform to maximize participation and results. The program focuses on moderately intense activities that can be performed at the senior center and at home. Participants are supported through learning activities, online assessments, booklets, group interaction, and individual guidance.

This program is chiefly designed to motivate seniors to become more physically active and develop better dietary habits. Educational programs and tools for health and fitness were produced to help blind seniors improve their health and quality of life by adopting and maintaining healthy habits such as physical activity and balanced eating.

The program is designed for moderate levels and intensities of physical activities. They are beneficial lifestyle activities that provide good alternatives for people who don't or who are not suited for traditional fitness center based exercise programs. Topics included Setting Goals and Rewarding Yourself, Finding New Opportunities to be Active and Enlisting Support.

The program is a 12 week group based program with participants meeting once a week for one hour each. Seniors also completed lessons at home.

The ALED program was led by Joseph Flood, certified staff trainer who completed the required training, and was assisted by J. Travis Joseph, COTA, who was also certified in the ALED training and served as a backup instructor for the program. Tressa Kern, VISIONS Licensed Occupational Therapist supervised the program.

2. Based on your experience in implementing the project, were the expected project outcomes realistic? If not, why?

Yes

Have there been any unanticipated outcomes? What are they?

No

Were the planned strategies for each objective appropriate and effective?

Yes

What significant changes, if any, occurred in the project's staffing pattern (e.g., change in project leader)?

The only material change from the first year to the second is Travis Joseph, COTA, led the WALK program in Year Two, and Joseph Flood, Physical Trainer, led the ALED programs in both sessions. Tressa Kern remains the Project Leader. Elizabeth Lee, LMSW, Senior Director of Caregiver and Senior Services, and Carrie Lewy, MS Gerontology, Senior Center Director, monitor reporting and administrative aspects of the evidence-based programs and provided staff support when needed.

If you have requested or are requesting any changes in project objectives, activities, and/or budget, please describe the changes and explain why they are needed. (The Fund will then review and decide on the proposed changes.)

No changes have been requested or required.

B. Context

1. As necessary, describe major factors (either within or outside your organization) that either helped or impeded you in achieving the project goals. Examples might include a change in agency leadership or a change in the economic or funding environment.

1) In order for the participants to be safely monitored during the preparatory indoor stretches, all volunteers and support staff were trained extensively by the Licensed Occupational Therapist/Project Director in the correct technique of performing each stretch/exercise. It was anticipated that several individuals would require modifications of these stretches, and verbal cueing in order to accommodate their physical limitations, balance issues, impaired vision and proprioception (sense of position).

The Licensed Occupational Therapist and a trained assistant provided the instruction, supervised stretches both prior to and after outdoor walking sessions, and provided verbal instruction, demonstrations and physical reminders when necessary, since participants were unable to visually interpret the instructions. When providing instructions for visually impaired individuals, gentle hands-on instruction and physical modeling are frequently required. In addition, participants often demonstrated a habit of maintaining a head-down position, since they lack visual input; correcting this habit through repeated instruction contributed positively to maintaining erect posture, proper alignment, improved ability to maintain balance, increased distance and speed, and improving breathing quality and capacity, during walking sessions.

2) Since the grant award by the Lavelle Fund, VISIONS has received funding from the Fan Fox and Leslie R. Samuels Foundation for one year to introduce a third EBP program: Stay Active and Independent for Life (SAIL). This program is being

incorporated into the schedule of exercise programs offered for blind seniors at VISIONS Center on Aging. In addition, to meet the NYC Department for the Aging DFTA requirements, two other evidence-based programs are being introduced at the senior center.

3) VISIONS new database system became operational in 2016. The database has been used to track all participants involved in the EBP programs through assessments and outcomes.

4) As previously observed, several adjustments to the WWE program became necessary to accommodate blind seniors. The physical conditions that the exercise program is supposed to relieve, is often also an obstacle for multi-disabled, blind seniors, and several adjustments were required to meet these conditions. The materials provided by the Arthritis Foundation were often produced as videos or visual media, and had to be verbally described to the participants. Written materials were not available in formats that could be used by screen reading and magnification software. Staff needed to convert all materials to accessible format.

5) The nature of walking, while pleasurable and enjoyable by the seniors, was also often more physically taxing than they could comfortably endure. The length and duration of travel had to be adjusted based on the conditions of the individual. Some participants needed frequent rest breaks, and some required frequent monitoring of their pulse and heart rate. While some people were fully capable of performing the complete route with group supervision, most needed to be escorted by at least one staff or volunteer, which required more staffing than initially anticipated.

6) Similarly, the ALED program also required adjustments to accommodate seniors who are blind. Much of the material that is provided was in text form that needed to be translated into audio or large print formats. Videos that were provided had to be described to participants so they could understand the lessons that were being provided.

2. As necessary, please indicate what your organization has done to overcome any impediments.

The sponsors of the Walk with Ease (WALK) EBP did not consider the adaptations needed for written materials and video instructions that blind seniors require. Five WALK participants use dog guides. Several participants use assistive devices including prescribed long mobility canes and Rolators (3- or 4-wheeled walkers), and other devices to enable them to walk safely and independently, although many participants still required supervision as they were walking on unfamiliar streets and cracked sidewalks. There were no provisions for these factors in the training, and VISIONS project staff had to make all the accommodations for these circumstances.

The necessity to provide one to one escorts for such a large group of blind seniors walking in the city streets was an arduous administrative task that was unforeseen in

the planning process for the project. The requirement for such extensive personal assistance resulted in a decrease in the number of participants for the second session to enable better management, although the goals of the project for enrollment and completion exceeded expectations.

While there are definite advantages for staff to be properly trained to assist blind seniors with activities associated with extensive walking, this task did require considerable time and coordination, particularly for volunteers who needed to assist the participants during the walks. It is especially important for the staff and volunteers to be properly trained since some research has shown that increased walking could also cause increased falls. Improper posture, rushing, not paying attention, getting in the way of “walking while texting” pedestrians, bikers and other typical obstacles such as street barriers, construction, needed to be addressed.

Challenges Ahead

As with any new endeavor, especially one involving intense physical activity, there are inevitable difficulties. However, staff has been able to effectively manage and creatively resolve all the issues that arose. As VISIONS moves ahead with the second year of the Lavelle Fund grant, the WALK program is providing valuable lessons for the other EBPs that will follow.

It will be necessary to identify, recruit and train more volunteers. It will require careful attention to monitor the health and condition of participants, particularly those with cardiac and respiratory diseases.

In the second year, two sessions of the ALED program, and an additional session of the WALK program are scheduled. Per DFTA guidelines, going forward each program will be held twice weekly for six weeks for a total of 12 weekly sessions. This will not change the outcomes, but only accelerate completion of each exercise program,

Project Director's Critical Analysis

- A. What do you think are the most important outcomes, impacts and lessons learned from this project?

DFTA’s requirement to offer at least five evidence-based programs at the senior centers without any additional funding places an enormous burden on the staff at the centers, and to the budgets for operating the centers. Although recently VISIONS was awarded baseline dollars through the City Council to support EBP programs as a result of many months of discussions with DFTA. Nevertheless, more hours have been required from the fitness instructors, and some enjoyable non-EBP exercise and fitness programs had to be curtailed, angering the seniors that participated in those popular but not evidence based fitness programs. VISIONS staff has worked with the Senior Center Advisory Council to maintain the programs deemed most popular with the blind seniors and manage the anger and disappointment when favorite programs are cancelled. These results have been reported to DFTA and will continue to be discussed.

The most important outcome is that the blind seniors were able to improve and maintain healthy habits through these courses. While many of them were keeping up with healthy habits, they felt the class kept them motivated to keep active especially during the winter months where it is harder for them to go out. They were able to utilize the suggestions from the course on how to keep active at home such as doing chores, or moving around while watching TV or taking brisk walks. The EBP guidelines encourage participants that being active does not require long, strenuous hours but only 20 minutes per day of moderate physical activity. We have many participants who are frailer so it helps them keep active by doing non- strenuous activities. Participants found that rewarding.

Overall, I think that ALED program was not as popular as the more physically active program like WWE. A lot of material was repetitive and not having accessible materials for people to complete activities made it challenging for the staff and participants. We adapted the program by doing all the activities as a group out loud and all the take home assignments as a group. The other issue is that this ALED class does not lend itself well to repetition. There are strict materials that need to be reviewed each session, so a participant would not want to take this class more than once because they would be hearing the same information over again. There are not enough physical activities built in to keep our seniors coming back. Additionally, the materials are cumbersome and involve homework, which is not appealing to many of our seniors who would prefer a course that does not rely so heavily on visual materials. Although the seniors did benefit from the material, they did not give glowing reviews of that course to their peers, like they did with WWE, so we will have a hard time recruiting for the next session. With WWE, the class is so popular that we always have a wait list for the next session. That is not the case with ALED.

B. As necessary, please comment on how these lessons influenced your organization's work.

Several participants in both sessions were totally blind, and all others presented with low and impaired vision. Two participants had dog guides, several used red and white long mobility canes to enable them to travel independently, and one used a support cane in addition to a long cane, and two used Rollators (4-wheeled or 3-wheeled walkers). In addition, many of the participants required 1-to-1 guidance (Human Guide) when walking outdoors on city streets, regardless of the fact that they may otherwise be independent cane travelers. Human Guide technique is the universally-accepted technique to enable an individual with low vision or blindness to travel safely and efficiently with a human guide, in familiar and unfamiliar environments, and under varying conditions. This accommodation was necessary in order to ensure the participants' safety, especially at intersections, and when walking with a large group of other participants.

Some physically (and medically) challenged participants receiving Human Guide assistance, also required brief resting periods while walking, in order for staff to observe

regulated breathing, due to diminished cardio-respiratory capacity. This accommodation often resulted in a slower pace and shorter-distanced-goals for participants who were closely supervised and guided while walking, by the Licensed Occupational Therapist. A revised travel route was created, to accommodate the limitations of these individuals. Pulse was monitored periodically in order to determine the individual's heart rate, and the viability of increasing or decreasing walking pace and distance to be traveled. The creators of the WWE and ALED programs apparently designed them with "healthy" seniors in mind.

While participants enjoyed the discussion group, participants felt that physical fitness EB programs are more valuable at the center. This group, like all other EB programs, required our staff to spend additional time making the class accessible and enjoyable. Since this particular class was so laden with visual materials, extra sighted staff had to spend time working with our visually impaired instructor to make sure the materials were accessible for him as well, and much time went into transforming the class into verbal instruction and activities. This course made it evident to staff that EB classes that only have one element, without the option of offering sequential courses, are truly limiting for our center and participants. We do not doubt the importance of the material or lessons, but it will be hard for us to sustain a course like this that only offers one set of practice, and does not provide the same level of peer excitement that the WWE program offered.