



EVERYBODY LOVES
LINE
DANCING

RHYTHM & NOURISHMENT *from* AROUND *the* WORLD

Evaluation Report



INNOVATIVE
HEALTH
SOLUTIONS

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EXECUTIVE SUMMARY

Background

Older adults are a group that has historically been vulnerable. In California, almost a third of older adults experience a fall every year.¹ The 2019 Napa/Solano Older Adult Needs Assessment uncovered that isolation, lack of belonging/inclusion, inadequate advocacy, and insufficient funding all affect the older adult population. These issues are likely to affect older adults across California. A healthy lifestyle significantly impacts chronic conditions such as stroke, cardiovascular disease, and cancer. However, not all residents can equally attain this lifestyle.² The need is to expand community wellness programming to include culturally relevant classes for African Americans, Latinos, Asians, and members of immigrant communities and Indian Tribal organizations.

Line dancing is a long-established form of low-impact aerobic dance popular among older adults that does not require a partner. Research shows that dance, regardless of its style, can significantly improve muscular strength, endurance, balance, and other aspects of functional fitness in older adults.³ Line dancing is a popular exercise that can be modified and is thus feasible for older adults with mobility limitations.⁴ Furthermore, line dancing is an alternative exercise for older adults who need modifications due to mobility limitations. Line dancing incorporates cognitive and motor control, and it can be performed alone or in a group setting and improves balance, reducing the risk of falls. Studies show that most participants state that dance classes were an effective leisure pursuit that contributed to their successful aging.⁵ Participation in these programs has improved older adults' physical, emotional, social, and cognitive capabilities.⁶

The “Everybody Loves Line Dancing (ELLD): Rhythm and Nourishment from Around the World” is a six-week program that aims to promote optimal health for seniors and older adults in California. This program includes culturally relevant physical activity in the form of line dancing, social engagement and connection with others, and education about healthy and tasty recipes to provide tips on planning nutritious meals. The California Department of Aging funded the program through Napa/Solano Area Agency on Aging PSA-28. Innovative Health Solutions developed it in partnership with older adult centers, community centers, and older adult housing complexes, but potential partnerships can extend beyond these locations.

Evaluation Goals, Questions, and Indicators

An Impact Outcome Evaluation (IOE) was carried out to assess the changes in behavior in the locations where the ELLD pilot program interventions took place between October 2022 and July 2023. The aim of evaluating the ELLD curriculum pilot is twofold:

1. To provide data to be used for curriculum and program improvements
2. To establish the intervention as a best practice program for SNAP-Ed approval to be implemented in other communities.

A mixed methods approach was used to complete this study, which included pre- and post-tests for food behavior, physical activity, and social belonging. The process evaluation components comprised an organizational readiness assessment, a class participation tracking system, class observations, instructor input interviews, participant satisfaction surveys, and success stories.

The purpose of the assessment was to respond to the following questions:

- ***“Do participants of the ELLD program have improved food/nutrition behavior and physical activity after the 6-week program?”***
- ***“Do participants experience an increased perception of social belonging after the 6-week program?”***
- ***“Do participants feel they benefitted and learned something new from the ELLD program?”***

Using the following indicators:

Process Indicators

1. At least 50% of regular (attends >=4 classes) participants to complete both the pre- and post-surveys.
Achieved, 62%
2. 50% of attendees attend at least four classes in each series.
Almost achieved, 46%
3. 85% of pilot sites take the required number of pictures and videos.
Achieved, 100% compliance
4. 100% of observed classes either have “Justice for All” posters sign displayed or made available during the class.
Observed in 6/9=67% of sites
5. Each pilot agency will have at least one observed class for its two sites.
100% completed for all but 1 pilot agency
6. At least 85% of instructors complete the weekly feedback survey.
This survey was discontinued in favor of one final instructor input survey, with 100% compliance.
7. For 85% of the classes the following data points will be recorded for each class/series: total number of participants attendance by class and site, number pre-post-matched, maximum participation at single class and minimum participation at a single class.
Achieved, 100% compliance
8. At least one success story will be submitted from each county pilot site for a total of five success stories.
Almost achieved, 86% compliance
9. At least 30% of the participants will complete the *What do you think of Everybody Loves Line Dancing classes?* Questionnaire.
Achieved and surpassed, (357/546 = 65%) participant satisfaction surveys completed
10. A final curriculum is developed based on pilot project data.
In progress as of Spring 2023, to be completed by Fall 2023

Outcome Indicators

1. The proportion of participants who have improved food behaviors on each of the eight questions on the Food Behavior Checklist.
Drink sports drinks or punch: 15% (with improvement), Drink regular soda: 7%, Fruit eaten per day: 28%, Vegetables eaten per day: 24%, Different kinds of fruit daily: 17%, Different kinds of vegetables daily: 20%, Read nutrition facts: 16%, Run out of food before month end: 8%
2. The proportion of participants who have increased physical activity for each of the three physical activity questions on the Adult Physical Activity survey.
Days exercise a least 30 minutes: 32% (with improvement), Strength workout days: 32%, Small changes to be more active: 24%
3. The proportion of participants who have an increased perception of social belonging.
Lack companionship: 22% (with improvement), Feel left out: 16%, Feel isolated: 20%, Attend meetings of organized group: 50%, Attend religious services: 9%, Socialize with friends and relatives: 35%, Socialize with neighbors: 22%, Volunteer: 22%
4. The proportion of participants who felt they have benefited and have learned something new from ELLD.

92%
benefited

76% feel accomplished having learned line dances

Findings

KEY FINDING #1:

Existing organizations that serve seniors are generally strongly receptive to offering line dancing classes, and barriers to offering them are low. Once programming is implemented, most will continue offering line dancing classes.

“The class has been a hit here in Benicia and is always full of 40-45 participants. We are lucky to have great partnerships and be able to add to our already great classes for our aging community.”

– Organization Quote

KEY FINDING #2:

Line dancing classes are more popular among older adults than traditional programming, as attendance rates for these classes are higher.

Over the course of the pilot program, there were 24 six-week class series, totaling 144 classes, held at 12 different locations. Overall, 549 individuals participated in the program, with many individuals coming to more than one series of classes or even attending at multiple sites. The largest attendance at a single class was 54 people, while the average attendance per class was 19 people. Demographically, the program served a diverse group of individuals, with a majority being older adult women. There was also a range of racial and ethnic backgrounds represented among the participants, with high participation (28%) from Black/African American women.

KEY FINDING #3

Line dancing was the crux of the success of this program. Future programming may consider switching up, scaling down, or altering the nutrition and reflection components of the curriculum.

While 100% of observed classes provided some sort of nutrition education, all the nutrition and recipe discussion questions were not always asked as outlined in the curriculum. The majority of classes spent 10 minutes or less on nutrition education, and instructors recommended that it is better to keep it simple and just mention one nutrition topic. The assessment and reflection questions were often skipped. Levels of engagement (scale of 1 to 5, 5 being highly engaged) in each of the three curriculum components, as evidenced by observation data and instructor input interviews, were as follows:

COMPONENT	PARTICIPANT ENGAGEMENT
Line Dancing	4.8 (Highly Engaged)
Nutrition Education	3.82 (Neutral to Engaged)
Assessment and Reflection	3.5 (Neutral to Engaged)

KEY FINDING #4

There was a moderate improvement in food behaviors and physical activity, but a significant improvement was observed in the participants' feelings of social belonging.

At the end of the program, 226 APAS/FBC matched surveys were collected. The results of those surveys show 28% of the participants reported consuming more fruit per day, while 24% ate more vegetables. Although not significant at the .05 level, the results were close with a P-value of 0.08, showing promise despite nutrition not being a major component of the program. Almost one-third of the participants improved the frequency of their exercise routines for at least 30 minutes, and strength workouts, while nearly one-fourth increased their intentional small active changes. However, these results were not significant at the .05 level. Statistically significant results were seen in the attendance of organized group meetings, with 50% of participants reporting an increase, and in socializing more with friends and relatives, with 35% of participants reporting an increase. Additionally, 20% of participants showed improvement in how often they felt isolated from others, which was also significant at the P=.05 level.

KEY FINDING #5

There were several success stories from the program.

A few examples include:

SACRAMENTO COUNTY

Participant 1 is overweight, has Chronic Obstructive Pulmonary Disease, must be connected to an oxygen tank while walking around, and uses a walker. She was nervous about joining the *Everybody Loves Line Dancing* class offered at her apartment complex but decided to do it because she needed to get physical activity and learn more about nutrition.

Participant 1 commented about her experience:

“The class was awesome. It was a great learning experience and helped me get into shape physically and learn about nutrition labels and how to read them. We started great and got better. We had more fun as each class started. We look forward to this class every week. I do hope they offer this class again. I hope every older adult gets to experience this class.”

She took the 6-week class twice, and in the last three classes, she could do the line dances without her walker.

NAPA COUNTY

Participant 2 is a widow and a retired nurse assistant. She has always been very busy and worked long hours. Once she lost her husband, retired from work, and was isolated during COVID, she longed to be with others and have a good time. She physically feels great, but the social and emotional piece is where Line Dancing and other classes help her feel better. She knows that dancing helps lift her mood, keeps the depression away, and improves her quality of life. She knows how important exercise and music can be as therapy. She has attended other dance classes but has felt left out during the couple's dance styles. With line dancing, she does not need to have a partner.

SOLANO COUNTY

Participant 3 has vertigo, so you'll often find her at the back of the class where she can sit down in a chair if she needs to take a break or be near a table so she can steady herself if she feels uneasy. However, in her words:

*“Everybody's got something;
you can't let it limit you.”*

She takes the class a little at a time, does what she can, and most importantly, just has fun with it.

KEY FINDING #6:

Participants overwhelmingly claim the class benefited their overall health, and they learned something and had fun in the process.

The vast majority of attendees found the course to be highly beneficial for their physical and mental health, with 92% rating it as “Beneficial” or “Very beneficial”. Additionally, 96% of participants rated the course as “Fun” or “Very fun”. Over 75% of attendees felt a sense of accomplishment as they learned new dances and met new people during the class. The most common suggestion for improvement was to offer more classes, with a desire for multiple sessions per week, more days, and longer durations.



Joseph Nelson Community Center, Solano County, Fall 2022

Limitations

While conducting the pilot project, several limitations were observed, such as delays in the timeline, survey limitations due to “survey fatigue,” challenges in collecting data, maintaining the curriculum fidelity with a new curriculum, and occasional difficulties in locating and retaining instructors (one instructor had an injury) and stable locations for conducting six-week classes.

Conclusions and Recommendations

Process indicators were achieved to a high degree, suggesting the instructors, students, and evaluation team collaborated effectively to carry out the goals of the pilot project. The pilot project functioned as intended, providing helpful information for process improvement and future iterations of ELLD.

Outcome indicators showed some improvement in food behaviors and physical activity, with more marked improvement in measurements of social belonging. Given social belonging is such an important thing to promote in seniors and older adults, further implementation of this programming could be of benefit to additional seniors in other areas of California. Furthermore, participants' and instructors' positive feedback and success stories suggest that continued implementation of this type of programming is desired.

In order to implement the ELLD program in other locations, it is recommended to allow at least a year for the program to establish a following among potential participants. Seniors tend to rely on word-of-mouth communication, which can be a slow process. Additionally, it is important to recognize that funding and resources may have different timelines, so plan accordingly and remain flexible when seeking funding sources.

It's important to stress the significance of evaluations for participants and instructors. However, to prevent survey fatigue, it's suggested to lessen the frequency and length of surveys whenever feasible. Additionally, it's crucial to maintain an organized and accurate data system. To save time, assessment and reflection questions can be eliminated, or instructors can have more flexibility to ask suitable questions or questions they have time for. To achieve maximum success in the program, it is recommended to concentrate on a straightforward nutrition topic and assign more time for dancing in class, which is the most popular aspect. Moreover, exploring new and creative ways to increase engagement in the nutrition education part of the class is recommended.

BACKGROUND

Project Need

The older adult population has always been vulnerable due to age. In California, almost a third of seniors experience a fall every year. The 2019 Napa/Solano Older Adult Needs Assessment highlighted issues such as isolation, inclusion, insufficient advocacy, and funding as problems affecting this demographic. These issues are likely to affect seniors across California. Chronic illness is the leading cause of mortality, accounting for 65% of the deaths of older adults. Before COVID, physical activity declined in older populations, leading to decreased muscle strength and increased risk of falls. While a healthy lifestyle can significantly reduce the risk of chronic conditions like cardiovascular disease, stroke, and cancer, not all residents have equal access to necessities. Furthermore, current programming needs to expand to include culturally relevant classes for African Americans, Latinos, Asians, and members of immigrant communities and Indian Tribal organizations.

A new six-week program called “Everybody Loves Line Dancing: Rhythm and Nourishment from Around the World” has been launched to promote culturally relevant physical activity through line dancing. The program offers classes that can be customized to include Country, Latin, Soul, or Filipino styles. In addition to line dancing, participants receive information about healthy and delicious recipes and tips for planning healthy meals. The California Department of Aging funded the program through Napa/Solano Area Agency on Aging PSA-28. Innovative Health Solutions developed it in partnership with older adult centers, veterans’ centers, community centers, and older adult housing complexes, but potential partnerships need not be limited to these types of locations.

Setting and Population

The intended audience comprises seniors and older adults living in different counties and jurisdictions across California. As the participants come from diverse backgrounds, this may involve differing levels of mobility, among other factors.

Stakeholders

We have considered a wide range of stakeholders to evaluate this program. It is especially important to involve members of the older adult and older adult population as they are most affected by the program and any changes that are made. We also recognize the value of collaborating with individuals and service providers who are already working with seniors, such as staff from Innovative Health Solutions, Leah’s Pantry, Solano Public Health, Older Adult Centers, Community Centers, Veterans Affairs, older adult housing complexes, Area Agency on Aging, Meals on Wheels, Healthy Aging Associations, and other potential partners.

The pilot agencies for the initial phase of this program were:

Area Agency on Aging Napa and Solano Area (PSA 28)
Innovative Health Solutions

Area Agency on Aging Diablo Region (PSA 7)
Meals on Wheels Diablo Region

Stanislaus County Aging and Veterans Services (PSA 30)
Health Aging Association

Sacramento Area Agency on Aging (PSA 4)

Logic Model

EVERYBODY LOVES LINE DANCING

A COMMUNITY WELLNESS PROGRAM

SITUATION: Older adults frequently encounter obstacles in maintaining healthy eating habits and physical exercise, which may lead to feelings of loneliness. Consequently, this can lead to subpar health results.

goal

Optimal health for seniors and older adults in California

Inputs	Activities	Short Term Outcome	Long Term Outcome
<ul style="list-style-type: none"> Educational materials Class venues Class instructors Support staff Recipes, food & water Other class supplies Community partnerships Program funding 	<ul style="list-style-type: none"> Produce/source educational materials Community outreach Identify and recruit participants Produce and refine curriculum Distribute materials and curriculum to teachers Train teachers Hold classes Conduct evaluation activities 	<ul style="list-style-type: none"> Seniors Have Healthier Food Behaviors Seniors Have Higher frequency of physical activity Increased perception of social belonging 	<ul style="list-style-type: none"> Seniors engage with the community and their peers Seniors' overall nutrition is improved Seniors' overall physical health and mobility is improved and impact of chronic diseases is reduced Seniors feel more connected and less isolated

CONTEXTUAL FACTORS: Language barriers, institutional attitudes and flexibility, economic and time factors, funding sustainability, and level of physical ability. Culturally sensitive classes for African Americans, Latinos, Asians, and members of immigrant communities and Indian Tribal organizations.

INDIVIDUAL OR GROUP	TITLE OR ROLE	RESPONSIBILITIES
Innovative Health Solutions	Evaluation Lead	Write Evaluation Plan, Oversee Implementation of Evaluation, Activities and Data Collection, Analysis with Interpretation of Data
Leah's Pantry	Evaluation Support	Assist with Evaluation Plan as Needed
Pilot Sites <ul style="list-style-type: none"> Contra Costa Stanislaus Sacramento, Placer Solano Napa 	Evaluation Activity Implementation	Conduct Data Collection On-Site

EVALUATION PURPOSE AND EVALUATION QUESTIONS

Evaluation Goals

Evaluation is a systematic approach to studying a program, practice, intervention, or initiative to understand better how effectively it achieves its intended goals. Evaluations help identify areas working well and areas that could be improved within a program.

One way to evaluate the effectiveness of a program is through a pre-and post-test. This type of assessment compares the participants' progress before and after the program to determine if the expected changes occurred. A standard test, survey, or questionnaire is given before the program starts (pre-test or baseline), typically during the first session of a series of sessions, and then again after a predetermined period or at the end of the program (post-test or end line), typically during the final session. This method allows for measuring the program's benefits to the participants and identifies areas for improvement in program delivery for future implementations.

The evaluation of the "Everybody Loves Line Dancing" (ELLD) curriculum has two main objectives: 1) to gather data to be used to improve the curriculum and program, and 2) to establish it as a best practice program for SNAP-Ed approval so that it can be implemented in other communities.

The Impact Outcome Evaluation (IOE) was carried out to assess the effectiveness of the ELLD program interventions in promoting behavior change at various sites. The study collected and analyzed quantitative behavioral data and qualitative feedback from participants to determine if the interventions resulted in the desired outcome. A process evaluation was also conducted to identify areas where the program design and delivery could be improved.

Evaluation Questions (Outcome)

This evaluation seeks to answer:

1. "Do participants of the ELLD program have improved food/nutrition behavior and physical activity after the 6-week program?"
2. "Do participants experience an increased perception of social belonging after the 6-week program?"
3. "Do participants feel they benefitted and learned something new from the ELLD program?"

EVALUATION METHODS AND LIMITATIONS

The pilot project underwent a comprehensive evaluation, including quantitative and qualitative components. The evaluation methods employed were thorough, mixed, and non-experimental. This report describes the seven evaluation components in detail, clearly showing the project's process and outcome evaluation. Results from each component are presented in the "Findings" Section of this report, and all survey instruments and tools are included in the "Appendices."

Evaluation Components

Organizational Readiness Assessment

The pilot site staff who participated were provided with an Organizational Readiness Assessment, which can be found in Appendix J. This assessment helped identify any obstacles to implementing the program on-site, as well as the chances of continuing line dancing classes and other strategies that were employed to make the program a success.

Class Participation Tracking

At the start of every class, a sheet for signing in (Appendix H) was handed out to all sites and classes. The participant lists were recorded in the Apricot 360 data management platform, and attendance was monitored both overall and for individual participants throughout the program.

Class Observations

The evaluation team set out to observe at least one class at all sites to ensure that they followed the designed curriculum, using the Everybody Loves Line Dancing Observation Tool found in Appendix F. The data from surveys were entered into a database and analyzed to identify trends and areas where we can improve our processes.



Joseph Nelson Community Center, Solano County, Fall 2022

Instructor Input Surveys

The ELLD instructors were required to complete two surveys to evaluate the ELLD curriculum (Appendix G.). These surveys suggested improvements and changes. The first survey, “Instructor Weekly Feedback Questions for Class #1-6,” was completed after teaching all classes for six-week sessions. The second “Instructor Feedback Questions survey” survey was conducted before the last class. All surveys were entered into the Apricot 360 database, and the results were thoroughly analyzed for trends and actionable ways to enhance the process.

Pre And Post Surveys

During each 6-class series, the Participant Data Card (Appendix A), Food Behavior Checklist (Appendix B), Adult Physical Activity (Appendix C), and Social Belonging (Appendix D) Surveys were given to participants at Class #1, #2 and #3 as pre-surveys, and at Class #5 and #6 as post-surveys.

These surveys were administered on paper, and Spanish language packets were made available if needed. Additional staff were present at the agency pilot sites’ classes #1 and #6 to oversee survey administration. Depending on class size, 2-3 staff members from the participating agency were scheduled to assist with administering the surveys.

The pre-and post-surveys were given at the start of class to ensure no one was missed, and the classes did not begin until participants had finished the surveys. Before the surveys were administered, all participants were informed about the importance of evaluation and the purpose of the surveys. Once the participants completed the surveys, the staff reviewed them to ensure a unique identifier was created, all questions were answered, and the writing was legible.

Matched pre and post-tests were compiled for the six-week curriculum for adults. The pre-and post-test instrument was developed from multiple validated tools related to mindful eating, cooking skills, and resource management food skills.

The survey responses were entered into Apricot 360, an online data management platform. Data were cleaned and prepped for analysis after the initial review for data entry issues and to align matched surveys. Then, the data were transferred to an Excel template provided by the California Department of Aging (CDA), which is used as a standardized means of capturing pre versus post-comparisons and assessing the statistical significance of those results.

The data were analyzed using statistical methods, including frequencies, means, and paired t-tests, to determine statistical significance at the $p < 0.05$ level. Each site received copies of the standard template report for their use and as needed for the CDPH's Program Evaluation and Reporting System (PEARS).

Success Stories

The pilot agencies involved in the program created success stories using a format of their choice. They also produced an "instructor's highlight" outlining the instructor's background, credentials, and teaching style.

Participant Satisfaction Questionnaire

At the end of every 6-week series, all participants were requested to fill out a survey to share their level of satisfaction and give feedback. The survey is located in Appendix E. Participants were asked to share their opinion on the class and how it benefitted them. The collected surveys were entered into Apricot 360 and analyzed to identify trends and areas for improvement.

Below, the process and outcome indicators are listed. The evaluation team carefully selected these indicators in partnership with the funder to conduct continuous quality improvement and measure the impact of the program.

Process Indicators

1. At least 50% of regular (attends ≥ 4 classes) participants complete pre- and post-surveys.
2. 50% of attendees attend at least four classes in each series.
3. 85% of pilot sites take the required number of pictures and videos.
4. 100% of observed classes either have a "Justice for All" posters sign displayed, or it is made available during the class.
5. Each pilot agency will have at least one observed class for its two sites.
6. At least 85% of instructors complete the weekly feedback survey.
7. For 85% of the classes, the following data points will be recorded for each class/series: total number of participants' attendance by class and site, number pre-post-matched, maximum participation at a single class, and minimum participation at a single class.
8. At least one success story will be submitted from each county pilot site for a total of five success stories.
9. At least 30% of the participants will complete the What do you think of Everybody Loves Line Dancing classes? questionnaire.
10. A final curriculum is developed based on pilot project data.

Outcome Indicators

Before and after the 6-week series, four indicators were used to evaluate and contrast the participants' food behavior, physical activity, social belonging, and intention to continue participating.

1. The proportion of participants who have improved food behaviors on each of the eight questions on the Food Behavior Checklist.
2. The proportion of participants who have increased physical activity for each of the three physical activity questions on the Adult Physical Activity survey.
3. The proportion of participants who have an increased perception of social belonging.
4. The proportion of participants who felt they have benefited and have learned something new from ELLD.

Limitations

During the course of this pilot project, several limitations were noted.

Timeline delays

It was expected to experience delays in the timeline. During the 2nd session in Sacramento's 2nd site, they encountered a delay caused by an instructor injury, which led to the need to find a new instructor and location. The two Napa sites also experienced delays due to difficulties scheduling the line dancing class alongside other activities.

Survey limitations

It is necessary to encourage instructors and students to be involved in the process to maximize the effectiveness of evaluation activities.

Students were primarily interested in maximizing their dancing time and became tired of taking surveys. A few student groups hesitated to provide demographic information and declined to participate. Additionally, there were difficulties with seniors creating their unique identifiers for tracking pre and post-test results. Explaining the concept of the unique identifier was time-consuming and challenging for those with hearing impairments. Some participants needed help with writing legibly in the small boxes provided.

Some difficulties were faced with specific survey questions that had to be removed. For example, the question "Have you ever taken this line dancing class before?" added to the Participant Data Card confused the participants as they were unsure which class was being referred to (e.g., whether it was referring to a single class or the series). The idea behind this question was to track new versus repeating participants since many of them had taken multiple series of the program. Instead, we followed repeating participants by their unique identifiers.

In the Participant Satisfaction Survey, Question #3's scale was not in congruence with Questions #1 and #2 initially, and this had to be edited part-way through to provide additional clarity. This limited the amount of data available for analysis for Question #3. Additionally, participants completing the Participant Satisfaction Survey found Question #5 to be unclear as they were not sure about the specific dance practice videos being referred to. This was because some instructors had their own videos.

Following the completion of a 6-week session, the weekly instructor survey was replaced with a single-process improvement instructor input survey to help combat survey fatigue. Additionally, a final interview with the instructors was conducted once the pilot site had completed all sessions.

The surveys used should be appropriate for the intervention. For instance, the Food Behavior Checklist (FBC) has a short and long version and is typically used for nutrition education programs that have four or more classes. Meanwhile, the Adult Physical Activity Survey (APAS) is used for physical activity programs with four or more classes. These surveys are frequently utilized in CalFresh Healthy Living/The CA Department of Aging-sponsored programs. However, some of the questions in the surveys may not directly align with the intervention's teachings and may not be very effective in gauging its impact; using survey questions that more closely matched the intervention could have shown better outcomes.

Data Collection

Managing and collecting data presented significant challenges, particularly with classes taking place across the greater bay area. Despite best efforts, it was only sometimes possible to oversee pre and post-test data collection as thoroughly as was desired. To address this issue, a pilot agency with a proven track record of administering the survey effectively was observed. Subsequently, a process where the pre- and post-surveys were collected either during the last class or at a different time that worked for both agencies was implemented. In instances where IHS staff could not attend classes 1 or 6, the participating agency collected the data twice without IHS staff. Furthermore, additional measures were taken to increase the number of matched pre and post-data.

The most feasible method for data collection preferred by the intervention population was paper-based. However, this resulted in evaluation staff being required to enter the data manually, leading to the potential introduction of errors. Furthermore, transmitting multiple paper forms between agencies and individuals has been challenging, with issues such as legibility and tracking being prevalent. The evaluation team has taken necessary steps to review surveys and, if not legible, not include them in the program. The team also used a centralized database to store and record all results, allowing for easy coordination among various staff members and a secure system for recording results.

Curriculum Fidelity

With the development of a brand-new curriculum, several limitations were encountered.

- Some videos were too advanced, especially the Latin videos, containing too many turns and spins.
- The curriculum content needed to be shorter to allow for timely absorption and implementation.
- The curriculum section for line dancing was only sometimes used by instructors. Most of the instructors were experienced line dancing instructors with their own set of pre-established dance routines. Conversely, the curriculum needed more information for the few new line dancing instructors about how to learn line dances to teach to students. A section on “If you have not taught line dancing before” is being added, with resources on YouTube to learn.
- Several implementing instructors expressed the need for more flexibility in the nutrition education section. They wondered what alternative activities could be offered if preparing a recipe was not feasible. To help instructors who are new to teaching nutrition, it was recommended that they take the Eat Fresh mini-course to gain more confidence in the subject matter.
- The reflection questions in the “Let’s Dance” section to be asked before line dancing were unsuccessful and not used after the second month.
- The “Assessment and Reflection” portion of the curriculum was unsuccessful and was deleted after the second month.

Finding and Retaining Instructors

Securing instructors who were experienced in teaching line dancing presented some difficulties. The success of the class greatly depended on having an experienced instructor. Unfortunately, one pilot site’s instructor got injured, and finding a replacement proved challenging. Locating an experienced line dancing instructor was a time-consuming process requiring much effort. The pilot sites had to make numerous calls and network extensively before they finally connected with a suitable line dancing instructor.

Finding and Retaining Stable Locations

Ensuring appropriate venues for conducting line dance classes presented considerable challenges. The space had to be roomy enough to accommodate all participants, and on occasion, the number of attendees had to be restricted to ensure their safety. Furthermore, the locations had to be accessible to individuals with various levels of mobility. Also, the selected rooms were often used for multiple other activities unrelated to ELLD, and scheduling conflicts did occur.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Findings

Various process and outcome evaluation indicators and tools were utilized throughout the evaluation process. These indicators are listed above, and the tools used included the Organizational Readiness Assessment, Class Participation Tracking and Cal Fresh Data Card, The Class Observation Tool, Instructor Input Surveys, Pre, and Post Surveys (focusing on Nutrition, Physical Activity, and Social Belonging), Success Stories, and the Participant Satisfaction Questionnaire. Below, the findings for each component, with indicator results intermixed, are presented.

Organization Readiness Survey

Between February and March 2023, 8 organizational readiness surveys were conducted with evaluation and pilot site staff from Stanislaus, Contra Costa, Greater Sacramento/Placer, and Napa/Solano. The pilot site staff consisted mainly of individuals in the “Organizational Management” role, although two individuals identified as Activity Coordinators (non-management). Seventy-five percent (75%) of respondents reported offering line dancing for 0-12 months, while the remaining 25% had been offering it for over 5 years. Additionally, 75% of respondents indicated that their organization was “strongly receptive” to offering line dancing classes.

According to the feedback from the pilot site staff, the primary obstacles to implementing line dancing classes are funding the program (37.5%) and locating a line dancing instructor (25%). Despite these challenges, the overall perception of barriers to offering the classes was minimal. Additionally, a few other potential barriers were mentioned, including low participation, liability insurance, and the organization’s decision not to offer the classes (mentioned by one respondent each).

The survey results indicate that 75% of organizations plan to maintain their line dancing classes. However, the remaining 25% expressed uncertainty due to financial limitations. Funding for the pilot classes came from various organizations, including the California Department of Aging CalFresh Healthy Living program, the Area Agency on Aging, and the Health Aging Association, each with varying degrees of availability and sustainability.

Commentary offered by the respondents about why they think ELLD is a success in their locations:

- “The class has been a hit here in Benicia and is always full of 40-45 participants. We are lucky to have great partnerships and be able to add to our already great classes for our aging community.”
- “This was a wonderful and successful program. It provided the residents with education on nutrition; they exercised both brain and body during the line dance instruction and socialization. The program and instructors were wonderful.”
- “It was such an excellent experience and a huge success! It was our very first time trying the line dancing class. We started in the small area, but the group grew, so we moved to a bigger area after a few weeks. The instructor was amazing and personable. The class was designed and presented so that EVERYBODY could participate in some form, which was very inclusive. We would love to see a longer, 10- or 12-week session being offered. Thank you for partnering with us; we enjoyed the class.”
- “The Suisun City Recreation Parks, and Marina Department has been offering an adult line dancing class for years and charges the participants. It is a popular class, but our organization was so happy when Innovative Health Solutions reached out about offering a free line dancing class for seniors. Coretta has been teaching the Soul Line Dancing class on Fridays since May 2022, and participants love her class. They are eager for the next session to start whenever there is a break. The class is great for both beginners and advanced line dancers. Soul Line Dancing is the most well-attended older adult program, and I hope to continue offering it. I also think it is important to have nutrition education and I appreciate Innovative Health Solutions for educating the class.”

Class Participation Tracking

The evaluation team inputted attendance and demographic data from classes into the Apricot 360 database to scrutinize engagement levels. Across 8 unique locations, they held 24 class series, each spanning six weeks, amounting to 114 sessions in all. The classes attracted a total of 2582 duplicated participants, including 549 distinct individuals, with numerous attendees participating in more than one class series or enrolling at multiple locations. The team collected 226 APAS/FBC Matched surveys during this process.

References

1. CDPH Injury and Violence Prevention Branch, Older Adult Falls Prevention Program Accessed September 26, 2023 <https://www.cdph.ca.gov/Programs/CCDCPHP/DCDIC/SACB/Pages/OlderAdultFallsPreventionProgram.aspx#:~:text=In%20California%2C%20falls%20cause%2041,departments%20and%2074%2C945%20were%20hospitalized.>
2. Napa/Solano Area Agency on Aging County Senior Health Needs Assessment, August 2019, Accessed September 26th, 2023. https://tcfor.catcp.org/userFiles/0_Napa%20Solano%20Senior%20Needs%20Assessment%20Report_Final_Aug2520191.pdf
3. Hwang, P. W., & Braun, K. L. (2015). The Effectiveness of Dance Interventions to Improve Older Adults' Health: A Systematic Literature Review. *Alternative therapies in health and medicine*, 21(5), 64–70.
4. Crystal G. Bennett & Madeleine E. Hackney (2018) Effects of line dancing on physical function and perceived limitation in older adults with self-reported mobility limitations, *Disability and Rehabilitation*, 40:11, 1259-1265, DOI: 10.1080/09638288.2017.1294207
5. Dawn Joseph & Jane Southcott (2019) Meanings of leisure for older people: an Australian study of line dancing, *Leisure Studies*, 38:1, 74-87, DOI: 10.1080/02614367.2018.1544655
6. National Council on Aging. Chronic Inequities: Measuring Disease Cost Burden Among Older Adults in the U.S. A Health and Retirement Study Analysis. Page 5, Figure 2. April 2022. <https://ncoa.org/article/the-inequities-in-the-cost-of-chronic-disease-why-it-matters-for-older-adults>