

## Problem

- Nationally, one-third of older adults fall each year, leading to 2.5 million injuries and more than 21,700 deaths per year
- In Florida, falls are the leading cause of injury death in residents 65 years of age and older
- Polk County lacks age-specific fall prevention and balance programs

## Purpose

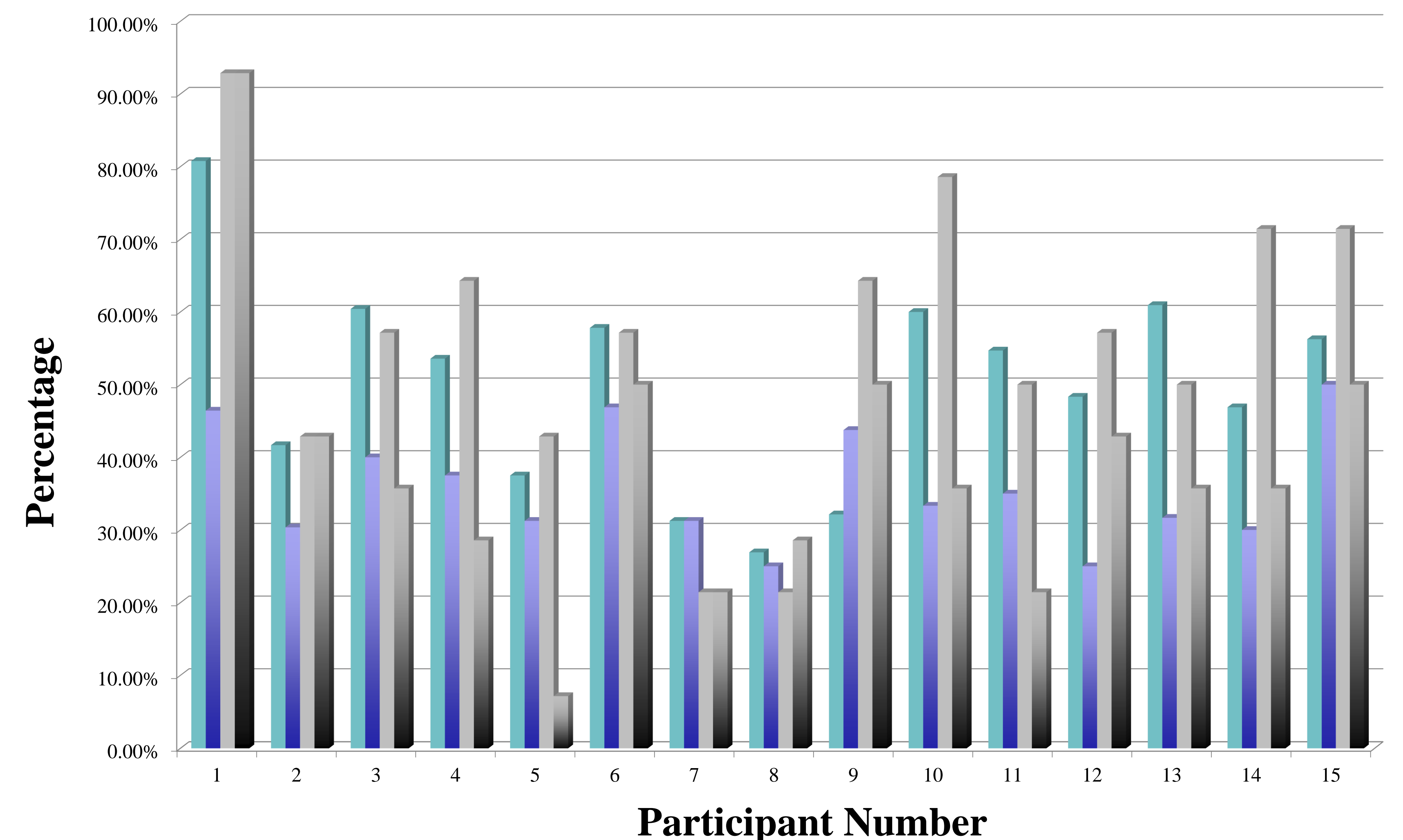
Decrease falls and fall risk factors by improving fall self-efficacy, ability to identify environmental fall risks, and strength, gait, and balance in frail homebound older adults in Florida

## Objectives

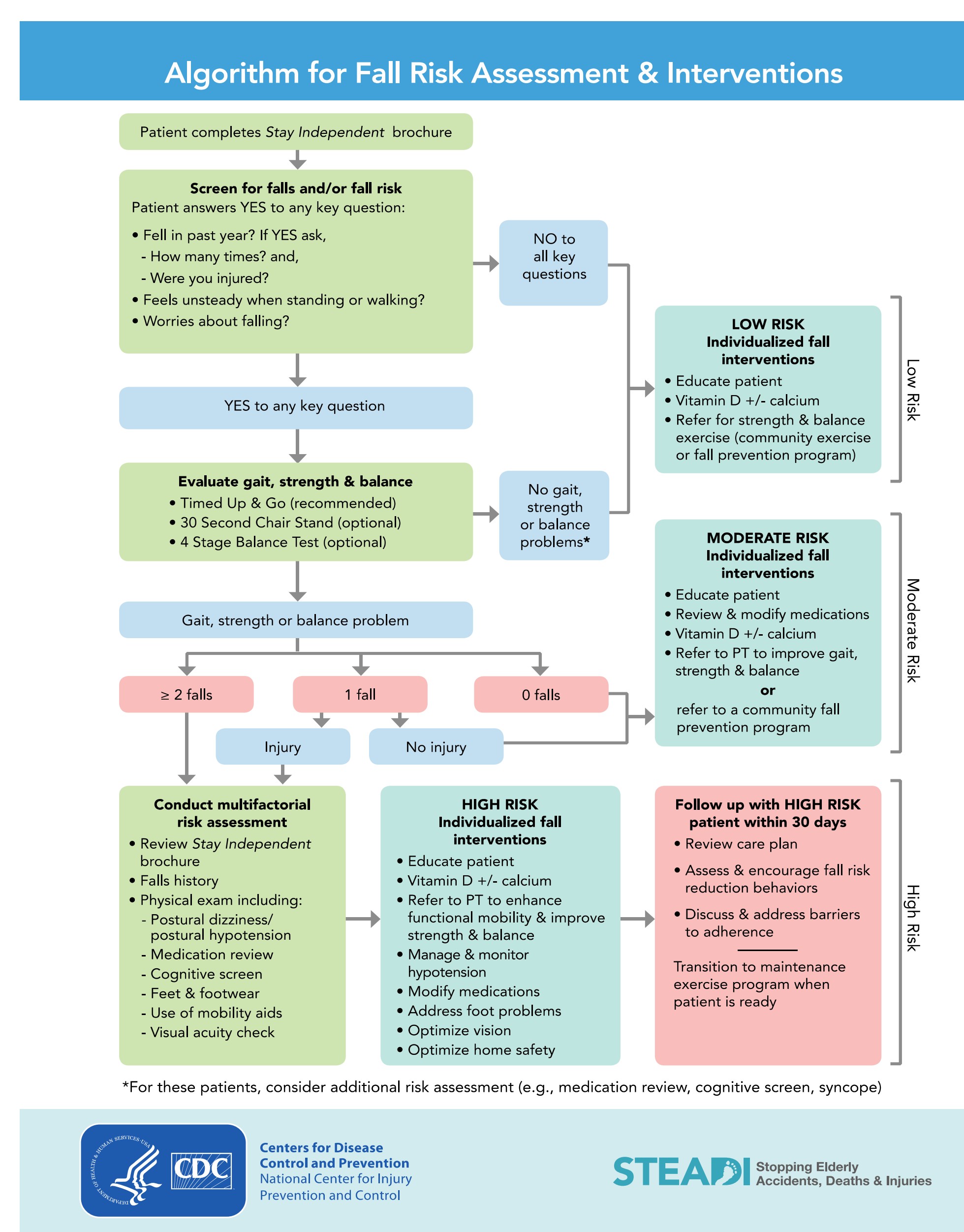
- Improvement in client fall prevention characteristics, including fall self-efficacy, ability to identify environmental fall risks, and strength, gait, and balance, in community home-bound older adults in the VISTE network.
- No falls and fall related injuries during the program or a 40% decrease in falls from the six months before enrollment in the program.
- Satisfaction from both volunteers and clients participating in the program

## Methods

- Multifaceted educational program focusing on common causes of falls, home assessment and modifications, and home exercise for balance and stability done over 16 weeks
- Evidence-based framework was the Centers for Disease Control and Prevention program, STopping Elderly Accidents, Deaths, and Injuries (STEADI) Algorithm for Fall Assessment (See figure)
- Week one: Pre assessments for fall risk self-efficacy, strength and balance, and environmental risks
- Weeks two to four: Determination of fall risk category and needed interventions and education using the STEADI Algorithm
- Week five: Client education on their fall risk category and risk-specific interventions. NIH Exercise and Physical Activity book reviewed
- Weeks six to nine: Began recommended exercises and fall prevention interventions
- Week eight: Follow-up call on exercises and interventions
- Week ten: Created exercise goal
- Weeks eleven to fifteen: Performed exercises and tracked progress
- Week sixteen: Post assessments completed



■ Initial FES-1 Total Percentage ■ Final FES-1 Total Percentage  
■ Initial Check Your Risk Total Percentage ■ Final Check Your Risk Total Percentage



## Setting and Population

- Volunteers In Service To the Elderly (VISTE), a non-profit organization in Lakeland, Florida, whose mission is to enable frail older adults to continue living independently and safely in their own home
- Study population: 15 older adults (6 males and 9 females) who were clients of VISTE hot meal deliveries living independently
- Average age was 82.4 years ranging from age 70 to 94
- All clients lived alone and scored at least a 5 on the Mini-Cog Cognitive Assessment and at least a 6 on the Lawton Instrumental Activities of Daily Living Scale

## Project Measures

- “Check Your Risk For Falling” self test
- “Check for Safety” Home Fall Prevention Checklist
- Timed Up and Go (TUG), 30 second chair stand, and 4 stage balance tests
- The Hartford Institute’s Fall Efficacy questionnaire FES-1
- Falls reported
- Likert scale client and volunteer satisfaction surveys

## Project Results

- 17.62% improvement in “Check Your Risk” scores
- 23.03% improvement in “Check For Safety” scores
- 2.34 second decrease in average TUG scores
- 0.93 increase in average number of chair stands for 30 second chair stand test
- Highest stage of 4 stage balance test remained the same at an average of stage 2.07
- 14.11% improvement in average FES-1 scores
- 50% decrease in falls from 8 total in the previous year to 4 total (1 with injury) during the 16 week program
- 97.33% client satisfaction with the program
- 73.33% of clients stated they felt stronger
- 66.67% of clients stated they felt their balance improved
- 80% of clients stated they felt their flexibility improved
- 95% volunteer satisfaction with the program

## Conclusion

- A multi-faceted fall education and intervention program is feasible and beneficial for frailer homebound older adults living independently in the community
- Fall prevention education can improve older adults’ self-efficacy regarding falls and aid them in changing their environment for safety
- Education regarding age-specific exercises and setting exercise goals can increase the frequency of exercise in older adults, making them stronger, with better balance, and more flexibility