



**Member Program:** EnhanceFitness

### **History:**

In 1994, researchers at the University of Washington Health Promotion Research Center (UW HPRC) and Group Health Cooperative (a health maintenance organization) collaborated with Sound Generations (formerly Senior Services) a non-profit community-based organization, to conduct a trial of a multicomponent disability prevention program. One hundred older adults were recruited for a 6-month study at a Washington State senior center. Evaluative measures showed that the intervention group significantly improved on several health-related and functional measures compared to the control group.

Following completion of the study, Sound Generations was chosen to hold the license for the program and oversee its dissemination to additional sites. Sound Generations' dissemination strategy has been to license, train, and support community-based delivery sites that adopt EnhanceFitness. In 2013, Y of USA was licensed as a national partner and in 2015, American Council on Exercise (ACE) collaborated with EnhanceFitness in development of an online continuing education program focused on chronic disease and safe exercise instruction for EnhanceFitness instructors. This strategy has been quite successful in balancing the need to maintain fidelity to the program's protocols with the mission to expand the program's reach in a sustainable way. (1)

### **Program Description:**

EnhanceFitness is an ongoing class, held three times per week in hourly sessions. Classes include exercises commonly used to build and maintain physical health in older adults – cardiovascular endurance work, dynamic and static balance movements, strength training, and stretching exercises. Strength training focuses on both the upper and lower body muscles, using soft cuff wrist and ankle weights. Cardio training can range from walking for 20 minutes to having 20 minutes of aerobic exercises, with (optional) music.

Classes are appropriate for near frail to more active adults with exercises adapted for those who are more frail. For example, exercises can be completed while sitting rather than standing. The class is led by a certified fitness instructor who also completes a 12 hour in-person training led by an EnhanceFitness Master Trainer. Class sizes depend on available space but are never larger than 25. Typical class sizes range from 10 to 15 participants.

### **Program Outcomes:**

The original research study (2) showed a:

- 13% improvement in social function;
- 52% improvement in depression;
- 35% improvement in physical functioning.

Members of the control group, who did not participate in the program, but who attended other senior center activities, deteriorated in these measures over the same period (2).

A 2013 retrospective study (3) found that:

- EF participation was associated with an estimated total medical cost savings of \$945 (95% CI: \$1,480, \$411)  $p=.05$ . Specifically, participants in an unplanned inpatient setting saw savings of \$545 (95%CI: \$817, \$272) and those in a skilled nursing facility setting saved \$139 (95% CI: \$276, \$3).
- EF participation helped decrease unplanned hospitalizations; one unplanned hospitalization was prevented during the outcome period for every 20-25 participants.
- Participants saw a decreased mortality rate; 1.4% versus 2.9% among controls.

A 2015 study Group Health Research Institute Study (4) found that:

- In fully adjusted Cox proportional hazards models, consistent (hazard ratio [HR], 0.74; 95% confidence interval [CI], 0.63–0.88) and intermittent (HR, 0.87; 95% CI, 0.8–0.94) EnhanceFitness participation were both associated with a reduced risk of falls resulting in medical care. Consistent use of EF was associated with the greatest reduction in risk of a medical fall, lowering risk by 20% to 30%.

#### **Program References/Recognition:**

- US HHS ACL Title IIID evidence-based Physical Activity and Fall Prevention program
- CDC Arthritis Program (CDC-AP) designated “arthritis-friendly” evidence-based intervention

1. Belza B, Snyder S, Thompson M, LoGerfo J. (2010) From research to practice: EnhanceFitness, an innovative community-based senior exercise program. *Top Geriatr Rehabil* 26(4):299–309.
2. Wallace JI, Buchner DM, Grothaus L, Leveille S, Tyll L, LaCroix AZ, et al. (1998) Implementation and effectiveness of a community-based health promotion program for older adults. *J Gerontol A Biolo Sci Med Sci* 53a(4):M301–6.
3. Report to Congress: The Center for Medicare and Medicaid Services’ Evaluation of Community-Based Wellness and Prevention Programs under Section 4202 (b) of the Affordable Care Act, September 30, 2013
4. Greenwood-Hickman MA, Rosenberg DE, Phelan EA, Fitzpatrick AL. (2015) Participation in Older Adult Physical Activity Programs and Risk for Falls Requiring Medical Care, Washington State, 2005–2011. *Prev Chronic Dis* 2015;12:140574.

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