

***Enhancing Fitness with EnhanceFitness:
An Evidence-Based Intervention
for Older Adults & People with Chronic Disease***

**Satellite Conference and Webcast
Thursday, January 26, 2006
12:00-2:30 p.m. (Central Time)**

**Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division**

Faculty

**Susan Snyder
Director**

**Brenda Barkey
EnhanceFitness Instructor**

**Project Enhance
Senior Services
Seattle, Washington**

Faculty

**Jon Ann Cruver
EnhanceFitness Site Coordinator
Shoreline/Lake Forest Park Senior Center
Shoreline, Washington**

**Teresa Brady
Senior Behavioral Scientist
Arthritis Program
Centers for Disease Control & Prevention**

Program Objectives

- Describe the basic components (how it is delivered, types of exercise) of the EnhanceFitness program.
- Identify the facility, space and equipment requirements for EnhanceFitness.
- Discuss the research demonstrating the effectiveness of EnhanceFitness.
- List the steps necessary to implement the EnhanceFitness program.

Project Enhance Ensemble

- EnhanceFitness
(formerly Lifetime Fitness Program)
- EnhanceWellness
(formerly Health Enhancement Program)

Project Enhance Ensemble

- Community-based health promotion programs designed for older adults.
- Evidence-based – proven to get measurable improvements in health and well-being of older adults.
- Powerful partnerships.
- Award-winning.

Presentation Overview

- EnhanceFitness overview
- Program attributes
- Performance measures
- Demographic and performance data
- Ongoing research
- Program requirements
- Program pricing
- Getting started – implementation steps
- Lessons learned and program successes

EnhanceFitness Beginnings

- 1994 Randomized Clinical Trial – University of Washington Health Promotion Research Center, Group Health Cooperative, Senior Services
- Six month study at Northshore Senior Center
- Class held 3 times/week, 1 hour sessions

EnhanceFitness Beginnings

Originally developed to transition participants from class to doing exercises at home.

Initial Study Results

- 90% completed 6 month program
- Significantly better scores on 7 of 8 SF-36 subscales compared to controls
- Fewer depressive symptoms than controls

What is EnhanceFitness?

- Turnkey package designed for ease of implementation, consistency, fidelity.
- Group exercise class, with exercises that increase strength, flexibility, balance and aerobic capacity.
- Ongoing, one hour classes, 3 times per week.
- Certified fitness instructors trained in EnhanceFitness protocols.

EnhanceFitness Class Format

- Warm-up (5-8 minutes)
- Cardiovascular workout (20 minutes)
 - Instructor determines intensity of workout based on participant ability
- Cool-down (3-5 minutes)

EnhanceFitness Class Format

- Resistance strength training (20 minutes)
- Flexibility (8-10 minutes)
- Balance training included in warm-up and cool-down
- Music typically provided by instructor

EnhanceFitness Attributes

- Accommodates all levels of fitness
 - Level I – seated version (for more frail adults)
 - Level II – standing version
- Instructor and site support
- Ongoing research
- Annual program review and modification
- Participant and program level outcome data collected, analyzed, distributed

EnhanceFitness Attributes

- Can be tailored for specific chronic diseases (e.g., arthritis)
- Multiple forms of exercise:
 - Cardiovascular conditioning
 - Resistance and strength training
 - Flexibility training
 - Balance and coordination

EnhanceFitness Attributes

- Successful partnerships
 - Aging services provider, (e.g., senior center, adult day care, continuing care retirement community)
 - Area Agency on Aging
 - Department of Health
 - Health care provider, (e.g., hospital, HMO)
 - University
 - Parks and Recreation Department

EnhanceFitness Attributes

- Functional fitness testing
- Data analysis
- Annual national/individual site reports
- Ongoing research examining effectiveness – dynamic program
- Scientific advisory board

Functional Fitness Testing

- Assess functional fitness of older adults for:
 - Identification of at-risk participants
 - Program planning and evaluation
 - Goal setting and motivation of participants

Performance Measures Collected

- Functional Fitness Test (Jones and Rikli, 2002)
- Baseline and each 4 months:
 - Up and Go (balance and mobility)
 - Chair Stand (lower body strength)
 - Biceps Curl (upper body strength)
- Optional tests: 6-minute walk, 2-minute step test, 1-leg stand
- Comparison to age and gender norms

EnhanceFitness Data Analysis

- Participant data collected
 - Baseline and follow-up performance measures
 - Demographic data
 - Satisfaction survey
 - Attendance
- Data analyzed yearly by site and comparing among all sites

Annual Site Reports

- Each EnhanceFitness site receives annual report detailing:
 - Baseline to follow-up changes
 - Baseline compared to others
 - Baseline to follow-up changes compared to others
- Other reports, as requested and time available

National Performance Outcomes 2005 (n = 403)

Test	Baseline Mean	Follow-Up Mean	Result
Up and Go (sec)	7.9	7.3	Significantly Improved
Chair Stand (#)	13.6	15.0	Significantly Improved
Arm Curls (#)	18.5	20.1	Significantly Improved

Demographic Comparison

Characteristic	1994 Study	2005
Age (mean)	71.1	76
Gender (% female)	70%	75%
Race (% white)	99%	60%
Marital Status (% married)	55%	35%

Expanding the Evidence

- 2003 Group Health Cooperative Cost Analysis
- 2003 Fit for Life Pilot Study
- 2005 Communities of Color Analysis
- 2005 Senior Falls Prevention Program

Expanding the Evidence

- Current projects
 - Arthritis in Focus, Portland, Oregon (University of Washington)
 - Arthritis Benefits of a Physical Activity Program in W. Virginia (West Virginia University)
 - Florida International University, Miami
 - Fit for Life, Los Angeles, CA (UCLA)
 - Ethnic Participants Experiences (UW Graduate Students)

Group Health Cooperative (GHC) Cost Analysis

GHC Medicare EnhanceFitness participants:

- Average increase in annual total health costs less in participants (\$642) compared to non-participants (\$1,175)
- 6% cost savings for once per week participants
- 21% cost savings for 2+ week participants

Fit for Life Pilot Study

- Sedentary older adults from 3 senior centers in LA.
- Weekly facilitated group discussions + 1 hour EF.
- Main outcome: steps per week measured by digital pedometer.
- In 4 weeks participants successfully raised and sustained walking levels.
- Efficacy of intervention currently being tested in NIA-funded RCT among 600 sedentary older Latinos.

Comparison of Sites Serving White Communities and Communities of Color

Participants of color (n = 236) compared to whites were:

- Younger
- Report ↑ pain
- Poorer self-rated health
- Less strength

Comparison of Sites Serving White Communities and Communities of Color

Participants of color :

- Significantly improved upper and lower extremity strength at 4 months
- Greater improvement than whites

Program Requirements

- Facility
- Equipment
- Instructor
- Licensing
- Training
- Monitoring

Facility Recommendations

- Wooden floor with air space underneath
- Room temperature of 68-72 degrees
- Area that does not echo
- Enough space for participants to move around comfortably
- ADA accessible

Equipment

Class equipment:

- Adjustable ankle and wrist weight cuffs
 - Typical class has: 18 one- to five-pound weights; 15 ten-pound weights; 1 twenty-pound weight
- Sturdy, straight-back, armless chairs
 - Level 1 uses chair with arms

Equipment

Performance Measure Equipment:

- Stop watch
- Five-pound and eight-pound hand-weights
- Tape measure
- Cone (or garbage can or large water bottle)

Instructor Requirements

- EnhanceFitness Instructor Training (One and one-half days)
- Nationally recognized fitness instructor certification
- Current CPR certification

Instructor Requirements

Skills and Experience (preferred, not required)

- 2 years group exercise leader experience or background in exercise science, physical education or related health field
- Knowledge of older adults' needs and issues
- Basic motivational techniques
- Attendance at annual EnhanceFitness workshop

National Fitness Certifying Organizations

- American College of Sports Medicine (ACSM)
- American Council on Exercise (ACE)
- YMCA
- Aerobics & Fitness Association of America (AFAA)
- American Senior Fitness Association (ASFA)
- National Strength & Conditioning Association (NSCA)

Cost Effective Licensing and Training

- Licensing
 - Year One EnhanceFitness license
 - Year Two and beyond renewal options

Cost Effective Licensing and Training

- Training options
 - EnhanceFitness instructor training
 - National Fitness certification by EnhanceFitness Trainer (YMCA)
 - EnhanceFitness Training of Trainer (TOT)

Year One Licensing

(As of January 1, 2006)

- Pricing - \$3,000 (includes one site)
 - \$1,000 for each additional site
- Package includes:
 - Two day EnhanceFitness instructor training
 - Instructor manual, participant guide and video tape or DVD
 - Data collection forms
 - Data entry, analysis, and reports

Year One Licensing

(As of January 1, 2006)

- Package includes:
 - Annual site and national program reports
 - Link to Project Enhance website
 - Marketing materials
 - Program updates
 - Subscription to listserve
 - Attendance at annual workshop

License Renewal

(As of January 1, 2006)

- Pricing - \$300/site
 - \$100 for each additional site
- Package includes:
 - Data collection forms
 - Data entry, analysis, and reports
 - Annual site and national program reports
 - Link to Project Enhance website
 - Marketing materials
 - Program updates
 - Subscription to listserve
 - Attendance at annual workshop

Optional Training Available Through EF

(As of January 1, 2006)

- If instructor does not have national fitness certification:
- One-day YMCA Certification Training (\$600)
 - YMCA Healthy Lifestyles Principles is pre-requisite
 - Additional costs per trainee:
 - \$35 for text; \$15 for YMCA processing fee

Optional Training Available Through EF

(As of January 1, 2006)

EnhanceFitness Instructor Trainer Training (\$2,000):

- Trainer manual
- EnhanceFitness annual trainer workshop
- Listing on EnhanceFitness website as EnhanceFitness Trainer
- Program updates, including manual and marketing materials
- Subscription to listserve

Site Monitoring Recommendations

- Monitoring can be provided by:
 - EnhanceFitness trainer for \$300/day + expenses, or
 - Local trainer (who has received EnhanceFitness TOT)
- Monitoring form provided by EnhanceFitness

Site Monitoring Recommendations

- Monitoring schedule:
 - New EnhanceFitness instructor – trainer visit within 1-2 months of class begin date
 - If necessary, more visits for quality assurance
 - Experienced EnhanceFitness instructors – annually for first two years, then once every two years

Steps to Getting Started

- Develop your partnerships
- Determine sites/reach
- Negotiate and sign contract
- Recruit instructors and trainers
- Schedule and conduct instructor and/or trainer training
- Marketing program
- Register participants
- Complete demographic and performance measures
- Begin class(es)!

EF Dissemination

2005 - 100+ Sites



Dissemination Lessons Learned

- Planning prior to implementing classes is imperative to assure program success.
- Community-based group exercise classes can improve functioning in communities of color; tailor to the community/setting/population.
- NCOA Diffusion of Innovation Tool helpful in evaluating sites capacity, willingness and resource needs for implementing EF.

Dissemination Lessons Learned

- Maintain fidelity but allow local adaptability.
- Develop program champions – participants, funders, researchers, and health care providers.
- Ongoing training of instructors critical to program fidelity

Dissemination Successes

- Stronger, healthier, engaged participants.
- Strong academic-community partnerships, enthusiastic and competent research teams.
- Excited, passionate, and committed instructors and staff.
- Sites with new members and more physical activity options.

A Participant’s Testimonial

“This program is my lifeline. I came here on the recommendation of a physical therapist while undergoing treatment for knee problems, a broken ankle and arthritis.

The improvement has been remarkable. I can once again walk 2 or 3 miles with no difficulty . . . In fact, I am in better shape than some of my friends who are 15 years younger.”

Doris M., age 69

EnhanceFitness Awards

- Washington Coalition for Promoting Physical Activity, Award for Outstanding Achievement in the Promotion of Physical Activity , Community Based Program, 2005
- US Health and Human Services Secretary’s 2005 Innovation in Prevention Award, Non-Profit Category
- US Administration on Aging You Can! Program Champion, 2005

EnhanceFitness Awards

- National Council on Aging One of Ten Exemplary Physical Activity Programs for Older Adults in USA, 2003
- Northshore Senior Center (SWP Pilot Site)
- National Council on Aging/National Institute of Senior Centers’ 1999 Research Award.
- Website: www.projectenhance.org

EnhanceFitness Citations

- Wallace JI, et al. (1998). Implementation and effectiveness of a community-based health promotion program for older adults. *Journal of Gerontology: Medical Sciences*, 53a(4): M301-M306.
- Ackermann RT, et al. (2003). Community exercise program use and changes in healthcare costs for older adults. *American Journal of Preventative Medicine*, 25(3): 232-7.

EnhanceFitness Citations

- Moore, T.L., McCamey, M.A., Johnson, M.A., Quinn, M.E. and Cress, M.E. (2004). An Evidence-based exercise program can be implemented in a community of underserved elders. *Medicine and Science in Sports and Exercise*. 36(5):S193.
- Snyder S, Belza B. (2005). Eliminating disparities in communities of color through the Lifetime Fitness Program [abstract]. *Preventing Chronic Disease* [serial online] 2005 Apr.

EnhanceFitness Contact Information

Telephone: 206-727-6219

**Email:
projectenhance@seniorservices.org**

**Website:
www.projectenhance.org**

For More Information

**Teresa J. Brady, PhD
Senior Behavioral Scientist
Arthritis Program
Centers for Disease Control & Prevention**

**Email:
tob9@cdc.gov**

**This program was sponsored by
The Centers for Disease Control
and Prevention
Arthritis Program.**

**Funded by the CDC through
a Cooperative Agreement to the
Directors of Health Promotion and
Education.**

**For a complete list of upcoming programs,
go to the**

**Alabama Public Health Training Network
web site at**

www.adph.org/alphntn

Produced by the

**Video Communications
&**

Distance Learning Division

Alabama Department of Public Health

(334) 206-5618

alphntn@adph.state.al.us

January 26, 2006