



# IMPROVING PHYSICAL FITNESS THROUGH EXERCISE DESIGNED FOR KŪPUNA IN HAWAI'I

## KEY FINDINGS

- Group exercise programs can improve physical fitness in older adults.
- Long-term participants in Enhance®Fitness improved at 4 months and 8 months in measures of upper- and lower-body strength, agility, and mobility (Figure 1).
- These improvements were maintained at 12 months (Figure 1).
- In addition to attending Enhance®Fitness, physical performance at 12 months was significantly associated with younger age, fewer chronic conditions, living with others, and having more social support.
- Native Hawaiians and Japanese elders were less likely to drop out than Caucasian elders.



## Enhance®Fitness

Enhance®Fitness is a low-cost, evidence-based, group exercise program designed for older adults (60+ years) to improve physical performance. The Hawai'i Healthy Aging Partnership (HHAP), a statewide health promotion initiative, tailored the program to Hawai'i's kūpuna and has offered it since 2007. <http://hawaiihealthyaging.org/>

HHAP operates programs in all four counties. More than 1,202 kupuna enrolled in Enhance®Fitness between 2007 and 2019.

## Purpose

We examined the 12-month impact of on physical performance among older adults participating in Enhance®Fitness in Hawai'i.

For this study, we looked at the fitness data for the 437 participants that were continuously enrolled in Enhance®Fitness for 12 months

# Long-term participants in Enhance® Fitness improved at 4 months and 8 months in measures of upper-body strength, lower-body strength, agility, and mobility. Improvements were maintained at 12 months (Figure 1).

## Seniors Improved Upper-Body Strength

The arm-curl test was used to test upper-body strength. We recorded the number of times the participant lifted a weight (5 pounds for women and 8 pounds for men) in 30 seconds. Seniors improved! See “Arm Curl” photo and Figure 1.



## Improved Lower-Body Strength

The chair-stand test was used to test lower-body strength. We recorded the number of times the participant moved from sitting to standing in 30 seconds. Seniors improved! See “Chair Stand” photo and Figure 1.



## Seniors Improved Agility and Mobility

The up-and-go test was used to test agility and mobility. We recorded the number of seconds it took for a seated participant to stand, travel 8 feet, round a cone, return to the chair, and be resealed. Seniors improved! See “Up & Go” photo and Figure 1.

**Figure 1:** This graph shows averages (dots) and margins of error (vertical lines) for arm curls, chair stand, and up-and-go tests before starting Enhance® Fitness and then after 4, 8 and 12 months. We know that improvements are real when the statistical p-values are below .05.

