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# Short-term multifactorial program with goal setting and feedback improves frailty in community-dwelling older adults A retrospective study

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Supporting older adults with frailty is a global challenge.

### What is already known

Age-related decline, and limitation in performance of everyday activities resulted in frailty. Multifactorial programs are known to be effective for improvement in frailty status.

### What is unknown

However, gain in frailty improvement and functional capacity do not always translate in to improved **daily activity**.

### Purpose

This gap suggests that older adults may need additional support to put their improved abilities into practice in daily life.

To examine the effectiveness of short-term multifactorial program with goal setting and feedback on the frailty and independent living

Introduction

Methods

Results

Discussion

Conclusion

### Study design

Retrospective analysis

### Setting

Single Center in Japan

### Period

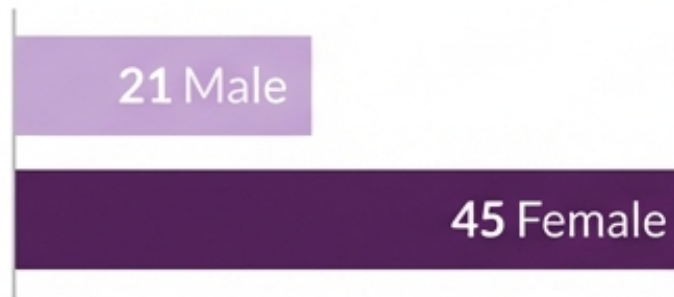
July 2019-March 2024

## Participant profile (n=66)

82.3

### Age

Average ( $\pm$  6.3 yrs.)



### Gender

68.2% female



### Living situation

22 participants  
living alone



**Multifactorial Program with goal setting and feedback**

**Participants:**

**Goal Setting**

Exercise, nutrition, oral supports (1/week 1.5 hours)

**Weekly Feed back** (20 min.)

**Self-Management** in their lives

**Therapists:**

**Goal Setting**

Exercise, nutrition, oral supports (1/week 1.5 hours)

**Weekly Feedback** (20 min.).

## Process Measures

### Behavioral Engagement



Defined as the percentage of days per week the participant performed planned activities in their daily lives.

**e.g.** walking around the park 10 participating in weekly Karaoke, & going to grandchild's house in weekend



**4 / 7 days = 57.1%**

## Outcome Measures

### Frailty Status

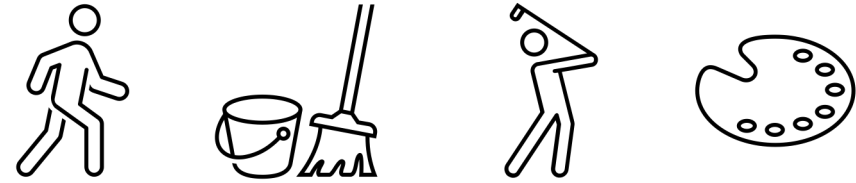
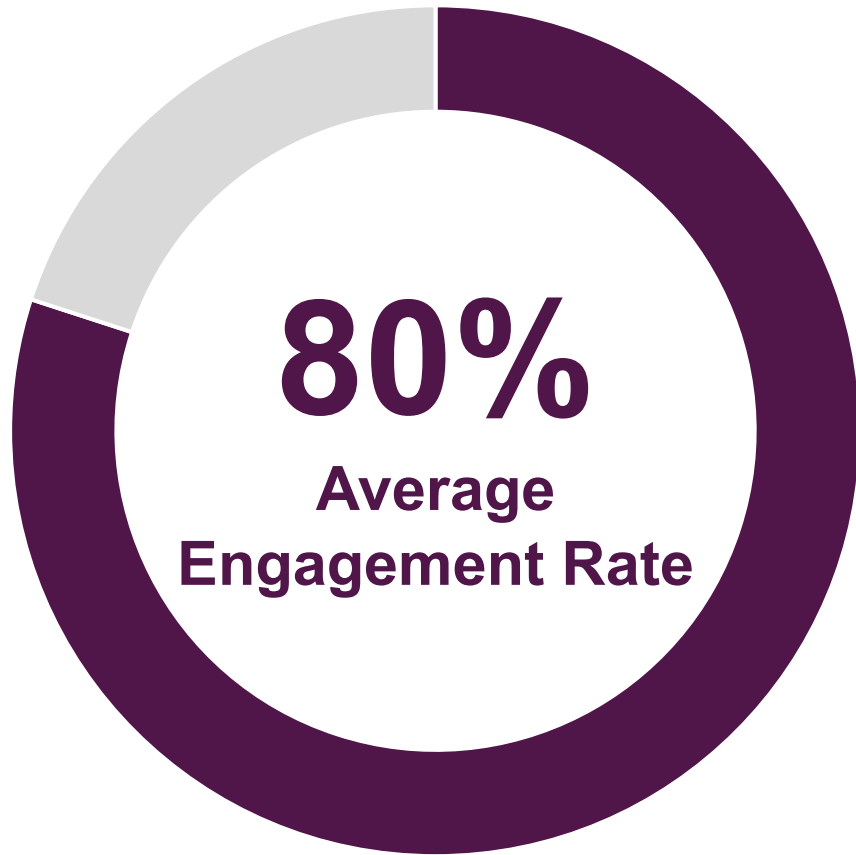
Assessed by Kihon Check List (KCL)

### Physical Function

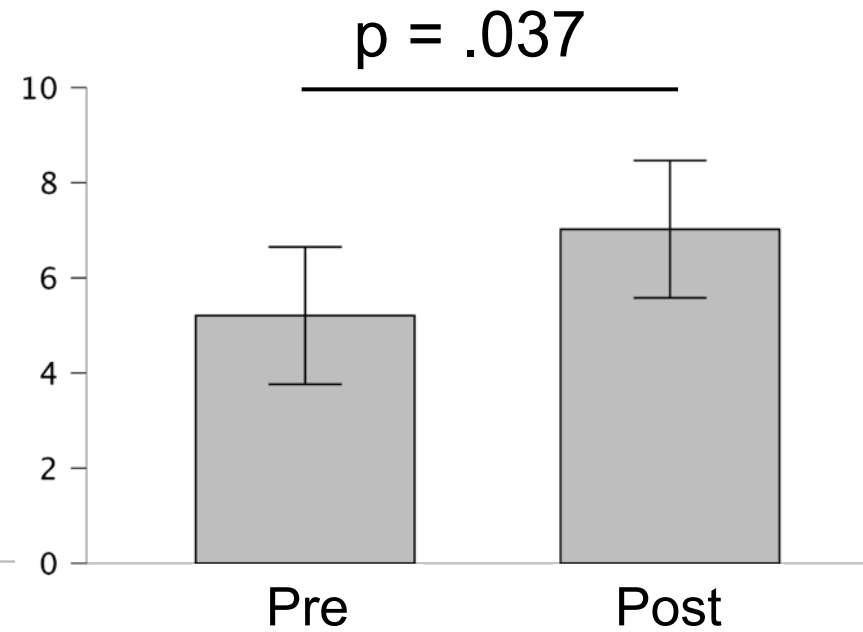
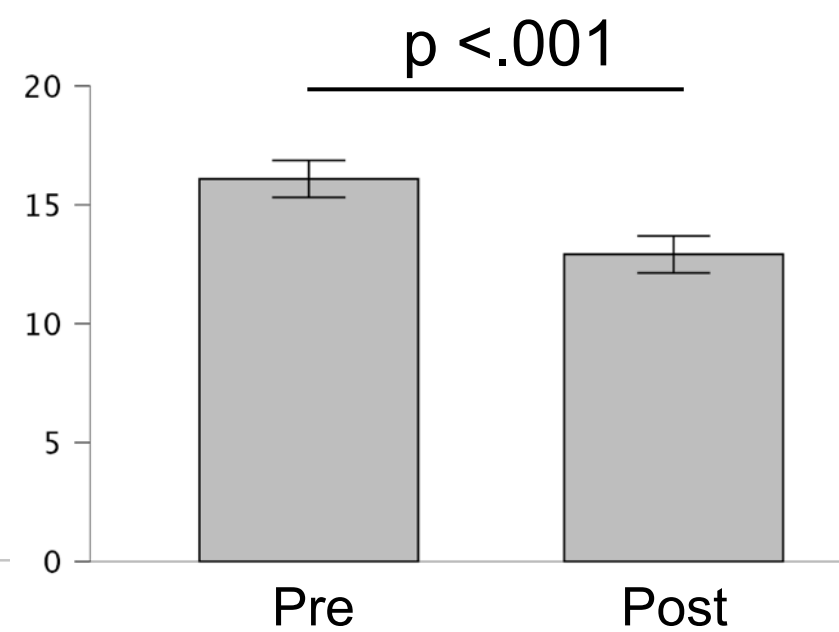
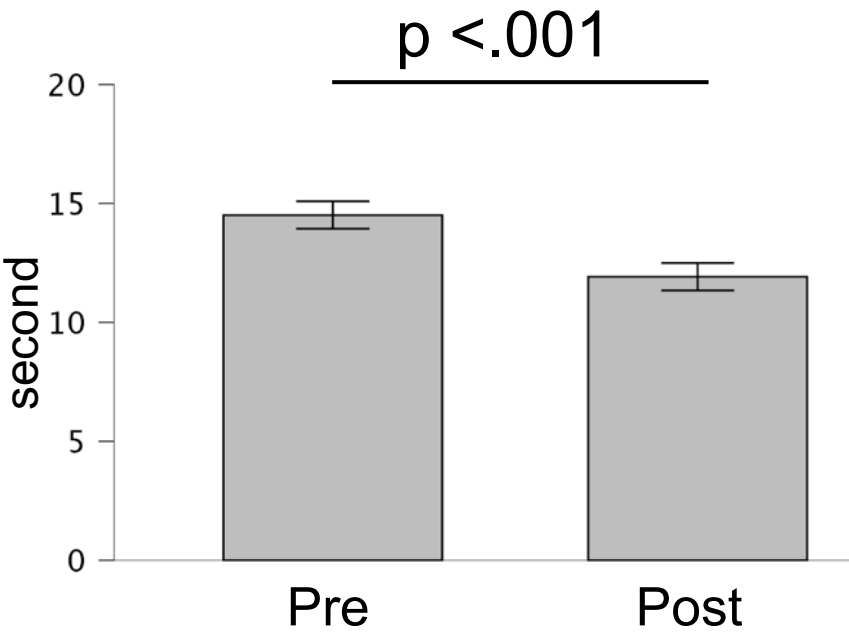
- ✓ Timed Up & Go test (TUG)
- ✓ 5-times Sit-to-Stand (SS5)
- ✓ Single-leg standing (SLS)

### Independence after the program

Defined as independent if they did not require long-term care services after program, except for assistive device rental.



**Multiple activities engaged**



Timed Up &amp; Go

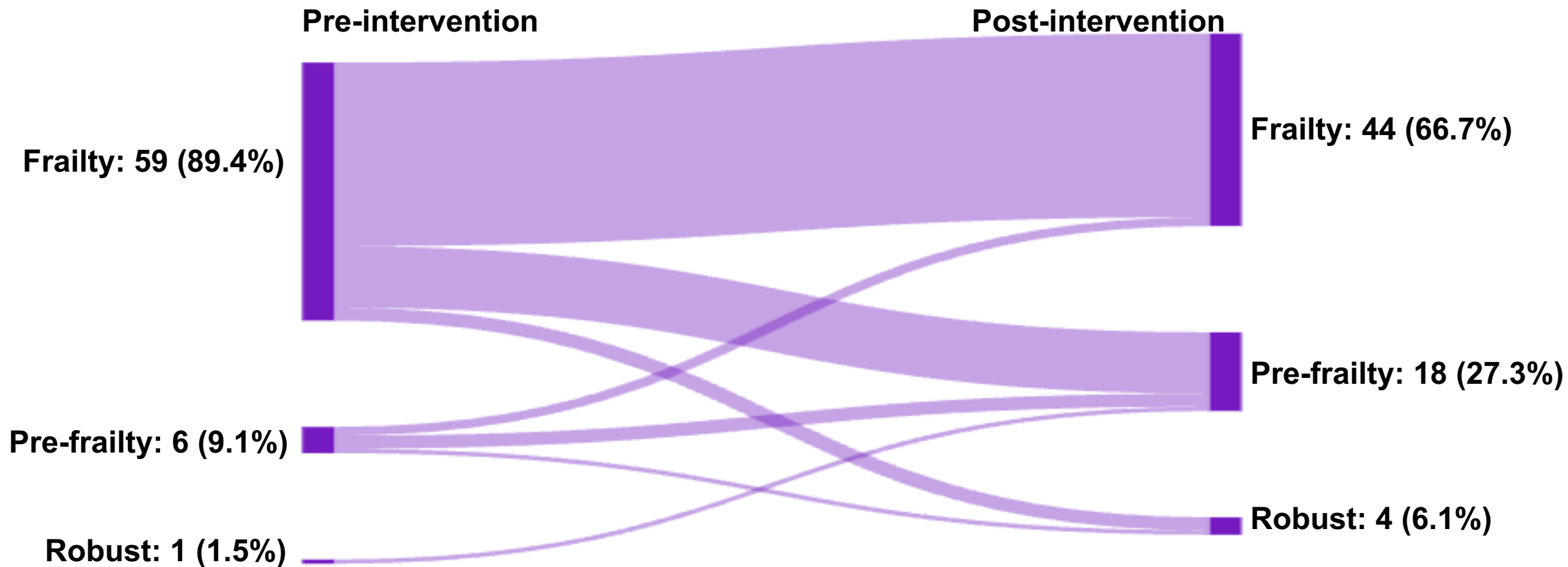


5-times sit to stand



Single leg standing

**Significant improvements in all physical functions were obtained through program.**



### Sankey diagram for transitions in frailty status through program ( $p < .001$ )

Among 59 participants with frailty, **18 participants (about 30%) improved their status**

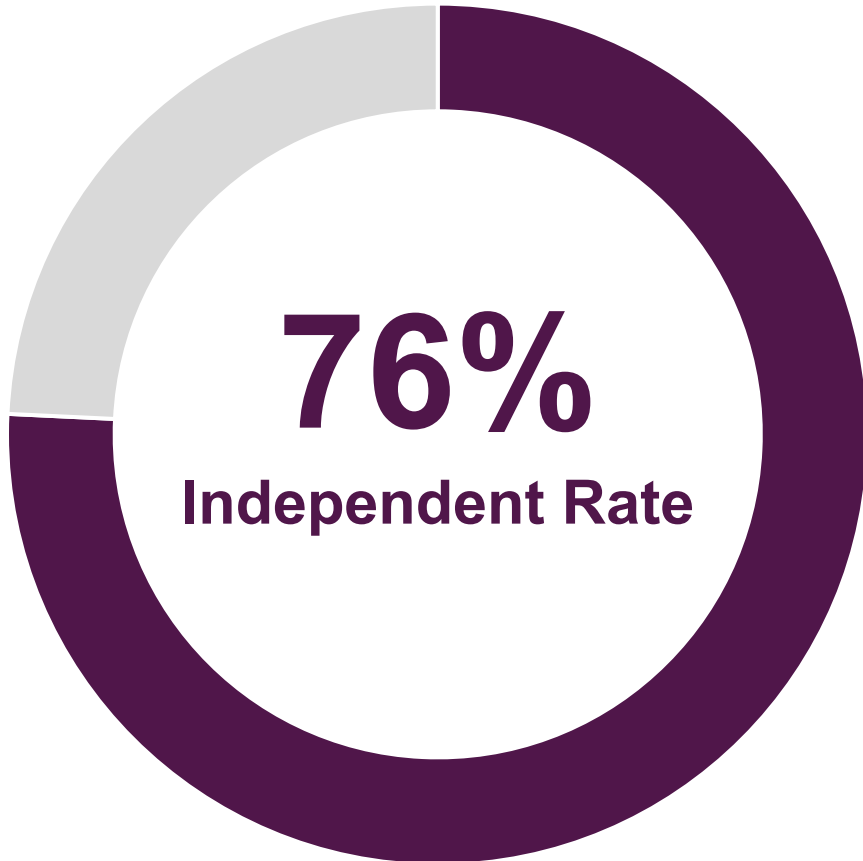
Introduction

Methods

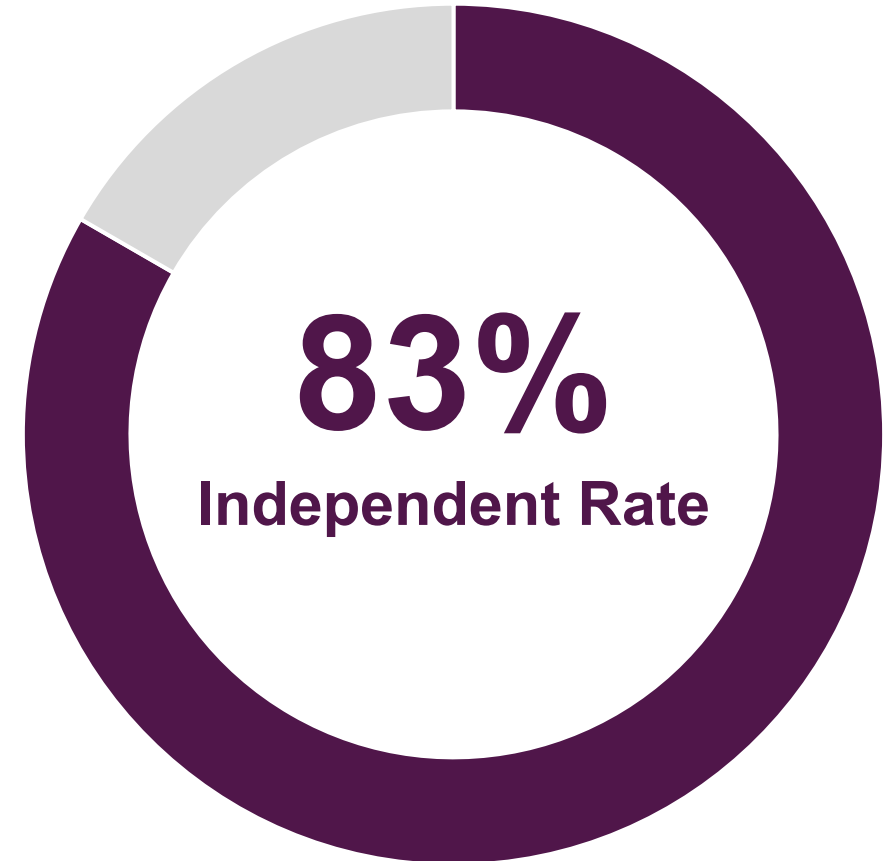
Results

Discussion

Conclusion



**Independent rate after the program  
in all participants**



**Independent rate after the program  
in 18 participants improved status**

## Why it works



**Goal Setting** made efforts a meaningful means to achieve a life they valued.



**Self-management** made efforts visible.



**Feed Back** reinforced their behavioral changes.



**80 % engagement** in their life

**76% independent living** without long-term care services



A short-term multifactorial program with **goal setting and feedback** are effective for among community-dwelling older adults.

**Goal setting and feedback for self-management** can get their lives active, which results in improvement in frailty and independent living.

**Thank you for your attention**

