

# Effectiveness of a Home-Based Exercise Program on Walking Ability in Patients with Peripheral Artery Disease -- The HONOR Trial

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## What was the research about?

Peripheral artery disease, or PAD, affects 8 million people in the United States. PAD narrows arteries in the legs. When this happens, the muscles don't get enough oxygen-rich blood. People with PAD may have leg cramping, pain, or tiredness while walking or climbing stairs. Walking regularly for exercise may help reduce symptoms of PAD.

In this study, the research team created a program to help patients with PAD walk for exercise. Patients in the program walked at home and wore a Fitbit® activity tracker to record the number of steps walked per day. Trained coaches helped patients set walking exercise goals and record their activity on the study website. Patients also practiced walking with the coach. Coaches called patients regularly to check on their progress with the walking program.

The research team compared the walking ability of patients in the at-home walking exercise program with those who weren't in the program. Walking ability includes how far and fast people can walk and whether they have pain when walking. The team also looked at patients' ability to carry out physical and social activities and how much pain interfered with their daily lives.

## What were the results?

Patients in the program and those who weren't in the program didn't differ in walking ability, physical function, or social activities. At the end of the study, patients in the at-home walking exercise program reported more pain than patients who weren't in the program.

## Who was in the study?

The study included 200 patients with PAD. Of these, 50 percent were African American, 47 percent were white, 2 percent reported other race, and 1 percent declined to provide information on race. The average patient age was 70, and 53 percent were women. Patients received care at clinics in three states.

## What did the research team do?

The research team assigned patients by chance to one of two groups: the at-home walking exercise program plus usual care provided by their doctors, or usual care alone.

At the start of the study and nine months later, the research team tested how far patients could walk in six minutes. The team also asked all patients in the study to wear a device on their right hips for seven days to record patients' rest and physical activity. Patients took surveys that asked about pain; physical and social function; and walking distance, speed, and stair climbing.

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Doctors and patients with PAD helped the research team design the study and recruit people to be in the study.

### **What were the limits of the study?**

Only 79 percent of patients in the at-home walking exercise program completed all follow-up calls. Results may have differed if more patients in the program had completed the calls.

Future research could look at other ways of helping patients with PAD find ways to walk for exercise.

### **How can people use the results?**

Doctors can use the results when considering ways to help patients with PAD walk for exercise.

*To learn more about this project, visit [www.pcori.org/McDermott215](http://www.pcori.org/McDermott215).*