



Clinical Staff Guide to Pedometers

Accelerometer Pedometer: Some pedometers utilize a pendulum, which measures movement in one plane. Others use an accelerometer, which measures acceleration through space in multiple planes. The pedometer currently being issued to MOVE! participants is an accelerometer pedometer. It will provide more accurate recording of movement in a variety of planes and directions (e.g., forward, backward, lateral, up and down). It does not need to be worn on the waistband or belt. It can be carried in one's hand, placed in a clothing pocket or a purse, or clipped to a hat or shoe. It will record activities such as walking on a treadmill, a stair climber, an elliptical trainer and even marching in place. A pendulum-based pedometer is also sensitive to movement that is not related to physical activity (like riding in a bus or car). The current pedometer eliminates non-physical activity movements. A side-effect of eliminating non-physical activity movements is that the wearer will need to be moving or walking for at least 10-15 continuous steps or 10-15 seconds before the pedometer will count and display steps. When it does display the steps, it will have taken into account the steps that the wearer has already taken. So, if one walks 15 steps, the display will activate after about 10-15 steps, and display 10-15 steps. If one rolls the same distance in a car, nothing will be displayed.

Pedometer for Staff Education and Training: Pedometers that have been provided for training and education should be available to all MOVE! team members. These are not intended for personal use and should not be distributed to individual team members or patients (use the Prosthetics ordering process to provide these to patients). NCP made these available on a limited, one-time basis.

Pedometer Initial Set Up and Use: Please refer to the MOVE! handout [P39 "Pedometer Initial Set Up and Use"](#) for steps involved in the initial set up of the pedometer. As this pedometer is slightly more advanced than the previous model, the initial set up should be completed with a clinician guiding the Veteran as needed.

Documentation of Education and Training: Documentation of patient education and training in the proper use of the pedometer should be recorded per facility and Joint Commission requirements in the Veteran's electronic medical record.

Measuring Stride Length: For this pedometer, the manufacturer's instructions refer to "stride" length; however, the description is actually for what is technically known as "step" length (see Figure 1). Thus for this pedometer, you will enter the user's step length.

A stride is defined as: the interval between two sequential initial floor contacts by the same limb (the distance between two consecutive heel prints of the same foot)

A step is defined as: the interval between an initial floor contact by each foot. (e.g., the distance between the heel print of the right foot and next heel print of the left foot).

Step Length is defined as: the distance from the heel print of one foot to the heel print of the other foot. This is the distance traveled forward by a single leg. An average that you will often

see is 2.2 feet (0.67 meters) for women and 2.5 feet (0.762 meters) for men, but this also depends on height.

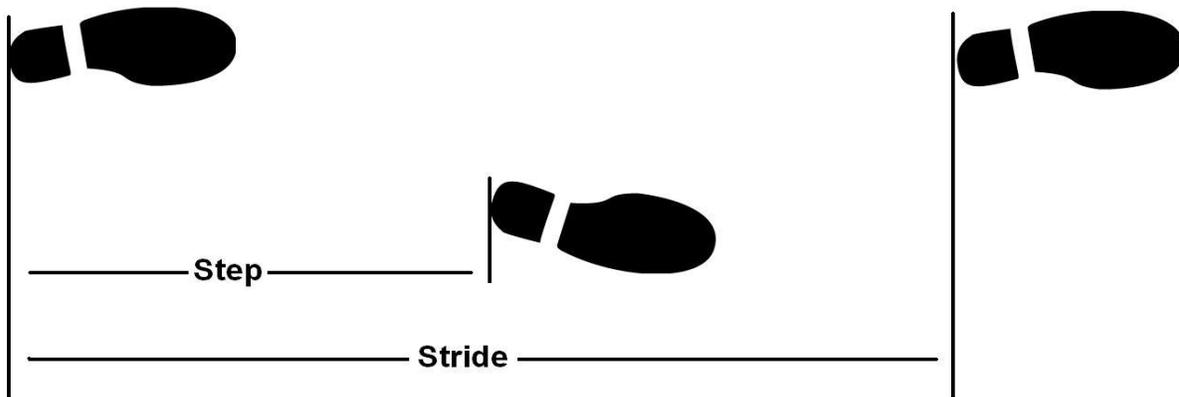


Figure 1: Step and Stride Measurement

Two methods for measuring step length: 1) Measure the distance traveled with 10 normal paces. Divide the total number of inches by 10. This is the average step length in inches. With this pedometer, you can enter length in increments of $\frac{1}{4}$ of a foot (e.g. 2.25 ft, 2.75 ft.).

2) Measure and mark off a known distance - 20 feet or 50 feet. Then get up to speed in your natural walk and count the number of steps to cover that distance. Divide the number of feet by the number of steps. Feet/steps = Step length in feet.

Partnership with Prosthetics and Sensory Aids Service (PSAS): It is strongly recommended that facility MOVE! and PSAS teams work together. This partnership can help provide the best service possible to Veterans by ensuring that a seamless and efficient process is created for 1) maintaining an adequate supply, and 2) distributing pedometers to Veterans.

Quality Improvement Report (QIR): If challenges with pedometers on national contract are identified by patients or clinicians, clinicians are strongly encouraged to complete a Quality Improvement Report (QIR) and submit this to the local PSAS. This information will be reviewed by PSAS team and communicated to the vendor for corrective action. Submission of the QIR is necessary to ensure the ongoing quality of pedometers issued to Veterans. Instructions for completing the form can be found on the [MOVE! SharePoint site](#) in the folder titled "Pedometer Information."

Pedometer Clinical Practice Recommendations (CPR): At the time of this writing, the Clinical Practice Recommendations for Pedometers is in the concurrence process. This document details the recommendations for the issuance of pedometers to eligible Veterans participating in a weight management or physical activity program. Once it has been approved, it will be included in the MOVE! [Physical Activity Tools](#) section of the MOVE! website.