

Usual and Fast Gait Speed

Equipment:

Unobstructed walkway of 3, 4, 5,6 or 10 meters (SPPB uses 3 and 4 meters)

Purpose:

Assess walking speed in meters/second (feet/second), has been referred to as the “Sixth Vital Sign”.

Notes:

- 10 meter walk test where the middle 6m is timed, is most commonly used
- Can also use lengths of 3, 4, 5 m, but may not be as responsive to change.
- Assistive devices can be used, but must be documented from test to test.
- Not standardized to test norms if the individual requires physical assistance to ambulate.
- Perform at 1. preferred walking speed then at 2. the fastest possible walking speed for comparison.

Procedure:

Mark off walking distance (3,4,5,6, 10m) with extra room (2m recommended) for acceleration and deceleration.

Normal/Usual/Comfortable Gait Speed

Instruct to walk at usual pace the entire distance of the pathway (including the acceleration and deceleration zones) Do not tell them when you will start the timing.

Instruct subject: “ Walk your normal or usual gait speed from here to the next mark.” (demonstrate).

Perform one practice trial and then three test walks.

Average the times.

If unable to complete 3 walks, use trials completed and average and note.

Fast Gait Speed

Instruct subject: “ Walk safely as fast as possible from here to the next mark.” (demonstrate).

Perform one practice trial and then three test walks.

Average the time.

If unable to complete 3 walks, use trials completed and average (and note).

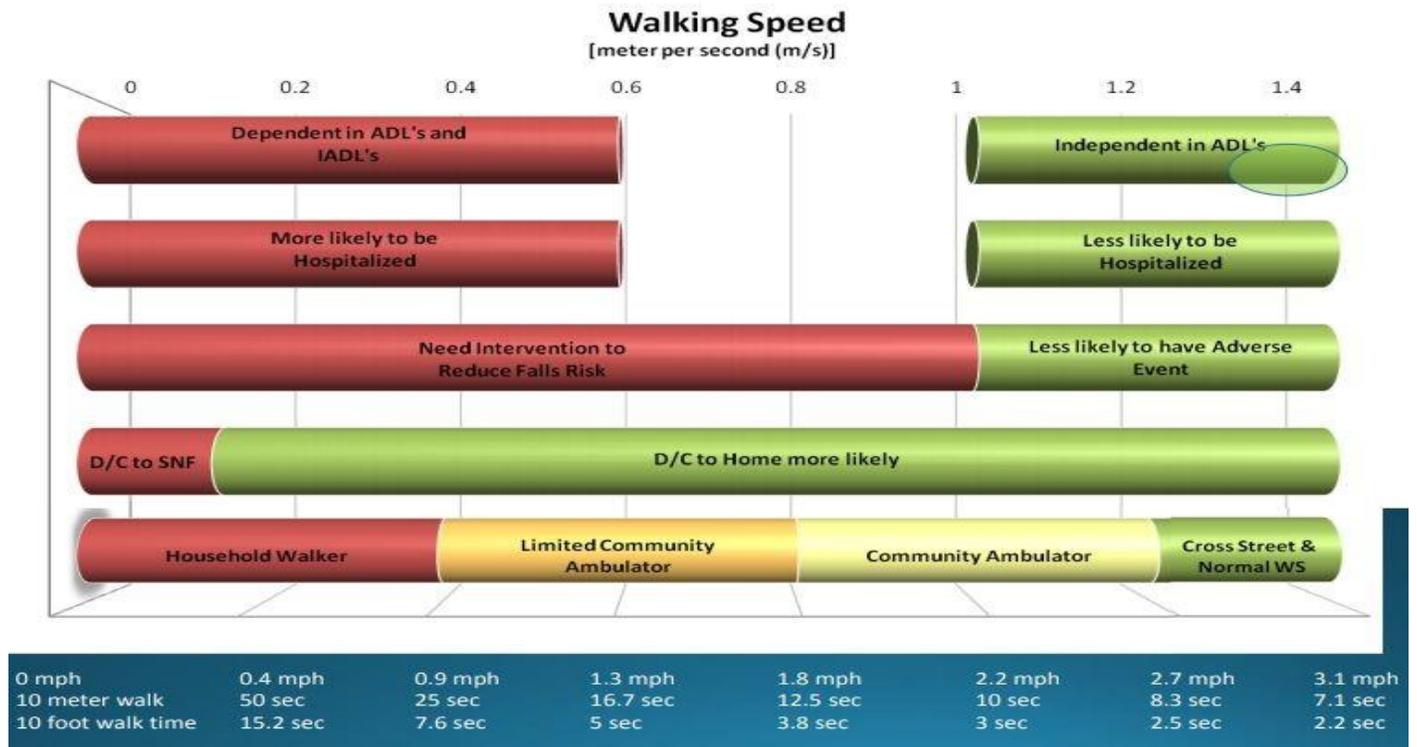
Normal	Distance (m)	Fast
Trial 1 ____s	____m	Trial 1 ____s
Trial 2 ____s (if able)		Trial 2 ____s (if able)
Trial 3 ____s (if able)		Trial 3 ____s (if able)
Total ____/n = ____ average time (s)		Total ____/n= ____ average time
dist. (m) \div Avg. time (s) = m/s	Distance (m) \div Average Time (s) = m/s	dist. (m) \div Avg. time (s) = m/s
____(s) \div ____ (m) = ____m/s		____(s) \div ____ (m) = ____m/s

Calculate Gait Speed Examples

Distance(m)/Time (s)

Example 1. 10 seconds to complete 4 meters: $4\text{m}/10\text{ sec} = .40\text{ m/s}$

Example 2. 15 seconds to complete 3 meters: $3\text{m}/12\text{ sec} = .25\text{ m/s}$



Gait speed is a sensitive predictor of declining physical mobility. It has been shown to discriminate between fallers and non-fallers, to be able to classify household from community ambulators, and has normative scores.

Minimal Clinically Important Difference is .05-.10 m/s

<1 m/s is a predictor of poor health related outcomes, increased risk for falls

>0.73 m/s required for safe outdoor ambulation

<0.6 m/s increased risk for hospitalization, decline in function, dependent in ADLs or IADLs

<0.56 m/s increased risk for falls

<0.4 m/s non- community amb, 0.4-0.8 m/s limited community amb, .0.8m/s community amb

Date	Name	Score
		<p>Normal:</p> <p>Fast:</p>